

## COLD ROOM WITH POSITIVE SEMI HERMETIC COMPRESSOR



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### 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

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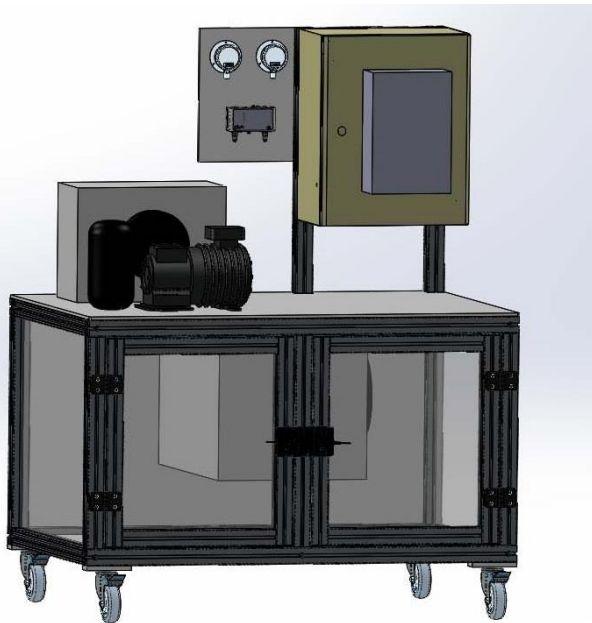
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As part of the continuous improvement of our products, this technical specification may be modified without previous notifying

## 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.

## Illustrations



1. Condensing unit bock SHGX12P-90-4L with crankcase heater (1940W at -15°C / 32°C).
2. Pressure speed controller to regulate the speed of condenser fan.
3. Oil separator type TURBOIL 1503S-carly
4. Cubic evaporator 3 -CA FRIGA BOHN (2.5KW / dt8K) with defrost heater
5. Expansion valve with internal equalization DANFOSS TN2

## Technical details

6. Low pressure automatic pressure switch KP1 DANFOSS
7. Manual pressure switch high and low pressure KP15 DANFOSS
8. Temperature control box and defrosting type RC500 COLDFACE (control pump down and defrost management)
9. High pressure safety valve
10. High pressure manometer R134a with double scale temperature / pressure
11. Low pressure manometer R134a with double scale temperature / pressure

This layout shows the general idea of the design of the bench. The group is placed in the upper part at a height of about 800mm from 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 in anodized aluminum profiles with 4 directional wheels with brake. On the right part will be installed an electrical box having the protection components and relay circuitry (circuit breaker, relay ...). On the front face of the cabinet is located the control box. Two switches are used to cut power of the solenoid control valve or the condenser fan. An enthalpy diagram format A3 with erasable surface is placed 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

- User's manual
- Pedagogical manual
- Technical documentation of the components
- Lab exercises
- Certificate of conformity CE