

STUDY OF THE ON-BOARD REFRIGERATION



Experimental capabilities

- **Operation of an embedded refrigeration installation**
- **Roles of the various elements.**
- **Using the digraph of MOLLIER of the refrigerant used (R 404 a).**
- **Plotting the refrigeration cycle on diagram (H-logP).**

Operating principle

It consists on-board refrigeration production unit, a control panel and an electric motor

To simulate the operation in road mode.

Ability to pass from the road mode to the sector mode.

The instrumentation used to monitor the pressures in the circuit, the liquid and gas phases of the refrigerant, and to measure the heat exchanges.

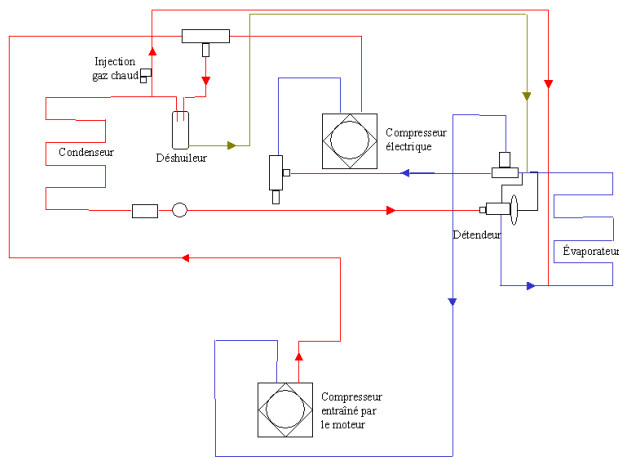
Industrial type equipment used in most on-board refrigeration facilities (marca THERMO- KING).The robust design of this device makes it suitable for use in schools.

The equipment is set up on an Anodized aluminium frame on casters wheels. This gives it great strength and a flexibility of integration into your premises.

The manufacture of this equipment complies with the European standard for machinery manufacturing.

This equipment can be used alone or with other compatible equipment from our range (see last section of this document).

Illustrations



Technical details

The on-board refrigeration installation allows to study both operating modes proper to the transport either in AC mode (mains mode), or on-road mode using of a thermal engine.

Calculation of the power consumption.

Digital temperature display with probes placed at characteristic points of the installation.

Regulation ensured by the own regulator to the system.

Services required

- Electrical supply : 380Vac TRI
- Water drain : on the floor
- S
- Dimensions: (LxWxH mm): 2500 x 1000 x 1800
- weight (Kg): 550

Documentation

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

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