

STUDY OF CONTROL COMPONENTS FOR REFRIGERATION SYSTEMS



Experimental capabilities

- Identification of the frigorific components
- Study and settings of the pressure switches.
- Study and adjustment of the evaporator pressure regulator
- Study and adjustment of the condensing pressure regulator

REG100



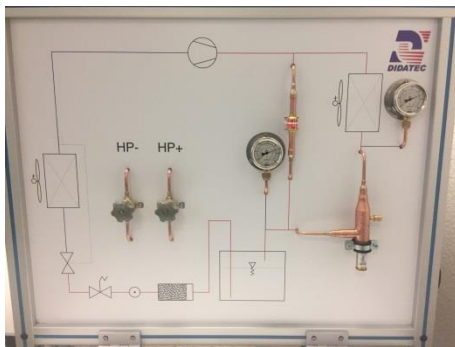
Operating principle

The workbench REG100 has been designed to work on frigorific components. There are 3 work station including a folding table.

This unit works without refrigerant gas and is autonomous, an air compressor is integrated. The students can use the manual valves to change and simulate the pressures in the components. They can then adjust the components. 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.

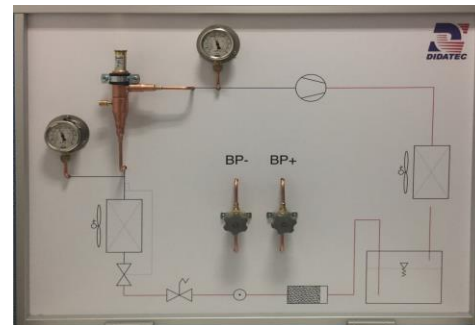
Illustrations

Technical details

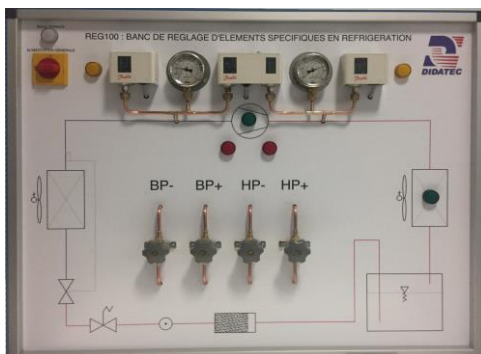


Working face on the condensing pressure regulator. Thanks to the valves located on the synoptic, you can change the inlet pressure of the regulator. You can then adjust the regulator and see the changes on the pressures. This face includes two valves, two high pressure gauges, one check valve and one condensing pressure regulator.

Working face on the evaporator pressure regulator. Thanks to the valves located on the synoptic, you can change the inlet pressure of the regulator. You can then adjust the regulator and see the changes on the pressures. This face includes two valves, two low pressure gauges and one evaporator pressure regulator.



Working face on the pressure switches. Thanks to the valves located on the synoptic, you can simulate the low pressure and the high pressure. So it is possible to adjust the switches and see what happens with the lights. This face includes the electrical main switch, the white light (main on), a low pressure switch, a combined pressure switch (HP & LP), a high pressure switch, a LP gauge, a HP gauge, two orange lights, two red lights, two green lights and four valves.



The workbench includes an electrical compartment with a GFCI, some circuit breakers, a 24VAC power supply for the lights and the switches, the air compressor, a filter/regulator for the compressed air and some buffer tank. All the components are accessible through a lockable door.

REG100



Services required

- Electrical supply: 230 Vac – 50 Hz – 10 A
- Electrical network: 1 live(s) + Neutral + Earth.
- Dimensions: (LxWxH mm): 1050 x 1050 x 1700
- weight (Kg): 150

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
- Technical documentation of the components
- Wiring diagram
- Fluidic diagram (PID)
- Lab exercises
- Certificate of conformity CE