

Heat pump domesticates with evaporation with air or water



The bench is delivered complete, instrumented with technical handbook and practical work.

Design, manufacture, and industrial material.

The didactic interest is directed towards various fields of studies.

Bench made up of a heat pump WATER/WATER VISSMANN modified to be able to function with an evaporator with water or air.

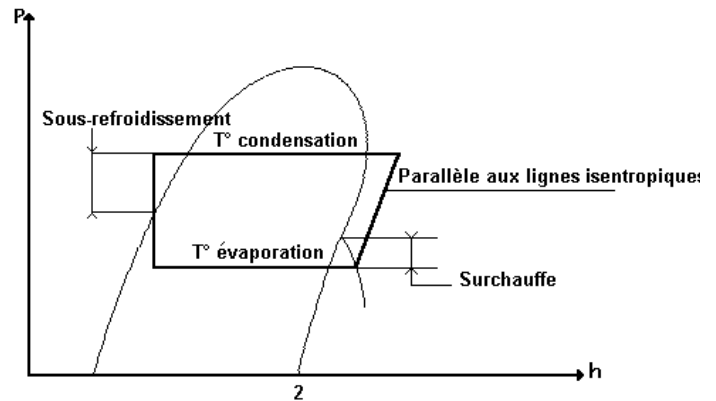
Ferment out of plastic with resistance of simulation of load.

Exchanger with air with resistance of simulation to charge

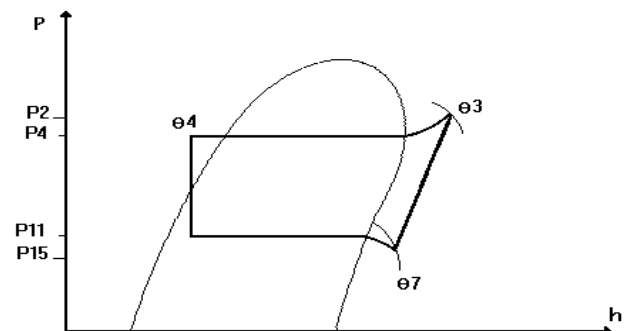
Possible dissipation on the bench TCF 129, unit heater or sink (in options)

Teaching applications

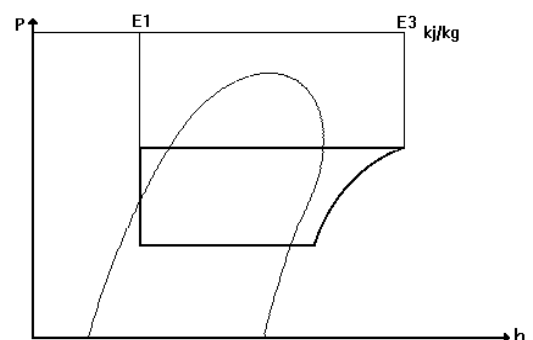
- Basic study and concept of a heat pump with industrialist components.
- Studies of the important phases of a refrigerating cycle with compression-condensation-evaporation (air/water-water/water).
- Analyze theoretical refrigerating cycle.
- Analyze real refrigerating cycle
 - Determination of the pressure losses
 - Determination of overheating
 - Determination of under cooling
 - Determination of the refrigerating power to the evaporator
 - Determination of the power to the condenser.
- Calculation of the heat balances to the condenser and the evaporator
- Construction of the refrigerating cycle on a diagram of state.
- Comparative study enters an evaporation to air or water.
- Calculation of different coefficient of performance.



Layout of the refrigerating theoretical cycle on diagram of state

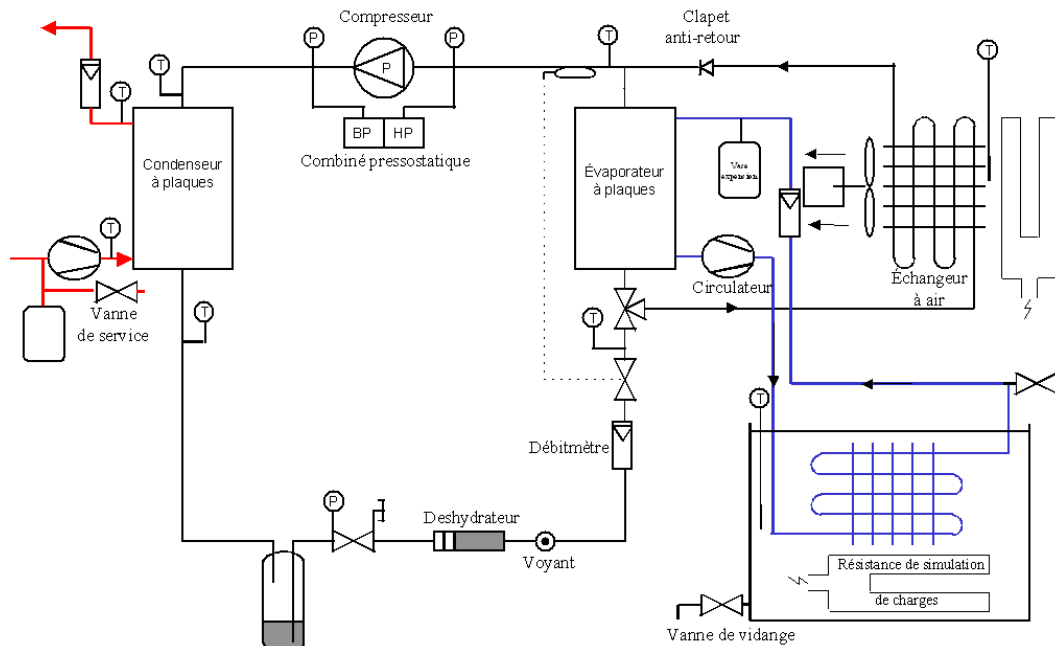


Layout of the real refrigerating cycle on diagram of state



Power with the condenser

Technical description



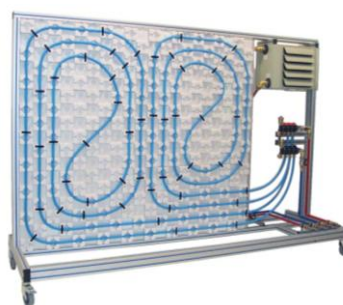
Fluidic diagram

Components of the industrial type, assembled on an aluminum frame anodic provided with four multidirectional casters.

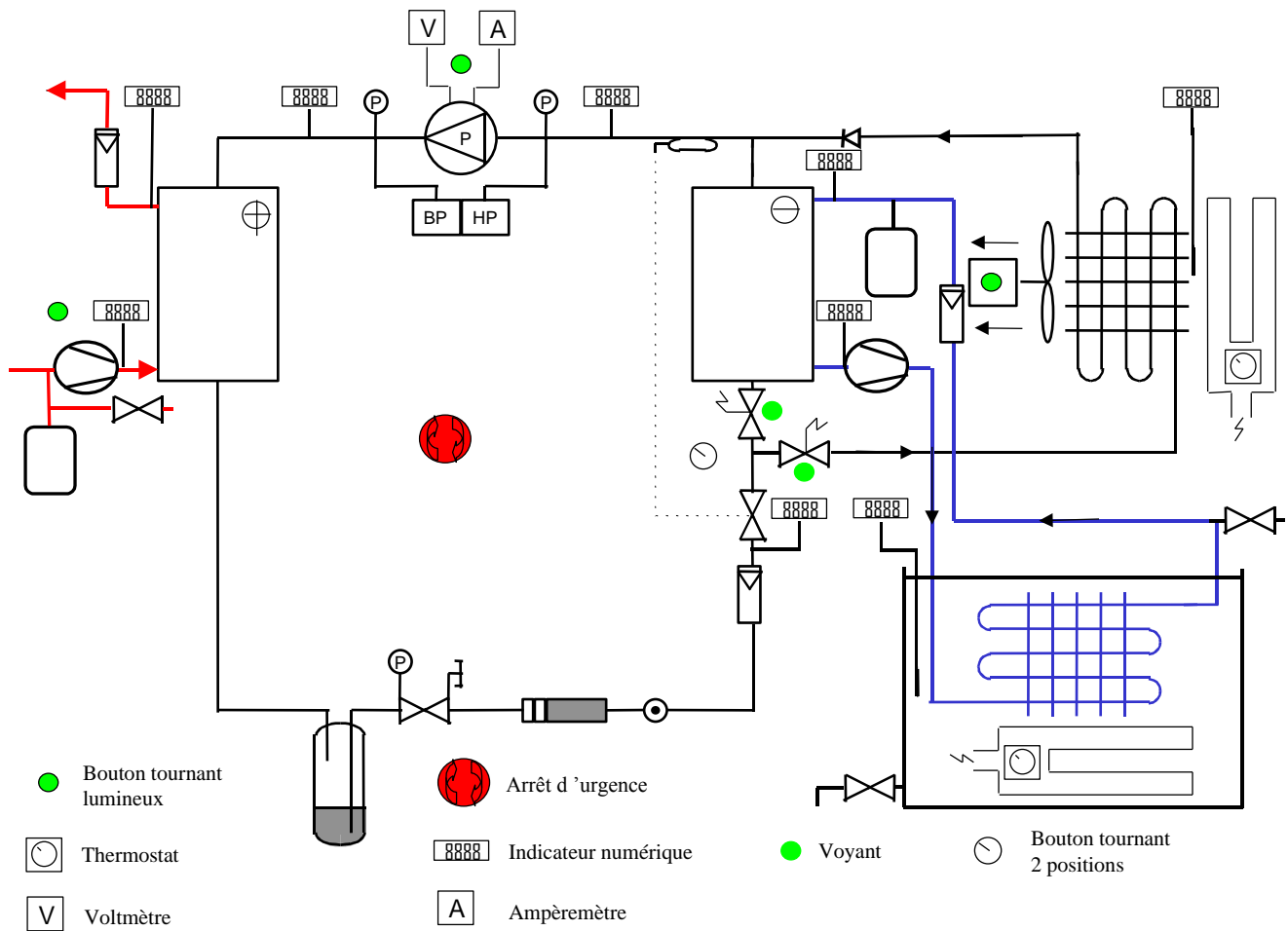
Identification and simplified access have all the elements of the installation.

Possibility of making function the heat pump in AIR/WATER mode or WATER/WATER thanks to the addition of an exchanger with air and a system of electromagnetic sluice gate allowing the passage of a mode another.

Circuit hot water provided with fast connector allowing this to connect to different bench of dissipation.



ERT 200



Synoptic of the installation placed on the electric box

Options

This equipment can be computerized
Various bench of dissipation can be coupled with
the bench.

Dimensions

Length 2000 mm
Width 800 mm
Height 1800 mm
Tare weight 250 kg

Utilities

Electricity: 380VAC Tri
Of other tensions can be provided to Ask
Water: 3 L/min (network)