

## WATER-WATER heat pump

### DESCRIPTION

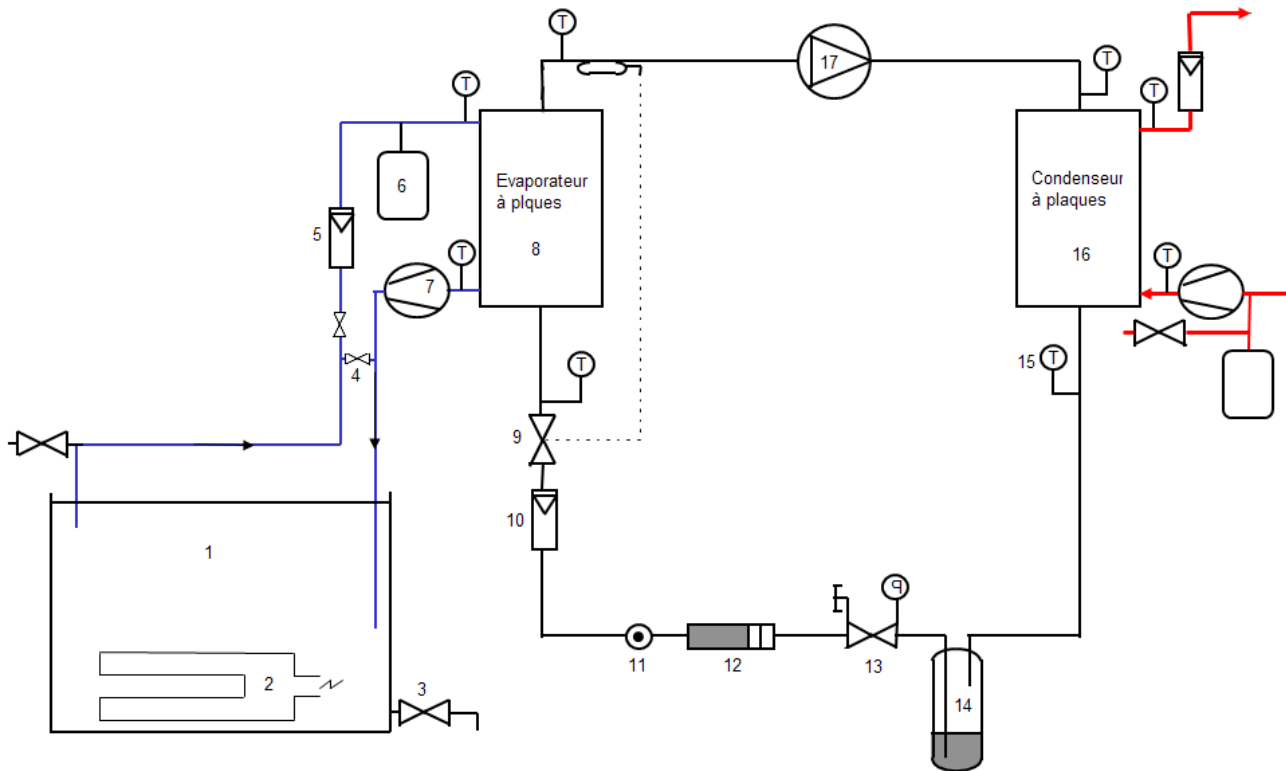
- The unit of heat pump is delivered supplements, instrumented with technical handbook and practical work.
- Design, manufacture and industrial material.
- The installation is composed of two benches, a bench of production and a bench of dissipation.
- The didactic interest is directed towards various levels and fields of studies.
- This unit is delivered with a heat exchanger with forced ventilation to dissipate the heat power produced



*Noncontractual photograph*

### TEACHING APPLICATIONS

- Study of the basic concept of a water-water heat pump
- Study of the concept of reversibility of the cycle
- Study of the thermodynamic cycle Traced of the cycle on enthalpic diagram
- Calculation of the coefficients of exchanges
- Calculation of the outputs
- Calculation of the heat balance



## DESIGN FEATURES

The didactic unit of heat pump air-water is elaborate around a heat pump intended for individual dwellings, as well as the small buildings of the tertiary sector.

Refrigerating power: 4,55 kw – T° water 18° C – T° water 5°  
Calorific power: 6,4 kw – T° water 35°C – T° water 18°

## INSTRUMENTATIONS

Pressure, temperature sensor at the points characteristic of the installation (primary and secondary), refrigerant flowmeter and water, Wattmeter.

## UTILITIES

Electricity: 400 V three-phased- 50 Hz

## VOLUME OF INSTALLATION

heat pump:	Length: 2500mm
	Width: 800mm
dissipation:	Length: 800 mm
	Width: 600mm