

## HEAT PUMP WATER AIR



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### Experimental capabilities

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- **Study of the thermodynamic cycle of the compression refrigerating machine.**
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- **Evaluation of the performances production of cold water.**
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- **Yield measurement of a refrigeration cycle, determining the energy balance of the condenser, of the evaporator and the entire production of cold water.**
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- **The vapor compression cycle comparison established by manipulation with the ideal cycle on pressure diagram – enthalpy**

## Operating principle

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

Erreur ! Liaison incorrecte.

## Technical details

### A. Motor compressor

- Of industrial type
- Electrical power: 1/8 CV
- Cooling capacity: 402 watts
- Condensation temperature: + 55 °C
- Evaporation temperature: + 5 °C

### B. High pressure manometer

### C. Safety valve

### D. Air condenser

- With forced convection
- Copper tubes and aluminum fins

### E. Liquid reservoir

### F. Dehydrator

### G. Indicator of fluid state

### H. Flowmeter R134a with float

- Magnetic transmission
- A needle dial
- Stainless steel construction

### I. Thermostatic expansion valve

- A Internal equalizer
- Interchangeable flow rate of calibration orifice

### J. Water evaporator

- Glass grille
- Copper coil
- Arrival water and drainage network

### K. Suction accumulator liquid bottle

### L. Low pressure manometer

### M. Pressostat high and low pressure combined

### N. Electrical box

- Indicator voltage, intensity, temperature with thermocouples selection
- Power switch compressor

## Services required

- Electrical supply : 230Vac
- Water supply : 1 L/min
- Dimensions: (LxWxH mm): 580 x 400 x 660
- weight (Kg): 45

## Documentation

- User's manual
- Pedagogical manual
- Technical documentation of the components
- 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