

BUFFER STORE 200L



Experimental capabilities

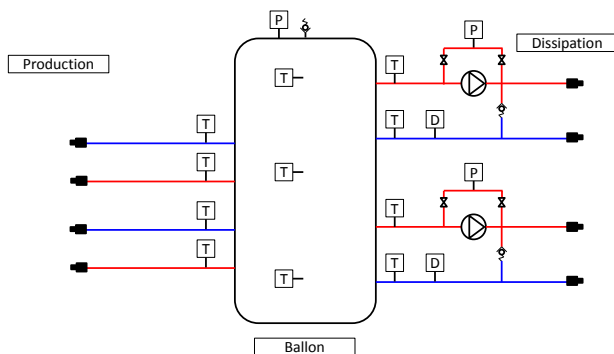
- Identification of the components of a buffer tank
- Visualization of the stratification
- Measurement of temperatures, flow rates and pressure
- Study of a circulator with variable flow, measuring its TDH based on flow rate
- Energy storage

Operating principle

The BAL bench serves as the interface between the thermal production systems and dissipation systems. It is equipped with quick connectors compatible with the different units of the range DIDATEC. It features a 200L tank, two primary circuits and two secondary circuits. The secondary circuits are equipped with variable speed circulators to ensure the circulation of water in the dissipation systems. The bench is fully instrumented to analyze the operation and the exchanges of the tank.

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

- TANK**
 - 200L Buffer tank with thermal insulation
 - Safety valve 3 bars
 - Automatic bleed valve in the upper part
 - Pressure manometer 0/4 bars
 - Lateral thermometer 0/120°C for visualization of the stratification
- PRODUCTION CIRCUIT**
 - Quick connector for the connection to two production systems
 - Thermometers 0/120°C at the input and output of each circuit for the production
- DISSIPATION CIRCUIT**
 - Quick connector for the connection to two dissipation systems
 - Thermometers 0/120°C at the input and output of each circuit for the dissipation
 - Flow rate measurement in each production circuit
 - Differential pressure valve for the protection of the water pumps
 - Water pumps with variable speed with manometer in parallel for measuring the TDH
- ELECTRIC BOX**
 - Power box with differential circuit breaker and starting switch of the water pumps

Services required

- Electrical supply : 230 Vac – 50 Hz – 6 A
- Electrical network : 1 phase(s) + Neutral + Earth.
- Water supply : filling
- Dimensions: (LxWxH mm): 1400 x 800 x 1500
- 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
- Lab exercises
- Certificate of conformity CE

Recommended equipment

All the heating system from the range of products of DIDATEC

- Heater 33KW
- Bench of radiators
- Heating floor
- Hydraulic balancing unit
- Fan convectors
- Ref : AER033
- Ref : TCF120
- Ref : TCF121
- Ref : TCF122
- Ref : TCF124