

## FAN CONVECTORS



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### Experimental capabilities

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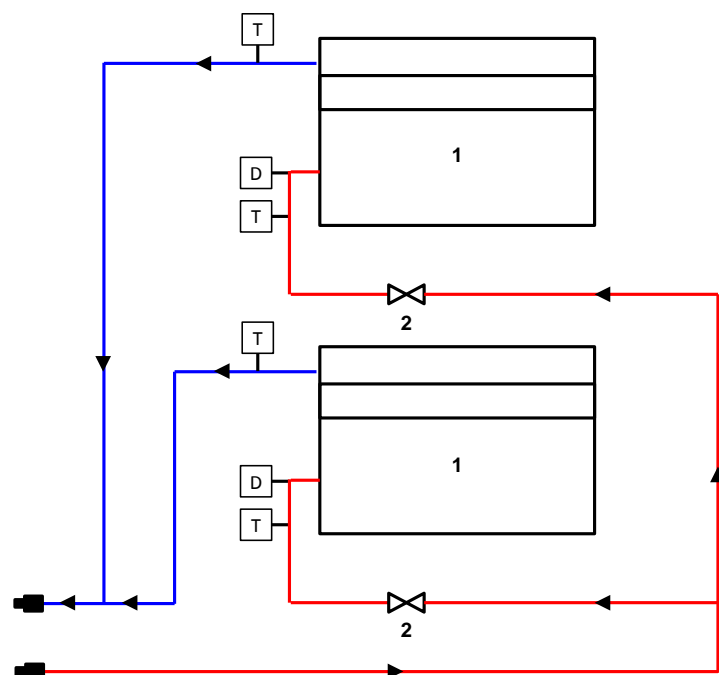
- Identification of the components of a dissipation circuit with fan convector
- Measurement of temperatures, flow rates and thermal energy for each convector
- Use and implementation of a fan convector
- Study of the influence of the fan speed
- Network balancing
- Study of the influence of water flow in the convector

## Operating principle

The TCF128 bench allows the study of a fan convector at variable speed  
The user may change the water flow rate in each convector and fan speed. They can then measure the effects of these changes on the dissipated thermal power.

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 machine directive. This equipment can be used alone or with other compatible equipment from our range.

## Illustrations



## Technical details

1. Fan convector:
  - Quantity: 2
  - Power: 3 Kw each
  - Speed of fan adjustable (3 positions)
  - parallel water circuit
2. Flow rate control valve
  - Balancing valve of type TA
  - one Valve by fan convector
3. Instrumentation
  - Two flowmeters 50-500L /h (D)
  - Two dial thermometers 0/120°C at the inlet (T)
  - Two dial thermometers 0/120°C at the outlet (T)
  - A portable thermometer with room sensor
4. Electrical box of supply
  - A 30mA differential circuit breaker
  - An emergency stop button
5. Structure
  - The system is installed on an anodized aluminum profile chassis fitted with four swivel castors with brake

## Services required

- Electrical supply : 230 Vac – 50 Hz – 6 A
- Electrical network : 1 phase(s) + Neutral + Earth.
- Dimensions: (LxWxH mm): 1000 x 800 x 1250
- weight (Kg): 55

## Documentation

- User's manual
- Technical documentation of the components
- Lab exercises
- 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