

BENCH OF TEMPERATURE CONTROL TABLE



Non contractual photo

SERVICE : POWER SUPPLY: 220 V SINGLE PHASE 50 HZ - 8A + EARTH, - SOUND LEVEL 70 DB (A) COMPUTER FOR USE OF THE SOFTWARE; SANITARY WATER. DIMENSIONS : 800 X 500 X 900 MM

WEIGHT : 76KG

REFERENCE : MINIREG T

The MINIREG / T bench is designed for study and experimentation on a temperature control loop. The bench includes the control loop, measurement instrumentation, indication, recording and control. Disturbance circuits, step or other models make it possible to highlight the response of the process.

The bench covers a large number of themes that can be developed :

- Temperature measurement,
- Adjustment and calibration of the temperature sensor,
- Initiation to control and regulation,
- Automatic regulation methods,
- Setting by discontinuous actions,
- Regulator P,
- PI regulator,
- PID controller,
- Regulatory strategies,
- Process response,
- Time analysis,
- Precision and stability of a loop.
- Control valves, - Valve positioner,
- Electric transmitters,
- Intensity-pressure converter,
- Digital systems.

Technical specifications :

Operative part

The bench consists of a chassis incorporating :

- A reservoir comprising:
- An immersion heater
- A temperature sensor.
- A thermometer,
- A thermostat.
- Low level security
- A centrifugal pump,
- A water / water heat exchanger
- Flow meter,
- A solenoid valve,
- A set of manually operated valves,
- A circuit disturbing temperature.
- Volume of the tank

Control and control part

An electrical cabinet including :

- Equipment for supply and protection of the installation,
- The heating modulator,
- The control organs,
- Shunts giving access to the 4/20 mA measurement of the sensors,

- A digital controller, configurable by block of preprogrammed functions. Hot / cold regulation.

The front panel gives clear operator information. SUPERVISION

A set of supervision is included in the supply of the base bench. This set is composed of :

- "SUPERVISOR MINIREG / T" software,
- A connection cable,
- A key to protect the Autolink software

This set requires the use of a PC-compatible microcomputer, Windows 7, 64 or 32-bit operating system

Supervisor MINIREG / T

The MINIREG / T supervision software is structured on the basis of several screens, and allows to visualize :

- The general synoptic of the regulation with the digital display of the various regulation parameters,
 - The front of the digital controller with the animation of bar-graphs corresponding to PV, SP
- Digital display of PV, SP, OP, Bp, Ti, Td values
The command giving access to modifications of the values ??of SP, Bp, Ti, Td
- The graph of tendencies PV,
 - The graph, full screen, trends PV, SP and OP.
- Operating system XP, Windows 7 64 or 32 bits
This set requires the use of a microcomputer (not supplied)

P V : process variable,
SP : Consigne,
OP : Command signal,
Bp : proportional band,
Ti : Integration time,
Td : Derivation time.