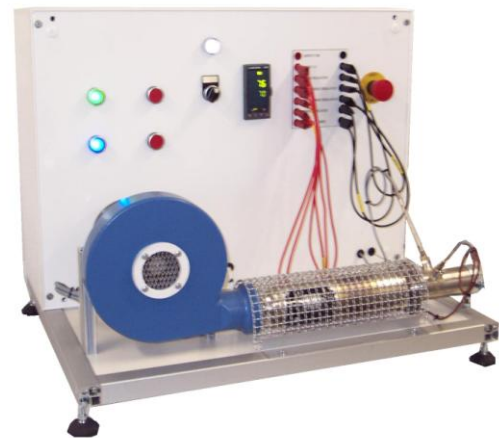


Temperature sensors unit Study of regulation

DESCRIPTION

- The unit is delivered complete with instrumentation, technical documentation, and instructions
- Designed and manufactured to industrial standards
- This unit is designed for various levels and fields of study
- Inlets and outlets are connectable by safety female sockets - Ø 4 mm.
Option :
 - Interface and software for PC
 - Utilities module
- It is possible to connect the measurement module to control and regulation modules in series or in parallel



SUGGESTED APPLICATIONS

- Illustration of the various theoretical principles used to make temperature measurements
- Adjusting controls
 - Characteristic curves
 - Comparison of sensors
 - Adjustment of the regulator's inlet
 - Calibration of the sensors using a reference
- Technical data about the elements of a regulation loop
- Sensor – regulator – actuator – perturbing element
- PID or self-adaptive – hot/cold regulation
- Configuration of the regulator
- Characteristic curves (temperature, time of response, etc...)

Erreur! Liaison incorrecte.

UTILITIES

Electricity : 230 VAC single-phase – 50/60 Hz

DIMENSIONS AND WEIGHT

Length : 780 mm
Width : 570 mm
Height : 590 mm
Weight : 35 kg

Pt 100 Ω probe

3 filaments 0.22 mm²
probe : \varnothing 3.2 mm
Stainless steel 304 L
Class A
Signal converter: outlet 4-20 mA

Thermocouple (T)

Type (Cu/Co) (T)
2 filaments 0.22 mm²
probe : \varnothing 3 mm
Stainless steel 304 L
Signal converter : outlet 4-20 mA

Fan (1)

Axial type
Forced operation for the perturbation
Control through the cold outlet of the regulator

Oven (2)

Stainless steel tube with heater band
Heater band **(2a)** controlled by static relay
(2b)
Heating signal 4-20 mA
Safety thermostat and heat-oven indicator

PID type regulator with microprocessor

Accuracy class : 0.2
Configurable scale range
Continue, logic and relay outlet
– Proportional band from 0.5 to 1000%
– Integral action time from 0.1 to 100 min
– Derived action time from 0.01 to 10 min
Self-adaptive : PID parameters are calculated by the regulator for an optimized regulation.
Numerical outlet MODBUS RS 232