

# ULTRA-THERM

NEW SERIES

## THE HIGH PERFORMANCE ELECTRONIC TEMPERATURE CONTROLLERS



### SPECIAL FEATURES

- ONE** **extractible design** and compact size (48x96) with a total depth of 100 mm. only, allows the assembly of the controller in a smaller space, on a front panel or within "OMEGA" drivers.
- TWO** **basic visualization versions** with:  
**LED digits logic display unit** for an accurate readout of the measured temperature, or **analogic deviation indicator** by mobile pointer to evaluate the stability of the regulation.
- THREE** **different functions in only one instruments: cooling-heating-alarm**, this allows to find the solution to any temperature controlling problem.

### TECHNICAL SPECIFICATIONS

**INPUT**, the measurement circuit can be connected to the following probes:  
**Thermocouple** (cold joint compensation included, ref. 20°C),  
**Resistance-thermometer** Pt 100 - 2 or 3 wires. Safety protection load interrupt against the breakdown of the probe or of its connection.  
**PRE-SETTING DEVICES**  
**Master set-point**: 3 or 4 digits decimal preslector-resolution 1 digit.  
**Auxiliary slave set-points**: adjustable potentiometers regulation, field in % v.f.s.  
**TEMPERATURE INDICATOR**  
 Type UA... Mobile pointer for the deviation value readout...  
 Type UC... Led digits logic display unit, each seven-segments display format: 10 mm.

### PRECISION CLASS

Direct readout in °C. (F on request).  
 For resistance thermometers < 0.5%, for thermocouples < 1%  
 Reference conditions at 22°C.

The new series ULTRA-THERM temperature controllers are representing the development of the most advanced technology in the field of industrial instrumentation. The assembly with carefully selected components, and severe production quality controls by skillful labour, grants the solution for any problem of temperature controlling and regulation that may occur on plating processing machinery; rubber, packaging machinery; wood working; alimentary, chemical, pharmaceutical industry; refrigerating rooms; ovens and industrial thermic control plants.

### OUTPUTS

Relay output with exchange contacts of 6A 250 V.  
 Voltage logic output for external static relay.  
 Current logic output variable from 0 to 20 mA.  
 Power static output 3.15 Amp. - 220 V. with SCR relay and extra-rapid fuse included.  
 5 versions of alarm contacts output.  
**3 positions** output for servo-motors positioning controller.  
**Optional** outputs of measuring signals or deviation signals.  
**MASTER CONTROL ACTION**, not-continuous (ON-OFF) P - PD or PD + PI  
 Proportional band Xp1 adjustable 0-6%  
 Derivative cycle time: 2 sec. ≤ Tv ≤ 80 sec.  
 Integrative cycle time: 2 min. ≤ Tl ≤ 10 min.