

CTD43/46 & CTH46 Temperature Controllers

Crouzet Products /Automation Controls /Control Relays /Temperature Controllers /CTD-CTH

PRODUCT FEATURES

CTD43 / CTD46 Temperature Controllers

- Five temperature control modes
- 1/16 DIN enclosure
- Multiple temperature range (°F & °C)
- CTD46 displays both setpoint and actual temperature
- Auto tuning
- Built-in alarm
- Soft-start function
- NEMA 4X front panel

CTH46 Temperature Controllers

- Includes a dual heating/cooling function, as well as the other features of the CTD46

[CTD43/46 & CTH46 Operating Manual](#)



CTD43 Series Temperature Controllers

| Mounting Style | Input Power | Output | Series | Part number |
|----------------------|--------------|------------|--------|-----------------|
| 1/16 DIN Panel Mount | 24 V AC/DC | SPDT | CTD43 | 89421102 |
| 1/16 DIN Panel Mount | 110/220 V AC | SPDT | CTD43 | 89421108 |
| 1/16 DIN Panel Mount | 24 V AC/DC | Transistor | CTD43 | 89421112 |
| 1/16 DIN Panel Mount | 110/220 V AC | Transistor | CTD43 | 89421118 |

CTD46 Series Temperature Controllers

| Mounting Style | Input Power | Output | Series | Part number |
|----------------------|--------------|------------|--------|-----------------|
| 1/16 DIN Panel Mount | 24 V AC/DC | SPDT | CTD46 | 89422102 |
| 1/16 DIN Panel Mount | 110/220 V AC | SPDT | CTD46 | 89422108 |
| 1/16 DIN Panel Mount | 24 V AC/DC | Transistor | CTD46 | 89422112 |
| 1/16 DIN Panel Mount | 110/220 V AC | Transistor | CTD46 | 89422118 |

CTH46 Series Temperature Controllers

| Mounting Style | Input Power | Output | Series | Part number |
|----------------------|--------------|------------|--------|-----------------|
| 1/16 DIN Panel Mount | 24 V AC/DC | SPDT | CTH46 | 89422502 |
| 1/16 DIN Panel Mount | 110/220 V AC | SPDT | CTH46 | 89422508 |
| 1/16 DIN Panel Mount | 24 V AC/DC | Transistor | CTH46 | 89422512 |
| 1/16 DIN Panel Mount | 110/220 V AC | Transistor | CTH46 | 89422518 |

CTH 46 SERIES

TEMPERATURE CONTROLLER

- Dual Heat/Cooling Function
- 1/16 DIN-Sized Enclosure
- Set Point and Actual Temperature Displayed
- Auto-Tuning
- NEMA 4X Front Panel



DESCRIPTION:

The CTH accepts inputs from various types of sensors (thermocouple and RTD). The CTH provides dual outputs for heating and cooling. The CTH has a temperature range from -199 to 999 degrees Fahrenheit or -199 to 999 degrees Centigrade and will accept J K L or N types thermocouples and RTDs as temperature sensors. Control modes include ON-OFF or proportioning action (PID, P, PI, PD). The auto-tuning "Smart" function will calculate and set automatically the optimum values for the PID mode to insure the closest control of any heating or cooling load.

SPECIFICATIONS:

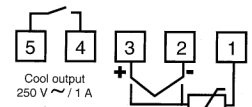
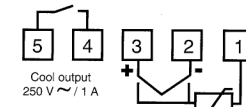
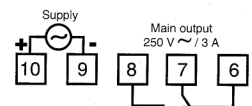
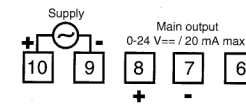
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|------------------------------------|-------------------------------------|
| Input Power | 100 to 240 VAC, 50/60 Hz +15% - 10% |
| | 24 VAC, 50/60 Hz, +15% - 10% |
| Power Consumption | 5 VA |
| Display | |
| Measure Display | 3 Digit (10mm) Red Leds |
| Preset Display | 3 Digit (7.5mm) Green Leds |
| Output | |
| Main Output | Relay: SPDT, 3 Amp 250 VAC |
| | Logic: Maximum load is 700 ohm |
| | Level 0 : <0.5 VDC |
| | Level 1 : 14 VDC @ 20 mA |
| | 24 VDC @ 1 mA |
| Cool Output | NO-1A contact, 250 VAC resistive |
| Accuracy | ± .3% of full scale range |
| Insulation Resistance | > 100 M ohm |
| Dielectric Strength | 1500 Vrms |
| Sampling Period | 0.5 sec |
| Wiring Connection | Screw Terminals |
| Operating Temperature | 32°F to 122°F |
| NEMA Panel Rating | NEMA 4X |
| Weight | 11 oz. (300g) |

WIRING DIAGRAM:

CTH 46

Voltage output

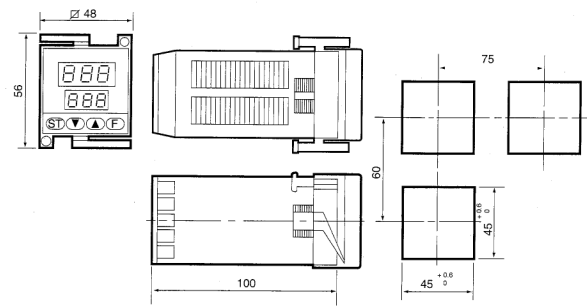
Relay output



Connection of thermocouple or resistance thermometer

Connection of thermocouple or resistance thermometer

DIMENSIONS: (mm)



ORDERING INFORMATION:

VOLTAGE

| | |
|---------|----------------|
| VOLTAGE | 100 to 240 VAC |
| | 100 to 240 VAC |
| | 24 VAC/VDC |
| | 24 VAC/VDC |

OUTPUT

| | |
|--------|------------|
| OUTPUT | Relay |
| | Transistor |
| | Relay |
| | Transistor |

PART NUMBER

| | |
|-------------|----------|
| PART NUMBER | 89422508 |
| | 89422518 |
| | 89422502 |
| | 89422512 |