

CT48A Temperature Controllers

Crouzet Products /Automation Controls /Control Relays /Temperature Controllers /CT48A

PRODUCT FEATURES

CT48 Temperature Controllers

- Simple two-function temperature controller
- On/Off & PD Operation modes
- Accepts types J & K thermocouples
- 8-Pin plug-in base, 1/16 DIN enclosure
- SPDT 5A output relay



CT48A Series Temperature Controllers

Mounting Style	Input Power	Range	Type	Output	Series	Part number
1/16 DIN Panel Mount	24 V AC	0-250°C	J	SPDT	CT48A	89420041
1/16 DIN Panel Mount	110 V AC	0-250°C	J	SPDT	CT48A	89420045
1/16 DIN Panel Mount	240 V AC	0-250°C	J	SPDT	CT48A	89420047
1/16 DIN Panel Mount	24 V AC	0-450°C	J	SPDT	CT48A	89420061
1/16 DIN Panel Mount	110 V AC	0-450°C	J	SPDT	CT48A	89420065
1/16 DIN Panel Mount	240 V AC	0-450°C	J	SPDT	CT48A	89420067
1/16 DIN Panel Mount	24 V AC	0-650°C	J	SPDT	CT48A	89420091
1/16 DIN Panel Mount	110 V AC	0-650°C	J	SPDT	CT48A	89420095
1/16 DIN Panel Mount	240 V AC	0-650°C	J	SPDT	CT48A	89420097
1/16 DIN Panel Mount	24 V AC	0-800°C	K	SPDT	CT48A	89420071
1/16 DIN Panel Mount	240 V AC	0-800°C	K	SPDT	CT48A	89420077
1/16 DIN Panel Mount	24 V AC	0-1000°C	K	SPDT	CT48A	89420081
1/16 DIN Panel Mount	110 V AC	0-1000°C	K	SPDT	CT48A	89420085
1/16 DIN Panel Mount	240 V AC	0-1000°C	K	SPDT	CT48A	89420087

- Accepts J or K type Thermocouples (Type PT100 can be made available on demand)
- 2 operational modes ON/OFF or PD (Proportional Derivative)
- 8 Pin Plug-in, Relay Output, 1/16 Din, Panel mount



Specifications:

Supply Voltage:230/240Vac,50/60Hz, +/- 15%
 115Vac, 50/60Hz, +/- 15%
 24VAC,50/60Hz, +/- 15%

Max Power Consumption 2 VA

Inputs:

ThermocoupleIAW IEC 584.....J or K types
 Max line resistance:.....150Ω

Derating with regard.....Per 10°C Variation in ≤ 1 °C
 to setpoint in Ambient Temp.
 Per 10Ω of line ≤ 1 °C
 Resistance Variation
 Per 10% variation ≤ 0.1 %
 In supply voltage

PT100.....IAW IEC 751..... 2 Wire
 Derating following line resistance1 °C / 0.4Ω

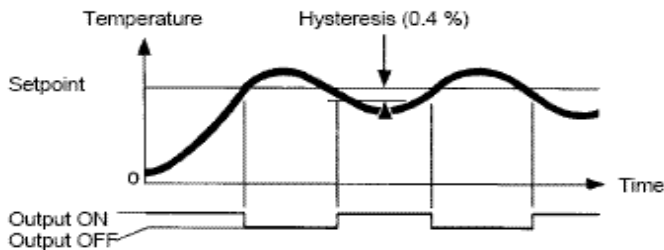
Derating with regard.....Per 10°C Variation in ≤ 1 °C
 to setpoint in Ambient Temp.
 Per 10% variation ≤ 0.1 %
 In supply voltage

Operation

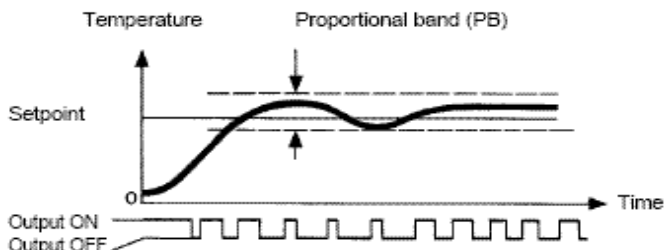
ON/OFF output.....Fixed Hysteresis.....0.4%
 PD output..... Fixed proportional.....3%
 Band (% of full scale)
 Period proportional.....22 s
 hand

Function diagrams

ON/OFF output action



Proportional derivative (PD) action



Type

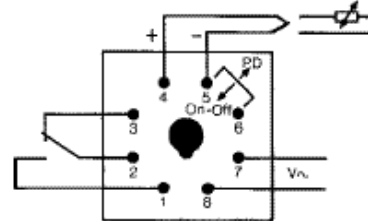
Part Number

Temperature Range / Scale	Divisions	Thermocouple	Part Number
230/240Vac			
0 to + 250 °C	5 °C	Type J	89 420 047
0 to + 450 °C	10 °C	Type J	89 420 067
0 to + 650 °C	10 °C	Type J	89 420 097
0 to + 800 °C	20 °C	Type K	89 420 077
0 to + 1000 °C	20 °C	Type K	89 420 087
115Vac			
0 to + 250 °C	5 °C	Type J	89 420 045
0 to + 450 °C	10 °C	Type J	89 420 065
0 to + 650 °C	10 °C	Type J	89 420 095
0 to + 1000 °C	20 °C	Type K	89 420 085
24Vac			
0 to + 250 °C	5 °C	Type J	89 420 041
0 to + 450 °C	10 °C	Type J	89 420 061
0 to + 650 °C	10 °C	Type J	89 420 091
0 to + 800 °C	20 °C	Type K	89 420 071
0 to + 1000 °C	20 °C	Type K	89 420 081

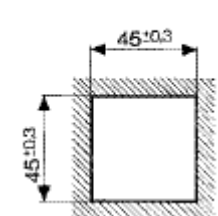
Outputs:

Contact relay.....SPDT.....5 A / 250Vac max
 Mechanical life.....3 x 10⁵ operations
 Scale resolution.....80mm
 Display accuracy.....J - K (full scale)..... ± 2%
 PT 100 (full scale)..... ± 1.5%
 Temperature limits..... Operational.....0 °C + 55 °C
 Storage.....-20 °C + 70 °C
 Front Panel RatingIP 41
 Case.....IP 20
 Weight.....350 g

Connections



Panel cut-out



Dimensions - mounting

