Temperature Controllers

Models TEC-4500 & TEC-9500

Model TEC-4500 1/4 DIN & Model TEC-9500 1/16 DIN Ramp & Soak Temperature Controls

Design Features
- Ramp & Soak Programmable Control
- Nine recipes (profiles) available using 64 segments maximum per recipe
- Event Input – one of 8 functions can be chosen: start run mode, hold mode, abort recipe, manual mode, failure transfer, turn off, segment advance, select 2nd set of PID parameters
- Event Output – 3 relays are available. Can be programmed to any segment or end of recipe
- Analog Retransmission – optional mA or VDC transfer of PV or SV values
- Highly accurate universal input with 18 bit analog to digital converter
- Bright 0.40” (10mm) red LED process display
- Fast sample rate – 200ms
- Fuzzy Logic PID Autotune heat and cool control – 2 sets of values can be used
- Optional RS-485 or RS-232 communications interface
- Programming port available for PC connection allowing quick set-up
- Lockout protection guards against unauthorized setting changes
- Bumpless transfer allows continued temperature control if sensor fails
- Universal input, field configurable (Type J T/C default, PT100, mA, V) with high accuracy 18-bit D-A
- Short panel depth required

Agency Approvals

Power Input
4 = 90-250 VAC, 50-60 Hz
5 = 11-26 VAC / VDC

Signal Input — Universal, can be programmed in the field
1 = Universal input (factory default = TC type J)
2 = Universal input (10mV input)
3 = Universal input (50mV input)
4 = Universal input (0-10V input)
5 = Universal input (0-5V input)
6 = Universal input (1-5V input)
7 = Universal input (0-1V input)
8 = Universal input (20V input)
9 = Universal input (Other)

Output 3
0 = None
1 = Relay: 2A / 240 VAC
2 = Pulse DC for SSR drive — 5 VDC (30 mA max)
6 = Triac-SSR output 1A / 240 VAC
7 = Isolated 20V @ 25 mA DC, Output Power Supply
8 = Isolated 12V @ 40 mA DC, Output Power Supply
A = Isolated 5V @ 80 mA DC, Output Power Supply
C = Pulsed voltage to drive SSR, 14V/40mA
9 = Other

Output 4 (TEC-4500 only)
0 = None
1 = Relay: 2A / 240 VAC
2 = Pulse DC for SSR drive — 5 VDC (30 mA max)
3 = Retransmission 4-20mA (default), 0-20 mA
4 = Retransmission 1-5 VDC (default), 0-5VDC, 0-10 VDC
6 = Triac-SSR output 1A / 240 VAC
7 = Isolated 20V @ 25 mA DC, Output Power Supply
8 = Isolated 12V @ 40 mA DC, Output Power Supply
A = Isolated 5V @ 80 mA DC, Output Power Supply
C = Pulsed voltage to drive SSR, 14V/40mA
9 = Other

Note: Detailed information on features common to digital microprocessor-based TEC temperature controls and the complete Table of Input Range and Accuracy can be found on page 13-46.

Hardware Code: TEC-4500-
Hardware Code: TEC-9500-

A Part Number based on the hardware code and any software pre-programming will be issued at time of order.

Standard lead time is stock to 2 weeks.

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