

The compact Series 16C Temperature C ontroller offers accurate temperature measurement and control in a $1 / 16$ DIN package. Designed for direct or reverse acting (cooling or heating) control, the Series 16C can be programmed for simple ON/OFF or more complex PID control functions. PID control is supported with manual or autotuning. Select relay, voltage or current output for control methods.
The Series 16C accepts a variety of thermocouple and RTD inputs. Process value and setpoint value are displayed simultaneously on the large dual LED. Auto-tuning, engineering units ( ${ }^{\circ} \mathrm{F}$ or ${ }^{\circ} \mathrm{C}$ ), and alarm status is also indicated on the faceplate. Two alarm outputs are included on the unit with 12 preprogrammed alarm functions.

| Input Types | Range |
| :---: | :---: |
| Pt100 RTD | 32 to $212^{\circ} \mathrm{F}\left(0\right.$ to $\left.100^{\circ} \mathrm{C}\right)$ |
|  | -4 to $932^{\circ} \mathrm{F}\left(-20\right.$ to $\left.500^{\circ} \mathrm{C}\right)$ |
|  | -328 to $1112^{\circ} \mathrm{F}\left(-200\right.$ to $\left.600^{\circ} \mathrm{C}\right)$ |
| $\mathrm{T} / \mathrm{C}$ type B | 212 to $3272^{\circ} \mathrm{F}\left(100\right.$ to $\left.1800^{\circ} \mathrm{C}\right)$ |
| $\mathrm{T} / \mathrm{C}$ type S | 32 to $3092^{\circ} \mathrm{F}\left(0\right.$ to $\left.1700^{\circ} \mathrm{C}\right)$ |
| $\mathrm{T} / \mathrm{C}$ type R | 32 to $3092^{\circ} \mathrm{F}\left(0\right.$ to $\left.1700^{\circ} \mathrm{C}\right)$ |
| $\mathrm{T} / \mathrm{C}$ type N | -328 to $2372^{\circ} \mathrm{F}\left(-200\right.$ to $\left.1300^{\circ} \mathrm{C}\right)$ |
| $\mathrm{T} / \mathrm{C}$ type E | 32 to $1112^{\circ} \mathrm{F}\left(0\right.$ to $\left.600^{\circ} \mathrm{C}\right)$ |
| $\mathrm{T} / \mathrm{C}$ type T | -4 to $752^{\circ} \mathrm{F}\left(-20\right.$ to $\left.400^{\circ} \mathrm{C}\right)$ |
|  | -328 to $752^{\circ} \mathrm{F}\left(-200\right.$ to $\left.400^{\circ} \mathrm{C}\right)$ |
| $\mathrm{T} / \mathrm{C}$ type J | -4 to $752^{\circ} \mathrm{F}\left(-20\right.$ to $\left.400^{\circ} \mathrm{C}\right)$ |
|  | -148 to $1562^{\circ} \mathrm{F}\left(-100\right.$ to $\left.850^{\circ} \mathrm{C}\right)$ |
| $\mathrm{T} / \mathrm{C}$ type K | -328 to $2372^{\circ} \mathrm{F}\left(-200\right.$ to $\left.1300^{\circ} \mathrm{C}\right)$ |
|  | -328 to $932^{\circ} \mathrm{F}\left(-200\right.$ to $\left.500^{\circ} \mathrm{C}\right)$ |
| $\mathrm{T} / \mathrm{C}$ type L | -328 to $932^{\circ} \mathrm{F}\left(-200\right.$ to $\left.500^{\circ} \mathrm{C}\right)$ |
| $\mathrm{T} / \mathrm{C}$ type U | -328 to $1472^{\circ} \mathrm{F}\left(-200\right.$ to $\left.800^{\circ} \mathrm{C}\right)$ |

## SPECIFIC ATIONS

Inputs: Thermocouple, RTD, see chart.
Display: Two 4-digit, 7 segment $.25^{\prime \prime} \mathrm{H}(6.35 \mathrm{~mm})$ LED's. PV: red; SV: green.
Accuracy: $\pm 0.25 \%$ span, $\pm 1$ least signific ant digit.
Supply Voltage: 100 to 240 VAC, $50 / 60 \mathrm{~Hz}$.
Power Consumption: 5 VA max.
Operating Temperature: 32 to $122^{\circ} \mathrm{F}\left(0\right.$ to $50^{\circ} \mathrm{C}$ ).
Memory Backup: Nonvolatile memory.

## Control Output Ratings:

Relay: SPST, 5A @ 250 VAC resistive.
Voltage pulse: $14 \mathrm{~V}, 10 \%$ to $-20 \%$ (max 40 mA ).
Current: 4 to 20 mA .
Communication: RS 485 Modbus ${ }^{\circledR}$ A-5-11/RTU
Communication Protocal
Weight: 4 oz (114 g).
Agency Approvals: CE, UL.

## MODELS

| Model <br> Number | Output |
| :---: | :---: |
| $16 \mathrm{C}-2$ | Voltage Pulse |
| $16 \mathrm{C}-3$ | Relay |
| $16 \mathrm{C}-5$ | Current |

