

# E5\_C Series Temperature Controllers

## Navigation Guide

**OMRON**  
AUTOMATION & SAFETY



Product Line	E5GC (1/32 DIN)	E5CC-U (1/16 DIN socket mounted)	E5DC (22.5 (w) socket mount)	E5AC (1/4 DIN), E5EC (1/8 DIN), E5CC (1/16 DIN)	E5AC-T (1/4 DIN), E5EC-T (1/8 DIN), E5CC-T (1/16 DIN)
<b>Selling Tips</b>	<ul style="list-style-type: none"> <li>Panel Mounted</li> <li>50 ms High Speed sampling allows more precise heater control</li> <li>Removable screw or spring clamp terminal blocks (depending on model)</li> <li>Parameters can be configured using CX-Thermo</li> </ul>	<ul style="list-style-type: none"> <li>Socket mounted</li> <li>50 ms High Speed sampling allows more precise heater control</li> <li>Up to eight set points can be saved and selected using event inputs</li> <li>Parameters can be configured using CX-Thermo</li> </ul>	<ul style="list-style-type: none"> <li>DIN rail mounting</li> <li>50 ms High Speed sampling allows more precise heater control</li> <li>Built in "AND/OR" logic allows user to configure to their application</li> <li>Parameters can be configured using CX-Thermo</li> </ul>	<ul style="list-style-type: none"> <li>50 ms High Speed sampling allows more precise heater control</li> <li>Built in "AND/OR" logic allows user to configure to their application</li> <li>Parameters can be configured using CX-Thermo</li> </ul>	<ul style="list-style-type: none"> <li>8 segments which can hold 32 segments (256 programs)</li> <li>"Segment Jump" allows users to jump to specified segment</li> <li>50ms High Speed sampling allows more precise heater control</li> <li>Built in "AND/OR" logic allows user to configure to their application</li> <li>Parameters can be configured using CX-Thermo</li> </ul>
<b>Typical Applications</b>	Extrusion Equipment, Blow Molding Equipment, Hot Runner Plastic Injection, Industrial Ovens/Furnaces, Textile mfg. Equipment, Food & Beverage Processing Equipment, Packaging Equipment, Boilers				
<b>Supply Voltage</b>	100-240 VAC, 24VAC/VDC				
<b>Input Types</b>	Thermocouple: K, J, T, E, L, U, N, R, S, B, W, or PL II; RTD: JPt100, Pt100; Current: 4 to 20mA or 0 to 20mA; Voltage: 1 to 5V, 0 to 5V, or 0 to 10V				
<b>Output Types</b>	Relay: SPST-NO (2A @ 250VAC); Voltage: 12VDC @ 20mA; Current: 4 to 20 mA or 0 to 20mA	Relay: (SPST-NO, 3A @ 250 VAC); Voltage: 12VDC @ 21mA; Current: 4 to 20mA or 0 to 20mA; Linear Voltage Output: 0 to 10 VDC (Transfer Output Only)			
<b>Control</b>	On/Off, 2-PID (with auto-tuning)				
<b>Event Input</b>	1 or 2 (depends on model)	0	0 or 2 (depends on model)	E5AC & E5EC: 2,4,6 (depends on model) E5CC: 2 or 4 (depends on model)	E5AC-T & E5EC-T: 2,4,6 (depends on model) * E5CC-T: 2 or 4 (depends on model)
<b>Sampling Rate</b>	50 ms	50 ms	50 ms	50 ms	50 ms
<b>Display (mm)</b>	PV: 10.5 SV: 5.0	PV: 15.2 SV: 7.1	PV: 8.5 SV: 8.0	E5AC: E5CC: PV: 15.2 SV: 7.1 E5EC: PV: 18.0 SV: 11.0	E5AC-T: PV: 18.0 SV: 11.0 MV: 7.8 E5EC-T: PV: 25.0 SV: 15.0 MV: 9.5 E5CC-T: PV: 15.2 SV: 7.1
<b>Set-up Software (CX-Thermo)</b>	Yes	Yes	Yes	Yes	Yes
<b>Heater Burnout</b>	Yes	Yes	Yes	Yes	Yes
<b>Communications Available</b>	RS-485, Protocol: CompoWay/F, Modbus RTU	No	RS-485, Protocol: CompoWay/F, Modbus RTU	RS-485, Protocol: CompoWay/F, Modbus RTU	RS-485, Protocol: CompoWay/F, Modbus RTU
<b>Program Capacity (Ramp/Soak)</b>	2 Simple Patterns	2 Simple Patterns	2 Simple Patterns	2 Simple Patterns	256 Segments (8 programs, 32 segments)
<b>IP Rating (Front Cover)</b>	NEMA4/IP66	NEMA 4X/IP66	NEMA1/IP20	NEMA 4X/IP66	NEMA 4X/IP66
<b>Approvals</b>	cULUS, CE				

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Omron's E5\_C Series of Temperature Controllers (E5\_C, E5DC, E5\_C-T and E5CC-U) are capable of providing solutions to multiple applications.

E5\_C Series Temperature Controllers can be used in "On Panel" or "In Panel" applications.

Common features which are shared with these series are:

- Easy to read bright LCD display
- 50 ms sampling speed
- 60 mm (depth) short body design
- Parameters can be set using CX-Thermo software
- Acceptance of multiple inputs (Thermocouple, RTD, Linear)
- Three outputs: Relay, Voltage, Linear Current

## On Panel

E5\_C Series Temperature Controller and E5\_C-T Ramp/Soak Temperature Controller Applications



Sterilization Equipment for Food and Pharmaceuticals



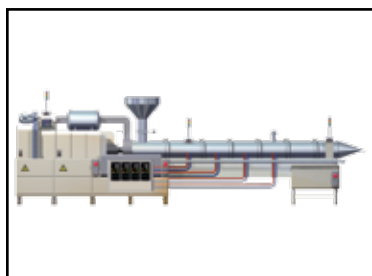
Electric Furnace



Laboratory Instruments and Desktop Testing Apparatus

## In Panel

E5CC-U 1/16 DIN Plug-in & E5DC 22.5 mm (width) Plug-in Applications



Plastic Injection molding



Electrical Panels



Shrink Wrapping