

# Digital Temperature Controllers/ NX-series Temperature Control Unit

E5□D/NX-TC



Temperature control is  
moving into the era of AI.













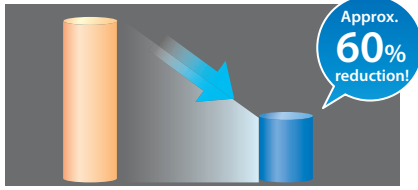


# Push-In Plus Technology for Easy Wiring

E5□D-B/NX-TC

Just Insert Wires: No Tools Required  
Now you can use Push-In Plus technology to reduce the time and work involved in wiring.

## Greatly Reduce Wiring Work



Conventional screw terminal blocks OMRON Push-In Plus terminal blocks

\*Information for Push-In Plus and screw terminal blocks is based on OMRON's actual measurement value data.

## Easy to Insert

OMRON's Push-In Plus technology are as easy as inserting to an earphone jack. They help reduce the work load and improve wiring quality.



Our shared Value Design for Panel (herein after referred to as "Value Design") concept for the specifications of products used in control panels will create new value to our customer's control panels.



## Main specifications

E5□D/E5□D-B

Model	E5CD	E5CD-B	E5ED	E5ED-B
Size (mm)	Front panel: 48 × 48, Depth: 60	Front panel: 48 × 48, Depth: 67.4	Front panel: 48 × 96, Depth: 60	Front panel: 48 × 96, Depth: 67.4
Sensor input	Thermocouple, platinum resistance thermometer, infrared temperature sensor (E51B), or analog input (voltage/current).			
Indication accuracy (at the ambient temperature of 23°C)	Thermocouple: (±0.3% of indication value or ±1°C, whichever is greater) ±1 digit max. Platinum resistance thermometer: (±0.2% of indication value or ±0.8°C, whichever is greater) ±1 digit max. Analog input: ±0.2% FS ±1 digit max. CT input: ±5% FS ±1 digit max.			
Input sampling period	50 ms			
Control output	Relay output, voltage output (for driving SSR), Linear current output			
Terminal type	M3 screw terminal block	Push-In Plus terminal block	M3 screw terminal block	Push-In Plus terminal block
Approved standards	UL, KC, CE			

NX-TC

Model	NX-TC24□□	NX-TC34□□
Size (mm)	Front panel: 12 × 100, Depth: 71	Front panel: 24 × 100, Depth: 71
Sensor input	Thermocouple, platinum resistance thermometer	
Reference Accuracy	For details, refer to the "NX-series Temperature Control Units User's Manual (Man.No. H228)".	
Input sampling period	50ms	
Control output	Voltage output (for driving SSR), Linear current output	
Terminal type	Push-In Plus terminal block (Screwless clamping terminal block)	
Approved standards	cULus, CE, RCM, KC, EAC	

Temperature Sensors for Packaging Machines

Model	E52-CA□AY S□
Type	Lead wire type
Element type	K
Temperature range (Temperature range of sleeve)	0 to 650°C (0 to 260°C)
Protective tubing length (mm)	60/120
Protective tubing diameter (mm)	1 dia.
Compensating conductor	7 core/30 core
Temperature measuring junction	Grounded type
Terminal type	Y(Y terminal), F(Ferrule terminal)

## Main functions of E5□D/NX-TC

- Adaptive Control
- Automatic Filter Adjustment
- Water-cooling Output Adjustment
- Indication Data

Power ON Time\*

Ambient Temperature

Output ON/OFF Count\*

\*Only E5□D Series

\* For details of the specifications, refer to "E5CD/E5ED Digital Temperature Controllers and Temperature Sensors for Packaging Machines Datasheet (Cat. No. H223)" and "NX - TC NX Series Temperature Control Unit Datasheet" on our website ([www.fa.omron.co.jp](http://www.fa.omron.co.jp))

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