

Digital Temperature Controller

E5CC/E5EC

Setting a new standard in temperature control.
E5CC (48x48x60 mm) / E5EC (48x96x60 mm)

- Large white LCD display which is easy to read from a distance
- Easy to set-up and operate
- Precise and fast regulation
- Wide range of I/O configurations for enhanced application ranges



48 × 48 mm (1/16 DIN)

E5CC



48 × 96 mm (1/8 DIN)

E5EC

Digital Temperature Controller

E5CC (48 × 48 mm)

Large white LCD display which is easy to read from a distance

Easy to set-up and operate

Precise and fast regulation

Wide range of I/O configurations for enhanced application ranges

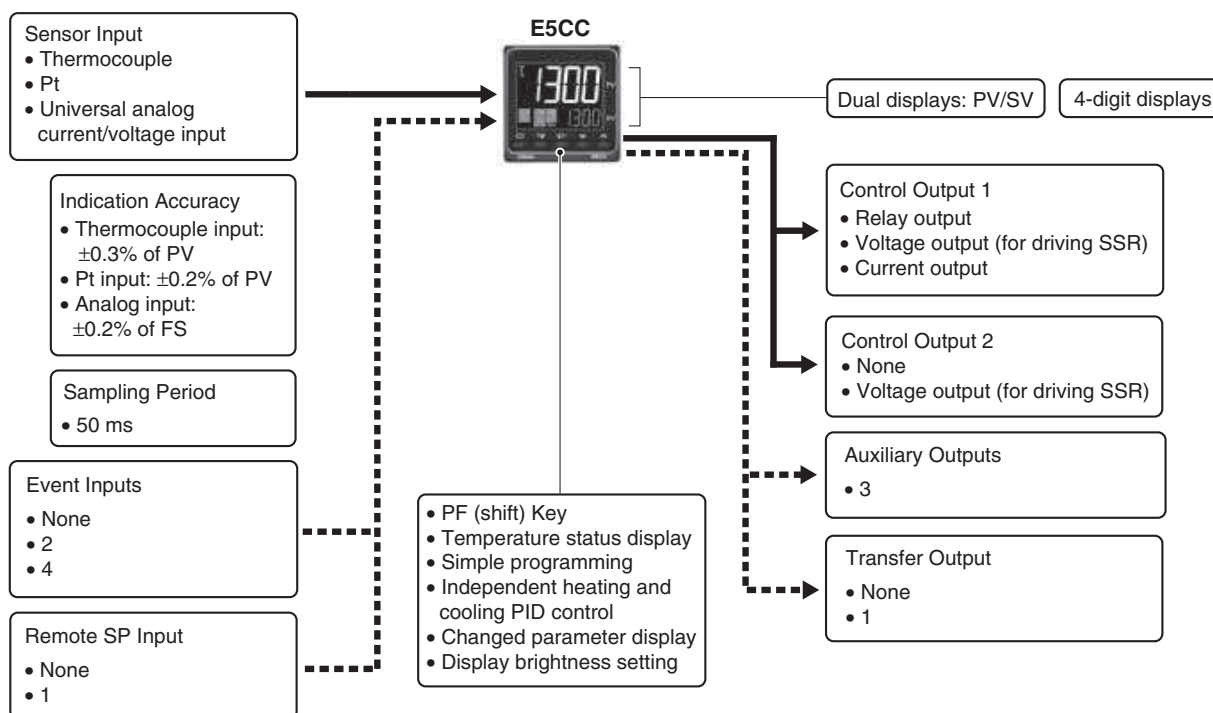


48 × 48 mm
E5CC

- Large white LCD display with 15,2 mm of height for best visibility
- Easy set-up and parameterization with CX-Thermo (sold separately)
- 50 ms control period time
- Extended range of I/O's: 3 auxiliary outputs, 4 event inputs, transfer output and remote SP's
- Short housing case with only 60 mm of depth
- Easy set-up with CX-Thermo software (Windows XP, 7) without additional power supply via USB conversion cable

Refer to Safety Precautions on page 30.

Main I/O Functions



This datasheet is provided as a guideline for selecting products.

Be sure to refer to the following manuals for application precautions and other information required for operation before attempting to use the product.

E5CC/E5EC Digital Controllers User's Manual (Cat. No. H174)

E5CC/E5EC Digital Controllers Communications Manual (Cat. No. H175)

Model Number Legend and Standard Models

Model Number Legend

E5CC-□□ □□□□-□□□□ (Example: E5CC-RX3A5M-000)

① ② ③ ④ ⑤ ⑥

Model	①	②	③	④	⑤	⑥	Meaning							
	Control outputs 1 and 2	No. of auxiliary outputs	Power supply voltage	Terminal type	Input type	Options								
E5CC							48 × 48 mm							
							Control output 1			Control output 2				
	RX						Relay output			None				
	QX						Voltage output (for driving SSR)			None				
*1	CX						Linear current output *2			None				
	QQ						Voltage output (for driving SSR)			Voltage output (for driving SSR)				
		3					3 (one common)							
			A				100 to 240 VAC							
			D				24 VAC/DC							
				5			Screw terminals (with cover)							
					M		Universal input							
							HB alarm and HS alarm	Communications	Event inputs	Remote SP Input	Transfer output			
							000	---	---	---	---			
						*1	001	1	---	2	---			
						*1	003	2 (for 3-phase heaters)	RS-485	---	---			
							004	---	RS-485	2	---			
							005	---	---	4	---			
							006	---	---	2		Provided.		
							007	---	---	2	Provided.			

*1. Options with HB and HS alarms (001 and 003) cannot be selected if a current output is selected for the control output.

*2. The control output cannot be used as a transfer output.

Heating and Cooling Control

● Using Heating and Cooling Control

① Control Output Assignment

If there is no control output 2, an auxiliary output is used as the cooling control output.

If there is a control output 2, the two control outputs are used for heating and cooling.

(It does not matter which output is used for heating and which output is used for cooling.)

② Control

If PID control is used, you can set PID control separately for heating and cooling.

This allows you to handle control systems with different heating and cooling response characteristics.