

Ordering Information

Controllers with Terminal Blocks

Size	Case color	Power supply voltage	Input type	Auxiliary outputs	Control output 1	Model		
1/16 DIN 48 × 48 × 78 (W × H × D)	Black	100 to 240 VAC	Thermocouple or Resistance thermometer	None	Relay output	E5CN-RMT-500		
					Voltage output (for driving SSR)	E5CN-QMT-500		
					Current output	E5CN-CMT-500		
				2	Relay output	E5CN-R2MT-500		
					Voltage output (for driving SSR)	E5CN-Q2MT-500		
					Current output	E5CN-C2MT-500		
		24 VAC/VDC	Thermocouple or Resistance thermometer	None	Relay output	E5CN-RMTD-500		
					Voltage output (for driving SSR)	E5CN-QMTD-500		
					Current output	E5CN-CMTD-500		
				2	Relay output	E5CN-R2MTD-500		
					Voltage output (for driving SSR)	E5CN-Q2MTD-500		
					Current output	E5CN-C2MTD-500		
	Silver	100 to 240 VAC	Analog (current/voltage)	None	Relay output	E5CN-RML-500		
					Voltage output (for driving SSR)	E5CN-QML-500		
					Current output	E5CN-CML-500		
				2	Relay output	E5CN-R2ML-500		
					Voltage output (for driving SSR)	E5CN-Q2ML-500		
					Current output	E5CN-C2ML-500		
		24 VAC/VDC	Analog (current/voltage)	2	Relay output	E5CN-R2MLD-500		
					Voltage output (for driving SSR)	E5CN-Q2MLD-500		
					Current output	E5CN-C2MLD-500		
				100 to 240 VAC	Thermocouple or Resistance thermometer	None	Relay output	E5CN-RMT-W-500
							Voltage output (for driving SSR)	E5CN-QMT-W-500
							Current output	E5CN-CMT-W-500
2	Relay output	E5CN-R2MT-W-500						
	Voltage output (for driving SSR)	E5CN-Q2MT-W-500						
	Current output	E5CN-C2MT-W-500						
24 VAC/VDC	Thermocouple or Resistance thermometer	2	Relay output	E5CN-R2MTD-W-500				
			Voltage output (for driving SSR)	E5CN-Q2MTD-W-500				
			Current output	E5CN-C2MTD-W-500				

E5CN
E5CN-U (48 x 48 mm)

E5AN (96 x 96 mm)
E5EN (48 x 96 mm)

E5CN-H (48 x 48 mm)

E5AN-H (96 x 96 mm)
E5EN-H (48 x 96 mm)

Option Units

One of the following Option Units can be mounted to provide the E5CN with additional functions.

Communications	Functions	Model
RS-485	3-phase heater burnout/SSR failure/Heater overcurrent detection	E53-CNHH03N2
	Heater burnout/SSR failure/Heater overcurrent detection	E53-CNHBN2
RS-485		E53-CNQ03N2
	Event inputs	E53-CNPBN2
	Heater burnout/SSR failure/Heater overcurrent detection	E53-CNPHN2
RS-485		E53-CNP03N2
RS-485	Heater burnout/SSR failure/Heater overcurrent detection	E53-CNHH03N2
RS-485		E53-CN03N2
	Event inputs	E53-CNBN2
	Heater burnout/SSR failure/Heater overcurrent detection	E53-CNQHN2
	3-phase heater burnout/SSR failure/Heater overcurrent detection	E53-CNQHHN2
	Event inputs	E53-CNQBN2

Operation

Safety Precautions

Note: Option Units cannot be used for plug-in models. These Option Units are applicable only to models released after January 2008.

External Connections

- A voltage output (control output, for driving SSR) is not electrically insulated from the internal circuits. When using a grounding thermocouple, do not connect any of the control output terminals to ground. (If the control output terminals are connected to ground, errors will occur in the measured temperature values as a result of leakage current.)
- Consult with your OMRON representative before using the external power supply for the ES1B for any other purpose.

E5CN

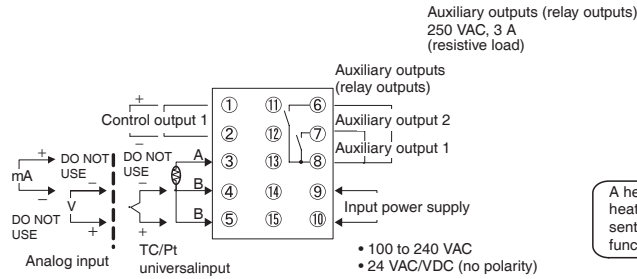
Controllers

Control output 1

- Long-life relay output
- 250 VAC, 3 A (resistive load)
- Relay output
- 250 VAC, 3 A (resistive load)
- Voltage output (for driving SSR)
- 12 VDC, 21 mA
- Current output
- 0 to 20 mA DC
- 4 to 20 mA DC
- Load: 600 Ω max.

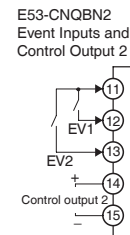
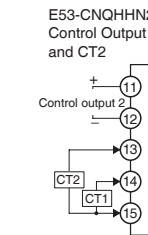
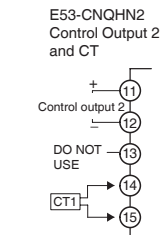
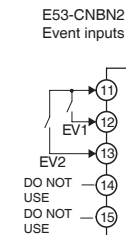
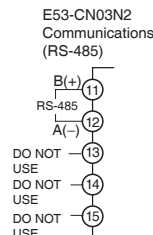
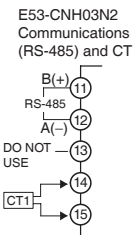
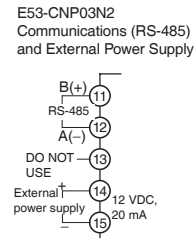
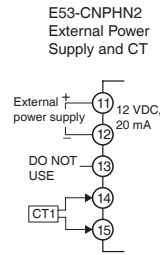
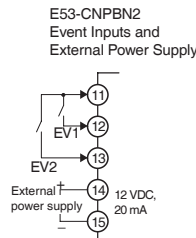
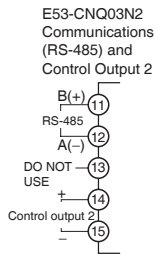
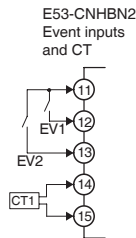
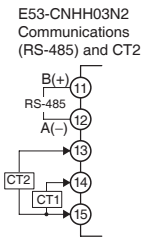
Control output 2

- Voltage output (for driving SSR)
- 12 VDC, 21 mA



A heater burnout alarm, heater short alarm, heater overcurrent alarm, or input alarm is sent to the output to which the alarm 1 function is assigned.

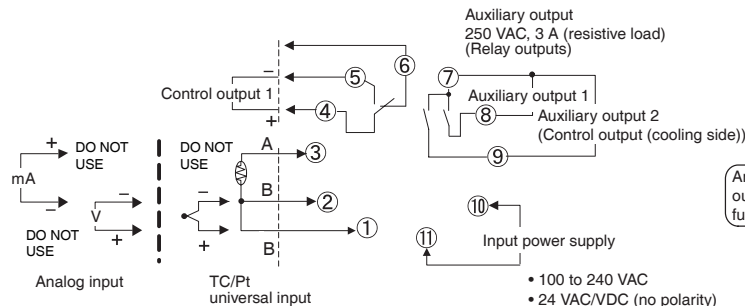
Option Units



E5CN-U

Control output 1

- Relay output (three terminals used) SPDT, 250 VAC, 3 A (resistive load)
- Voltage output (for driving SSR)
- 12 VDC, 21 mA
- Current output
- 4 to 20 mA DC
- 0 to 20 mA DC
- Load: 600 W max.



An input error is sent to the output to which the alarm 1 function is assigned.

Note: For the Wiring Socket, purchase the P2CF-11 or PG3A-11 separately.

E5CN
E5CN-U (48 x 48 mm)

E5AN (96 x 96 mm)
E5EN (48 x 96 mm)

E5CN-H (48 x 48 mm)

E5AN-H (96 x 96 mm)
E5EN-H (48 x 96 mm)

Operation

Safety Precautions