OMRON

Digital Temperature Controllers
E5CN/E5CN-U

This Best-selling General-purpose 48×48-mm Temperature Controller Is Now Even Better. Easy, Dependable, Complete Functionality, and 11-segment Displays.

- Controllers now available with analog inputs.
- Faster sampling at 250 ms.
- Transfer output provided for easy output to recorders.
- Voltage outputs (to drive SSRs) for both heating and cooling control. Can be used for alarms to provide three alarm outputs.
- Models available with three-phase heater burnout detection and SSR fault detection.
- Easy setting with 11-segment displays.
- Connect to either a thermocouple or platinum resistance thermometer with the same model.
- Easily see the status from a distance with PV display with three-color switching function.
- Setting protection indicator informs operator when protection is enabled.
- Manual output provided.
- Controller available with long-life relay output (available soon).

Note: Refer to Precautions on page 21.

NEW

Note: Refer to page 19 for information on changes in comparison to previous models.

Features

Improved Functions for a Wider Range of Application

Control Analog Values, such as Pressures, Flowrates, and Levels

The new E5CN Series now also includes models that accept analog inputs, enabling control applications other than for temperature, including pressure, flowrate, level, humidity, and weight control.

Note: E5CN-□L (Models with Analog Inputs)

Faster Sampling at 250 ms

The previous sampling time of 500 ms has been reduced by half to 250 ms. This enables the new E5CN to handle application requiring even greater response speed and accuracy.

Easy Connector to a Recorder

A transfer output now makes it easy to connect to a recorder or PLC Analog I/O Unit.

Note: E5CN-C□ (Models with Current Outputs)

Voltage Outputs (to Drive SSRs) for Both Heating and Cooling Control. Can Be Used for Alarms to Provide Three Alarm Outputs.

Voltage outputs can be used for both heating and cooling for Models with Two Control Outputs. Also, control output 2 can be set for use as an alarm output, to enable using up to three alarm outputs.

Note: E5CN-□Q (Option Board)

Three-phase Heater Burnout Detection

With Models with Three-phase Heater Burnout and SSR Failure Detection, two current transformers can be connected to detect both heater burnout and SSR failure at the same time, reducing costs because a separate heater burnout alarm device is not required. SSR failure detection can be used even with Models with Single-phase Heater Burnout Alarms.

Note: E5CN-□HH□ (Option Board)

Easy, Dependable, and Even Faster

Easy Setting with 11-segment Displays

The new E5CN features 11-segment displays to make text easier to read, eliminating the need to decode displays when trying to set parameters, as was necessary with previous temperature controllers.

Multi-input Capability with One Controller

Connect to either a thermocouple or platinum resistance thermometer with the same model. Model selection is simplified, stocks are reduced, and fewer maintenance parts are required.

Easily See Status from a Distance with PV Display with Three-color Switching Function

Setting Protection Indicator Informs Operator when Protection Is Enabled

A special icon on the display panel lights to let the operator know when setting protection has been set.

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Model Number Structure

■ Model Number Legend

E5CN-□□M□-500
1 2 3 4

1. **Output type**
   R: Relay
   Q: Voltage (for driving SSR)
   C: Current
   Y: Long-life relay output (available soon)
2. **Number of alarms**
   Blank: No alarm
   2: Two alarms
3. **Option Unit**
   M: Option Unit can be mounted
4. **Input type**
   T: Thermocouple/platinum resistance thermometer (multi-input)
   L: Analog input

This data sheet is provided as a guideline for selecting products. Be sure to refer to the following user manuals for application precautions and other information required for operation before attempting to use the product.

E5CN/E5CN-U Temperature Controller User's Manual (Cat. No. H129)

E5CN Temperature Controller Communications User's Manual (Cat. No. H130)

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Ordering Information

■ Controllers with Temperature Inputs (Multi-input)

Size	Power supply voltage	Number of alarm points	Control outputs	Model
1/16 DIN 48 × 48 × 78 (W × H × D)	100 to 240 VAC	0	Relay	E5CN-RMT-500
			Voltage (for driving SSR)	E5CN-QMT-500
			Current	E5CN-CMT-500
		2	Relay	E5CN-R2MT-500
			Voltage (for driving SSR)	E5CN-Q2MT-500
			Current	E5CN-C2MT-500
			Long-life relay	E5CN-Y2MT-500
	24 VAC/DC	0	Relay	E5CN-RMT-500
			Voltage (for driving SSR)	E5CN-QMT-500
			Current	E5CN-CMT-500
		2	Relay	E5CN-R2MT-500
			Voltage (for driving SSR)	E5CN-Q2MT-500
			Current	E5CN-C2MT-500
			Long-life relay	E5CN-Y2MT-500

■ Controllers with Analog Inputs

Size	Power supply voltage	Number of alarm points	Control outputs	Model
1/16 DIN 48 × 48 × 78 (W × H × D)	100 to 240 VAC	0	Relay	E5CN-RML-500
			Voltage (for driving SSR)	E5CN-QML-500
			Current	E5CN-CML-500
		2	Relay	E5CN-R2ML-500
			Voltage (for driving SSR)	E5CN-Q2ML-500
			Current	E5CN-C2ML-500
			Long-life relay	E5CN-Y2ML-500
	24 VAC/DC	2	Relay	E5CN-R2ML-500
			Voltage (for driving SSR)	E5CN-Q2ML-500
			Current	E5CN-C2ML-500

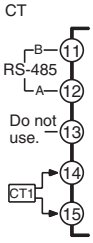
■ Option Units

The E5CN provides optional functionality when one of the following Option Units is mounted.

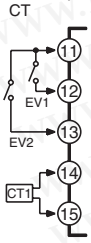
Functions			Model
Communications	Heater burnout/SSR failure detection		E53-CNH03N
Communications			E53-CN03N
	Heater burnout/SSR failure detection	Event inputs	E53-CNHBN
		Event inputs	E53-CNBN
Communications	3-phase heater burnout/SSR failure detection		E53-CNHH03N
Communications		Control output 2 (voltage output)	E53-CNQ03N
	Heater burnout/SSR failure detection	Control output 2 (voltage output)	E53-CNQHN

Note: Option Units cannot be used for Plug-in models.
These Option Units can be used for the new E5CN models only.

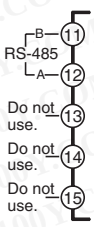
E53-CNH03N
Communications/
CT



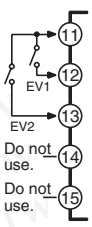
E53-CNHBN
Event inputs/
CT



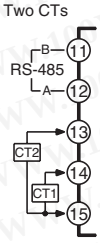
E53-CN03N
Communications



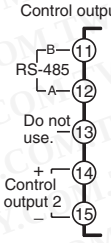
E53-CNBN
Event inputs



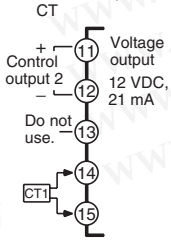
E53-CNHH03N
Communications/
Two CTs



E53-CNQ03N
Communications/
Control output 2



E53-CNQHN
Control output 2/
CT



Attach the appropriate terminal labels.

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Model Number Structure

■ Model Number Legend (Plug-in-type Controllers)

E5CN-□□□U
1 2 3 4

1. **Output type**
   R: Relay
   Q: Voltage
2. **Number of alarms**
   Blank: No alarm
   1: One alarm
   2: Two alarms
3. **Input type**
   T: Thermocouple/platinum resistance thermometer (multi-input)
4. **Plug-in type**
   U: Plug-in type

Ordering Information (Plug-in-type Controllers)

■ Controllers with Temperature Inputs (Multi-input)

Size	Power supply voltage	Number of alarm points	Control outputs	Model
1/16 DIN 48 × 48 × 78 (W × H × D)	100 to 240 VAC	0	Relay	E5CN-RTU
			Voltage (for driving SSR)	E5CN-QTU
		1	Relay	E5CN-R1TU
			Voltage (for driving SSR)	E5CN-Q1TU
		2	Relay	E5CN-R2TU
			Voltage (for driving SSR)	E5CN-Q2TU
	24 VAC/DC	0	Relay	E5CN-RTU
			Voltage (for driving SSR)	E5CN-QTU
		1	Relay	E5CN-R1TU
			Voltage (for driving SSR)	E5CN-Q1TU
		2	Relay	E5CN-R2TU
			Voltage (for driving SSR)	E5CN-Q2TU

Note: Option Units (E53-CN□□N) cannot be used for Plug-in models.

■ Accessories (Order Separately)

Terminal Cover

Connectable models	Terminal type
Model	E53-COV10

Current Transformers (CTs)

Model	E54-CT1	E54-CT3
Hole diameter	5.8 dia.	12.0 dia.

Adapter

Connectable models	Terminal type
Model	Y92F-45

Note: Use this Adapter when the panel has been previously prepared for the E5B□.

Sockets (for Models with Plug-in Connectors)

Model	P2CF-11	P2CF-11-E	P3GA-11	Y92A-48G
Type	Front-connecting Socket	Front-connecting Socket with Finger Protection	Back-connecting socket	Terminal Cover for Finger Protection

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Specifications

■ Ratings

Item	Power supply voltage	100 to 240 VAC, 50/60 Hz	24 VAC, 50/60 Hz or 24 VDC
Operating voltage range		85% to 110% of rated supply voltage	
Power consumption	E5CN	7.5 VA max. (E5CN-R2T: 3.0 VA at 100 VAC)	5 VA/3 W max. (E5CN-R2T: 2.7 VA at 24 VAC)
	E5CN-U	6 VA max.	3 VA/2 W max.
Sensor input		Models with temperature inputs Thermocouple: K, J, T, E, L, U, N, R, S, or B Platinum resistance thermometer: Pt100 or JPt100 Infrared temperature sensor: 10 to 70°C, 60 to 120°C, 115 to 165°C, or 160 to 260°C Voltage input: 0 to 50 mV	
		Models with analog inputs Current input: 4 to 20 mA or 0 to 20 mA Voltage input: 1 to 5 V, 0 to 5 V, or 0 to 10 V	
Input impedance		Current input: 150 Ω, Voltage input: 1 MΩ (Use a 1:1 connection when connecting the ES2-HB.)	
Control output	Relay output	E5CN: SPST-NO, 250 VAC, 3 A (resistive load), electrical life: 100,000 operations, minimum applicable load: 5 V, 10 mA	
		E5CN-U: SPDT, 250 VAC, 3 A (resistive load), electrical life: 100,000 operations, minimum applicable load: 5 V, 10 mA	
	Voltage output	E5CN, E5CN-U: Output voltage: 12 VDC ±15% (PNP), max. load current: 21 mA, with short-circuit protection circuit	
	Current output	E5CN: 4 to 20 mA DC/0 to 20 mA DC, load: 600 Ω max., resolution: approx. 2,700	
	Long-life relay output	E5CN: SPST-NO, 250 VAC, 3 A (resistive load), electrical life: 1,000,000 operations, minimum applicable load: 5 V, 100 mA (Do not connect a DC load.)	
Alarm output		SPST-NO, 250 VAC, 1 A (resistive load), electrical life: 100,000 operations, minimum applicable load: 1 V, 1 mA	
Event input	Contact input	ON: 1 kΩ max., OFF: 100 kΩ min.	
	Non-contact input	ON: Residual voltage: 1.5 V max., OFF: Leakage current: 0.1 mA max.	
		Outflow current: Approx. 7 mA per point	
Control method		ON/OFF control or 2-PID control (with auto-tuning)	
Setting method		Digital setting using front panel keys	
Indication method		11-segment digital display and individual indicators (7-segments displays also possible) Character height: PV: 11 mm, SV: 6.5 mm	
Other functions		Manual output, heating/cooling control, transfer output (on some models), loop break alarm, multi SP, MV limiter, input digital filter, self-tuning, temperature input shift, run/stop, protection functions, etc.	
Ambient operating temperature		−10 to 55°C (with no icing or condensation), for 3-year warranty: −10 to 50°C	
Ambient operating humidity		25% to 85%	
Storage temperature		−25 to 65°C (with no icing or condensation)	

■ Input Ranges

Thermocouples/Platinum Resistance Thermometers (Multi-inputs)

Input Type	Platinum resistance thermometer					Thermocouple													Infrared temperature sensor				Analog input
Name	Pt100			JPt100		K		J		T		E	L	U		N	R	S	B	10 to 70°C	60 to 120°C	115 to 165°C	160 to 260°C	0 to 50 mV
Temperature range (°C)	850 −200	500.0 −199.9	100.0 0.0	500.0 −199.9	100.0 0.0	1300 −200	500.0 −20.0	850 −100	400.0 −20.0	400 −200	400.0 −199.9	600 0	850 −100	400 −200	400.0 −199.9	1300 −200	1700 0	1700 0	1800 100	90 0	120 0	165 0	260 0	Usable in the following ranges by scaling: −1999 to 9999 or −199.9 to 999.9
Setting number	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23

The applicable standards for the input types are as follows:

K, J, T, E, N, R, S, B: IEC584-1

L: Fe-CuNi, DIN 43710-1985

U: Cu-CuNi, DIN 43710-1985

Pt100: IEC 751

Shaded settings are the default settings.

Models with Analog Inputs

Input Type	Current		Voltage		
Input specification	4 to 20mA	0 to 20 mA	1 to 5 V	0 to 5 V	0 to 10 V
Setting range	Usable in the following ranges by scaling: −1999 to 9999, −199.9 to 999.9, −19.99 to 99.99 or −1.999 to 9.999				
Setting number	0	1	2	3	4

Shaded settings are the default settings.

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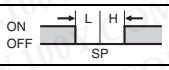
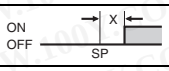
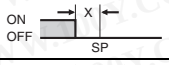
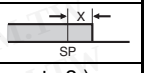
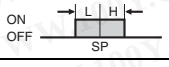
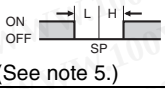
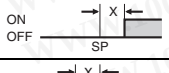
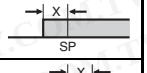
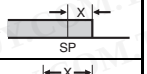
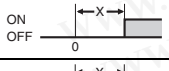
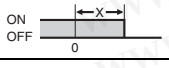
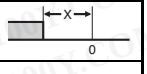
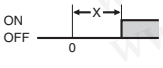
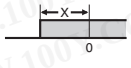
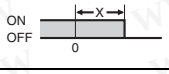
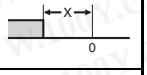
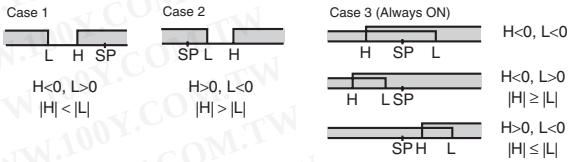
■ Alarm Types

Select alarm types out of the 12 alarm types listed in the following table.

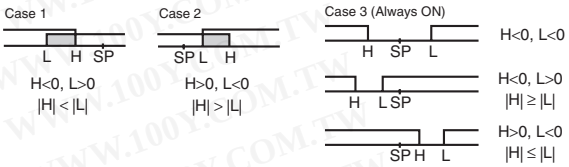
Set value	Alarm type	Alarm output operation	
		When X is positive	When X is negative
0	Alarm function OFF	Output OFF	
1 (See note 1.)	Upper- and lower-limit		(See note 2.)
2	Upper limit		
3	Lower limit		
4 (See note 1.)	Upper- and lower-limit range		(See note 3.)
5 (See note 1.)	Upper- and lower-limit with standby sequence	 (See note 5.)	(See note 4.)
6	Upper-limit with standby sequence		
7	Lower-limit with standby sequence		
8	Absolute-value upper-limit		
9	Absolute-value lower-limit		
10	Absolute-value upper-limit with standby sequence		
11	Absolute-value lower-limit with standby sequence		
12 (See note 6.)	LBA (for alarm 1 only)	---	

Note: 1. With set values 1, 4 and 5, the upper and lower limit values can be set independently for each alarm type, and are expressed as "L" and "H."

2. Set value: 1, Upper- and lower-limit alarm



3. Set value: 4, Upper- and lower-limit range



4. Set value: 5, Upper- and lower-limit with standby sequence
For Upper- and Lower-Limit Alarm Described Above

- Case 1 and 2
  Always OFF when the upper-limit and lower-limit hysteresis overlaps.
- Case 3: Always OFF

5. Set value: 5, Upper- and lower-limit with standby sequence
Always OFF when the upper-limit and lower-limit hysteresis overlaps.

6. Set value: 12, LBA can be set only for alarm 1.

Set the alarm types for alarms 1 to 3 independently in the initial setting level. The default setting is 2 (upper limit).

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■ Characteristics

Indication accuracy		Thermocouple: (See note 1.) E5CN: (±0.5% of indicated value or ±1°C, whichever is greater) ±1 digit max. E5CN-U: (±1% of indicated value or ±2°C, whichever is greater) ±1 digit max. Platinum resistance thermometer: (±0.5% of indicated value or ±1°C, whichever is greater) ±1 digit max. Analog input: ±0.5% FS ±1 digit max. CT input: ±5% FS ±1 digit max.
Hysteresis		Models with thermocouple/platinum resistance thermometer (multi-input) input: 0.1 to 999.9 EU (in units of 0.1 EU) Models with analog input: 0.01 to 99.99% FS (in units of 0.01% FS)
Proportional band (P)		Models with thermocouple/platinum resistance thermometer (multi-input) input: 0.1 to 999.9 EU (in units of 0.1 EU) Models with analog input: 0.1 to 999.9% FS (in units of 0.1% FS)
Integral time (I)		0 to 3999 s (in units of 1 s)
Derivative time (D)		0 to 3999 s (in units of 1 s) (See note 3.)
Control period		0.5, 1 to 99 s (in units of 1 s)
Manual reset value		0.0 to 100.0% (in units of 0.1%)
Alarm setting range		−1999 to 9999 (decimal point position depends on input type)
Sampling period		250 ms
Affect of signal source resistance		Thermocouple: 0.1°C/Ω max. (100 Ω max.) (See note 4.) Platinum resistance thermometer: 0.4°C/Ω max. (10 Ω max.)
Insulation resistance		20 MΩ min. (at 500 VDC)
Dielectric strength		2,000 VAC, 50 or 60 Hz for 1 min (between terminals with different charge)
Vibration resistance	**Malfunction**	10 to 55 Hz, 20 m/s² for 10 min each in X, Y, and Z directions
	Destruction	10 to 55 Hz, 0.75-mm single amplitude for 2 hrs each in X, Y, and Z directions
Shock resistance	**Malfunction**	100 m/s² min., 3 times each in X, Y, and Z directions
	Destruction	300 m/s² min., 3 times each in X, Y, and Z directions
Weight	**E5CN**	Controller: Approx. 150 g, Mounting Bracket: Approx. 10 g
	E5CN-U	Controller: Approx. 110 g, Mounting Bracket: Approx. 10 g
Degree of protection	**E5CN**	Front panel: NEMA4X for indoor use (equivalent to IP66) Rear case: IP20, Terminal section: IP00
	E5CN-U	Front panel: Equivalent to IP50, rear case: IP20, terminals: IP00
Memory protection		Non-volatile memory (number of writes: 1,000,000 operations)

Note: 1. The indication of K thermocouples in the −200 to 1300°C range, T and N thermocouples at a temperature of −100°C max., and U and L thermocouples at any temperature is ±2°C ±1 digit maximum. The indication accuracy of the B thermocouple at a temperature of 400°C max. is not specified. The indication accuracy of the R and S thermocouples at a temperature of 200°C max. is ±3°C ±1 digit max.

2. "EU" stands for Engineering Unit and is used as the unit after scaling. For a temperature sensor, the EU is °C or °F.

3. When robust tuning (RT) is ON, the differential time is 0.0 to 999.9 (in units of 0.1 s).

4. B, R, and S sensors: 0.2°C/Ω max. (100 Ω max.)

■ Communications Specifications

Transmission line connection method	RS-485 multipoint
Communications	RS-485 (two-wire, half duplex)
Synchronization method	Start-stop synchronization
Baud rate	1200, 2400, 4800, 9600, 19200, or 38400 bps
Transmission code	ASCII
Data bit length	7 or 8 bits
Stop bit length	1 or 2 bits
Error detection	Vertical parity (none, even, odd) Frame check sequence (FCS) with SYSWAY Block check character (BCC) with CompoWay/F or CRC-16 Modbus
Flow control	None
Interface	RS-485
Retry function	None
Communications buffer	40 bytes
Communications response wait time	0 to 99 ms Default: 20 ms

Note: The baud rate, data bit length, stop bit length, and vertical parity can be individually set using the Communications Setting Level.

■ Current Transformer (Sold Separately)

Ratings

Dielectric strength	1,000 VAC for 1 min
Vibration resistance	50 Hz, 98 m/s²
Weight	E54-CT1: Approx. 11.5 g, E54-CT3: Approx. 50 g
Accessories (E54-CT3 only)	Armatures (2) Plugs (2)

■ Heater Burnout Alarms and SSR Failure Detection Alarms

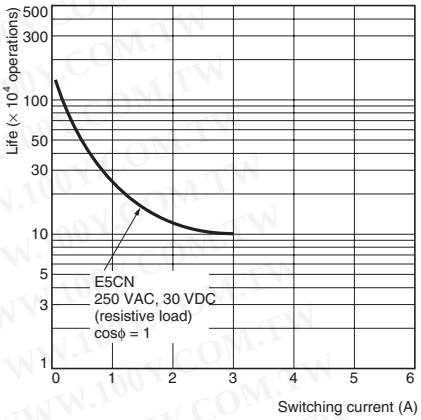
(E5CN Models with Heater Burnout and SSR Failure Detection Alarms)

Maximum heater current	50 A AC
Input current indication accuracy	±5% FS ±1 digit max.
Heater burnout alarm setting range	0.1 to 49.9 A (in units of 0.1 A) 0.0 A: Heater burnout/SSR failure alarm output turned OFF. 50.0 A: Heater burnout/SSR failure alarm output turned ON. Minimum detection ON time: 190 ms (See note 1.)
SSR failure detection alarm setting range	0.1 to 49.9 A (in units of 0.1 A) 0.0 A: Heater burnout/SSR failure alarm output turned ON. 50.0 A: Heater burnout/SSR failure alarm output turned OFF. Minimum detection OFF time: 190 ms (See note 2.)

Note: 1. If the ON time of control output 1 is less than 190 ms, heater burnout detection and the heater current will not be measured.

2. If the OFF time of control output 1 is less than 190 ms, SSR failure detection and the heater current will not be measured.

■ Electrical Life Expectancy Curve for Relays (Reference Values)

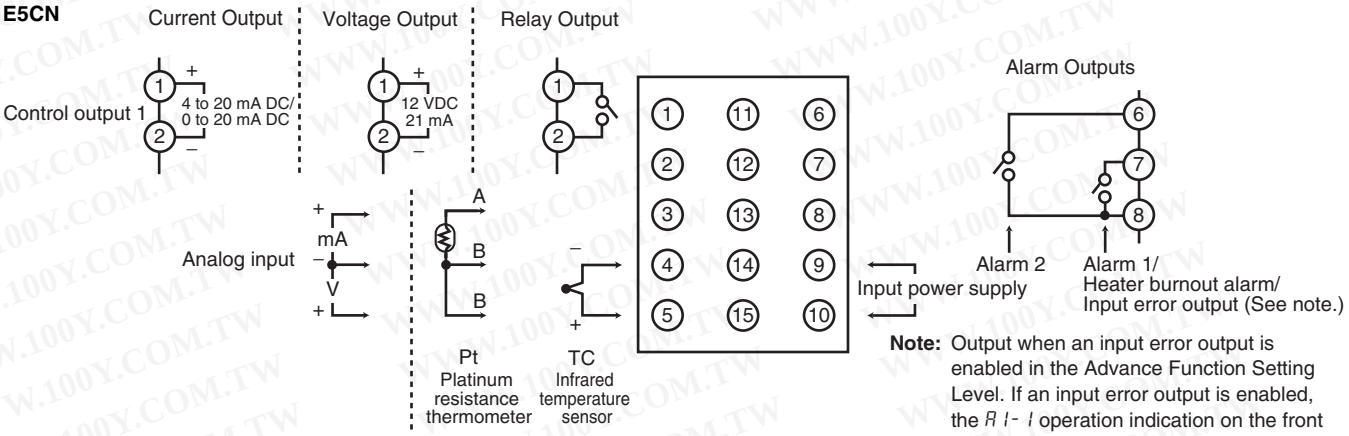


Note: Do not connect a DC load to a Controller with a Long-life Relay Output.

External Connections

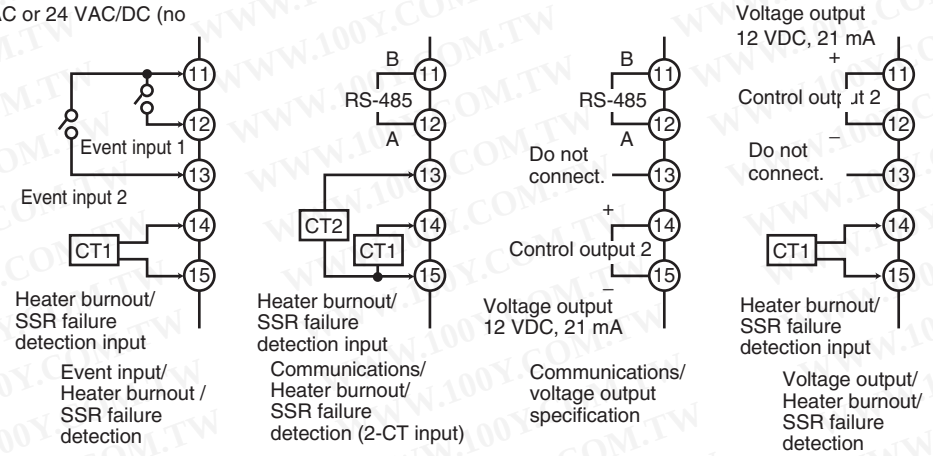
- A voltage output (control output) is not electrically insulated from the internal circuits. When using a grounding thermocouple, do not connect any of the control output terminals to ground. If the control output terminals are connected to ground, errors will occur in the measured temperature values as a result of leakage current.
- Standard insulation is applied between any of the following: power supply terminals, input terminals, output terminals, and communications terminals (for models with communications). If reinforced insulation is required, provide additional insulation, such as spacial distance or material insulation, as defined by IEC 60664 suitable for the maximum operating voltage.

E5CN



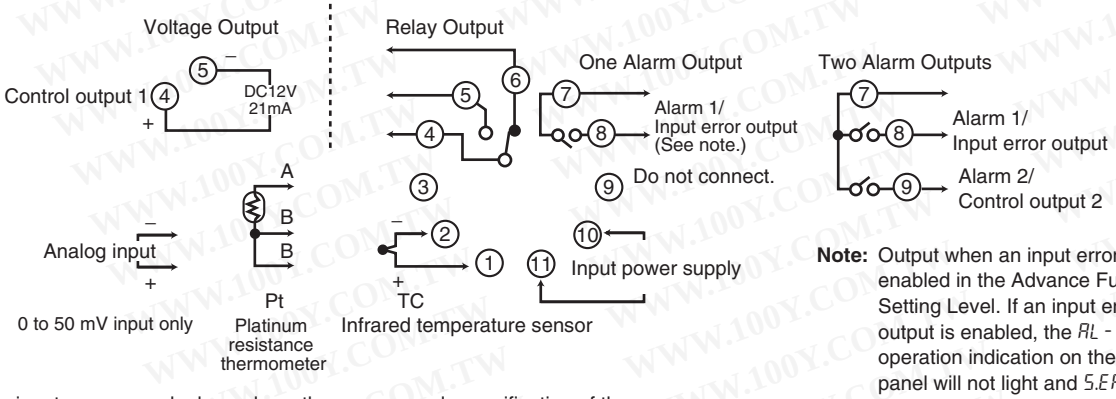
Note: Output when an input error output is enabled in the Advance Function Setting Level. If an input error output is enabled, the R1-I operation indication on the front panel will not light and S.ERR will be displayed on the No. 1 display.

The input power supply depends on the power supply specification of the Controller and is either 100 to 240 VAC or 24 VAC/DC (no polarity).



Terminals 11 to 15 do not exist on models without an Option Unit (heater burnout detection, control output 2, event inputs, or communications). Terminal applications depend on the model of the Option Unit.

E5CN-U



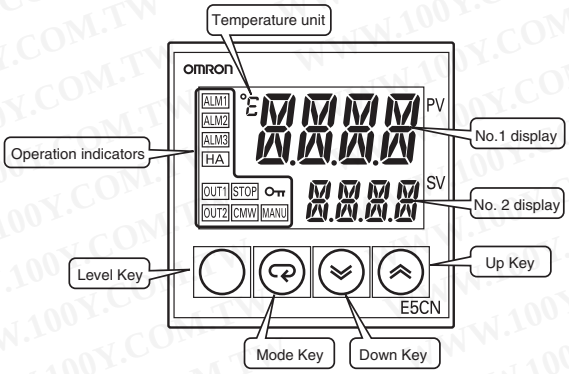
Note: Output when an input error output is enabled in the Advance Function Setting Level. If an input error output is enabled, the RL-I operation indication on the front panel will not light and S.ERR will be displayed on the No. 1 display.

The input power supply depends on the power supply specification of the Controller and is either 100 to 240 VAC or 24 VAC/DC (no polarity).
Order the P2CF-11 or P3GA-11 Socket separately. (See page 14.)

Nomenclature

E5CN
E5CN-U

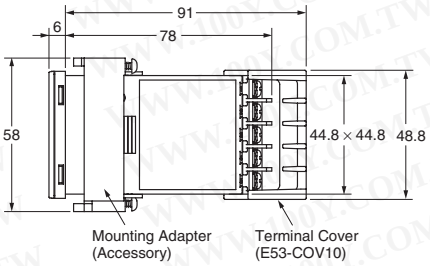
The front panel is the same for the E5CN and E5CN-U.



Dimensions

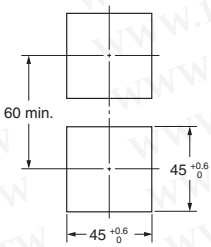
■ Standard Models

E5CN
Terminal Models

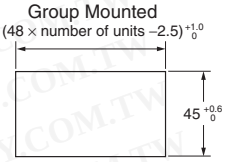


Panel Cutout

Mounted Separately



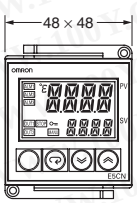
Group Mounted

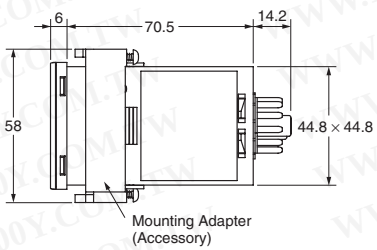


Group mounting does not allow waterproofing.

- Recommended panel thickness is 1 to 5 mm.
- Group mounting is not possible in the vertical direction. (Maintain the specified mounting space between Controllers.)
- To mount the Controller so that it is waterproof, insert the waterproof packing onto the Controller.
- When two or more Controllers are mounted, make sure that the surrounding temperature does not exceed the allowable operating temperature specified in the specifications.

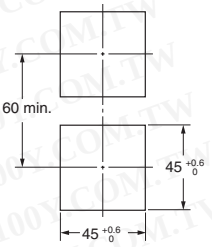
E5CN-U
Plug-in Models



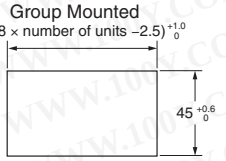


Panel Cutout

Mounted Separately



Group Mounted



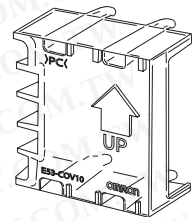
- Recommended panel thickness is 1 to 5 mm.
- Group mounting is not possible in the vertical direction. (Maintain the specified mounting space between Controllers.)
- When two or more Controllers are mounted, make sure that the surrounding temperature does not exceed the allowable operating temperature specified in the specifications.

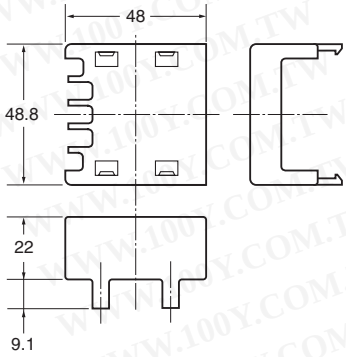
OMRON

■ Accessories

Terminal Cover

E53-COV10

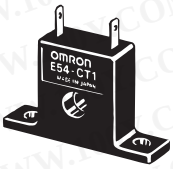


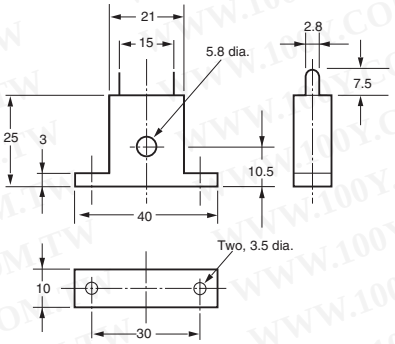


Note: The suffix “500” is added to the model number of each Controller provided with a E53-COV10 Terminal Cover.

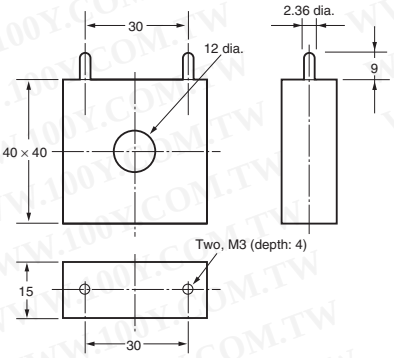
Current Transformers (Sold Separately)

E54-CT1



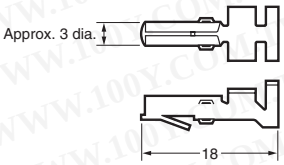


E54-CT3

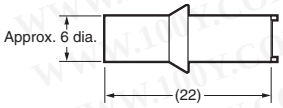


E54-CT3 Accessory

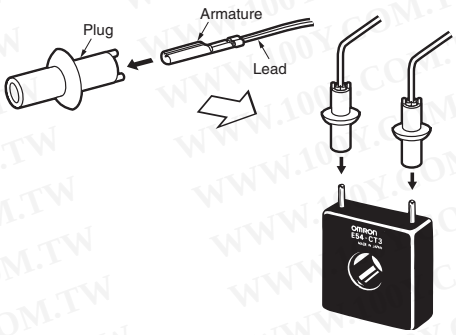
• Armature



• Plug



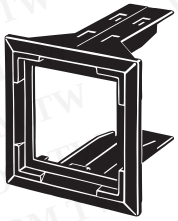
Connection Example

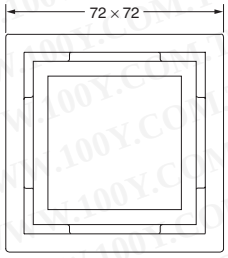


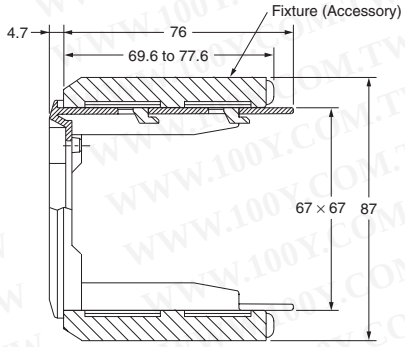
Adapter

Note: Use this Adapter when the panel has already been prepared for the E5B□.

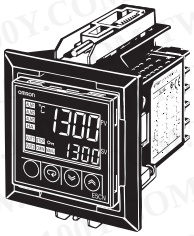
Y92F-45

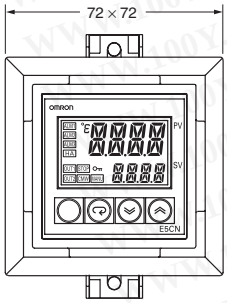


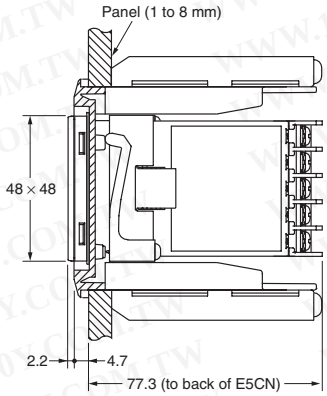




Mounted to E5CN



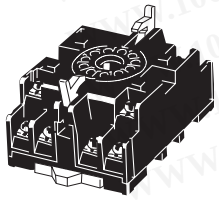


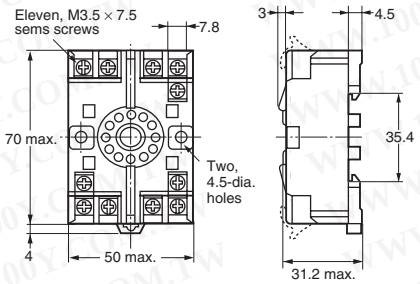


E5CN-U Wiring Socket (Sold Separately)

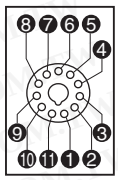
Front-connecting Socket

P2CF-11

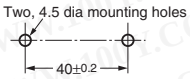




Terminal Layout/Internal Connections
(Top View)



Mounting Holes

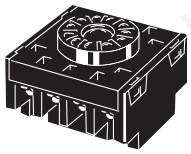


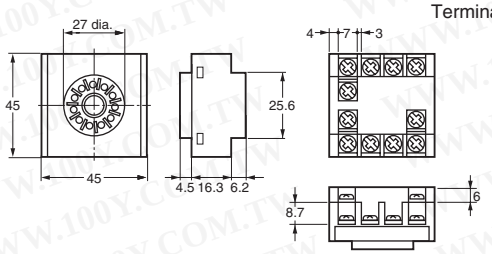
Note: Can also be mounted to a DIN track.

Note: A model with finger protection (P2CF-11-E) is also available.

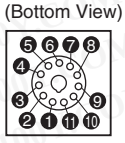
Back-connecting Socket

P3GA-11





Terminal Layout/Internal Connections
(Bottom View)



Note: 1. Using any other sockets will adversely affect accuracy. Use only the specified sockets.

2. A Protective Cover for finger protection (Y92A-48G) is also available.