

Product Discontinuation Notices

Temperature Controllers

Issue Date
June 2, 2014

No. 2014034CE(3)

Discontinuation Notice of E5GN series

<< REQUEST >>

There was modification in portion of Product Discontinuation Notices of Product News No. 2014034CE(2) of April, 2014 issue. What we have changed is as follows; 1) Change in the Recommended replacement, 2) Change of E5GC terminal arrangement, 3) Correction of input impedance, 4) Correction of load for current output.
Please abolish old edition, replace the latest No. 2014034CE(3).

Product Discontinuation

Basic-type Digital Temperature Controller



Model E5GN Series

Recommended Replacement

Digital Temperature Controllers

Model E5GC Series
(Launch in April 2014)



[Discontinuation date]

The end of March, 2015

[Caution on recommended replacement]

When replacing models, be sure that communications method for RS232C is rendered unavailable.

When using communications method for RS-232C, be sure to connect with interface converter K3SC series.

When replacing models, be sure that Sysway Protocol is rendered unavailable.

Two Auxiliary outputs and two event inputs can not be used at the same time.

Waterproof packing configuration is changed. Be sure to use accessory waterproof packing for E5GC.

The mounting adapter is changed. The adapter used for E5GN series is unable to use for E5GC.

[Difference from discontinued product]

Recommended replacement Model	Body color	Dimensions	Wire connection	Mounting dimensions	Charact-eristics	Operation ratings	Operation methods
E5GC Series	*	--	--	*	--	*	*

** : Compatible

* : The change is a little/Almost compatible

-- : Not compatible

- : No corresponding specification

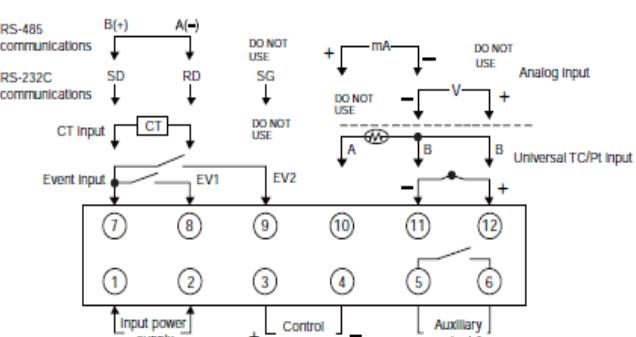
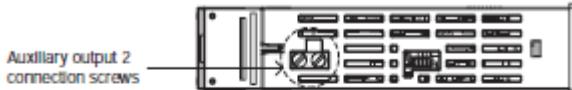
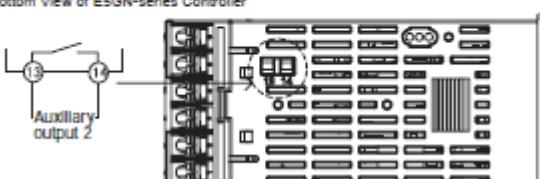
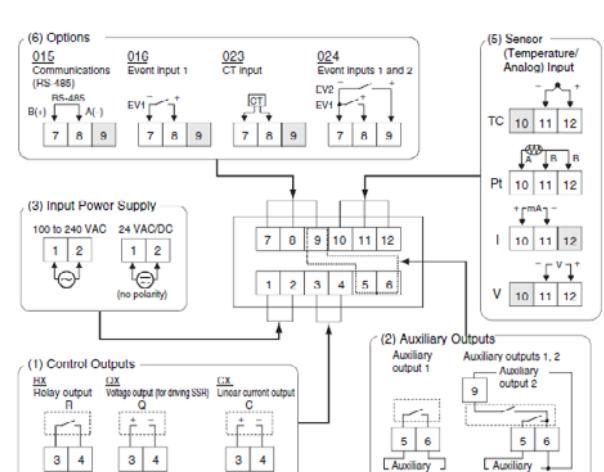
[Product discontinuation and recommended replacement]

Product discontinuation	Recommended replacement
E5GN-C1L-C	E5GC-CX1ACM-000
E5GN-C1T-C	
E5GN-C103T-C-FLK	E5GC-CX1ACM-015
E5GN-C1BT-C	E5GC-CX1ACM-024
E5GN-C1L	E5GC-CX1A6M-000
E5GN-C1T	
E5GN-C103T-FLK	E5GC-CX1A6M-015
E5GN-C1BT	E5GC-CX1A6M-024
E5GN-C1LD-C	
E5GN-C1TD-C	E5GC-CX1DCM-000
E5GN-C103TD-C-FLK	E5GC-CX1DCM-015
E5GN-C1BTD-C	E5GC-CX1DCM-024
E5GN-C1LD	
E5GN-C1TD	E5GC-CX1D6M-000
E5GN-C103TD-FLK	E5GC-CX1D6M-015
E5GN-C1BTD	E5GC-CX1D6M-024
E5GN-QT-C	E5GC-QX0ACM-000
E5GN-QT	E5GC-QX0A6M-000
E5GN-QTD-C	E5GC-QX0DCM-000
E5GN-QTD	E5GC-QX0D6M-000
E5GN-Q1T-C	E5GC-QX1ACM-000
E5GN-Q103T-C-FLK	E5GC-QX1ACM-015
E5GN-Q1BT-C	E5GC-QX1ACM-024
E5GN-Q1T	E5GC-QX1A6M-000
E5GN-Q103L-FLK	
E5GN-Q103T-FLK	E5GC-QX1A6M-015
E5GN-Q1BT	E5GC-QX1A6M-024
E5GN-Q1TD-C	E5GC-QX1DCM-000
E5GN-Q103TD-C-FLK	E5GC-QX1DCM-015
E5GN-Q1BTD-C	E5GC-QX1DCM-024
E5GN-Q1TD	E5GC-QX1D6M-000
E5GN-Q103LD-FLK	
E5GN-Q103TD-FLK	E5GC-QX1D6M-015
E5GN-Q1BTD	E5GC-QX1D6M-024
E5GN-Q2T-C	E5GC-QX2ACM-000
E5GN-Q203T-C-FLK	E5GC-QX2ACM-015
E5GN-Q2HT-C	E5GC-QX2ACM-023
E5GN-Q2BT-C	E5GC-QX1ACM-024 (in a case of 1 auxiliary output) E5GC-QX2ACM-016 (in a case of 1 event input)
E5GN-Q2T	E5GC-QX2A6M-000
E5GN-Q203T-FLK	E5GC-QX2A6M-015
E5GN-Q2HT	E5GC-QX2A6M-023
E5GN-Q2BT	E5GC-QX1A6M-024 (in a case of 1 auxiliary output) E5GC-QX2A6M-016 (in a case of 1 event input)
E5GN-Q2TD-C	E5GC-QX2DCM-000
E5GN-Q203TD-C-FLK	E5GC-QX2DCM-015
E5GN-Q2HTD-C	E5GC-QX2DCM-023
E5GN-Q2BTD-C	E5GC-QX1DCM-024 (in a case of 1 auxiliary output) E5GC-QX2DCM-016 (in a case of 1 event input)

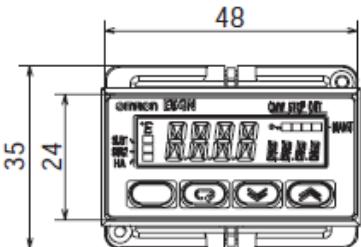
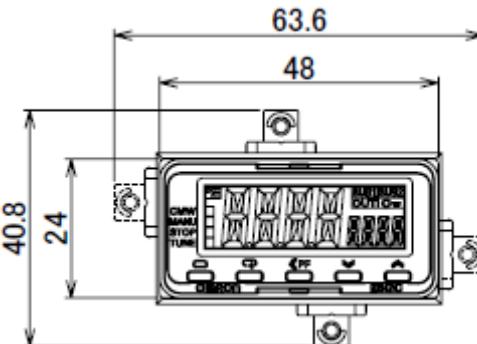
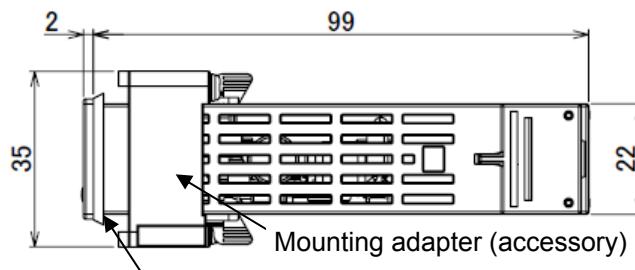
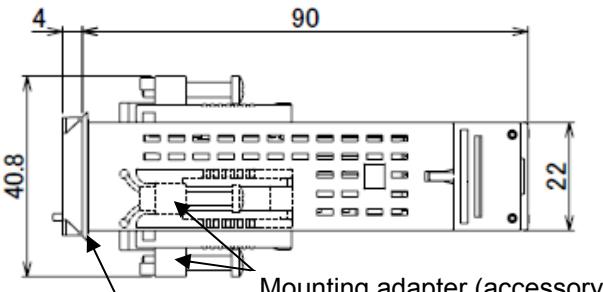
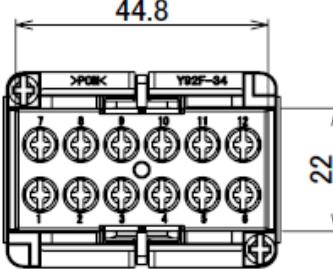
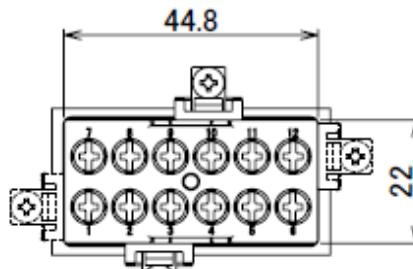
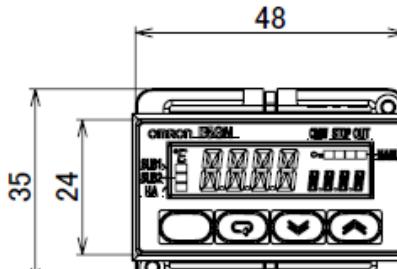
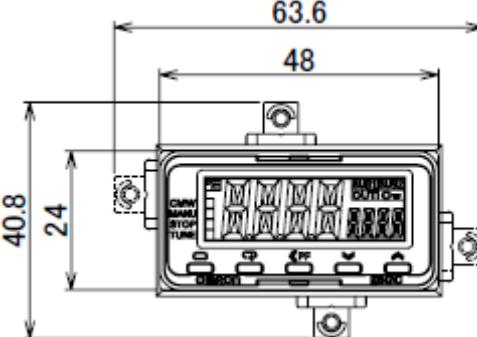
Product discontinuation	Recommended replacement
E5GN-Q2TD	E5GC-QX2D6M-000
E5GN-Q203TD-FLK	E5GC-QX2D6M-015
E5GN-Q2HTD	E5GC-QX2D6M-023
E5GN-Q2BTD	E5GC-QX1D6M-024 (in a case of 1 auxiliary output) E5GC-QX2D6M-016 (in a case of 1 event input)
E5GN-RT-C	E5GC-RX0ACM-000
E5GN-RT	E5GC-RX0A6M-000
E5GN-RTD-C	E5GC-RX0DCM-000
E5GN-RTD	E5GC-RX0D6M-000
E5GN-R1T-C	E5GC-RX1ACM-000
E5GN-R103T-C-FLK	E5GC-RX1ACM-015
E5GN-R1BT-C	E5GC-RX1ACM-024
E5GN-R1T	E5GC-RX1A6M-000
E5GN-R103L-FLK	E5GC-RX1A6M-015
E5GN-R103T-FLK	E5GC-RX1A6M-024
E5GN-R1BT	E5GC-RX1DCM-000
E5GN-R1TD-C	E5GC-RX1DCM-015
E5GN-R103TD-C-FLK	E5GC-RX1DCM-024
E5GN-R1BTD-C	E5GC-RX1D6M-000
E5GN-R1TD	E5GC-RX1D6M-015
E5GN-R103LD-FLK	E5GC-RX1D6M-024
E5GN-R103TD-FLK	E5GC-RX2ACM-000
E5GN-R1BTD	E5GC-RX2ACM-015
E5GN-R2T-C	E5GC-RX2ACM-023
E5GN-R203T-C-FLK	E5GC-RX2ACM-024 (in a case of 1 auxiliary output) E5GC-RX2ACM-016 (in a case of 1 event input)
E5GN-R2HT-C	E5GC-RX2A6M-000
E5GN-R2BT-C	E5GC-RX2A6M-015
E5GN-R2HT	E5GC-RX2A6M-023
E5GN-R2BT	E5GC-RX1A6M-024 (in a case of 1 auxiliary output) E5GC-RX2A6M-016 (in a case of 1 event input)
E5GN-R2TD-C	E5GC-RX2DCM-000
E5GN-R203TD-C-FLK	E5GC-RX2DCM-015
E5GN-R2HTD-C	E5GC-RX2DCM-023
E5GN-R2BTD-C	E5GC-RX1DCM-024 (in a case of 1 auxiliary output) E5GC-RX2DCM-016 (in a case of 1 event input)
E5GN-R2TD	E5GC-RX2D6M-000
E5GN-R203TD-FLK	E5GC-RX2D6M-015
E5GN-R2HTD	E5GC-RX2D6M-023
E5GN-R2BTD	E5GC-RX1D6M-024 (in a case of 1 auxiliary output) E5GC-RX2D6M-016 (in a case of 1 event input)
E5GN-C101T-C-FLK	Use E5GC-CX1ACM-015 connected with interface converter model K3SC.
E5GN-C101TD-C-FLK	Use E5GC-CX1DCM-015 connected with interface converter model K3SC.
E5GN-C101TD-FLK	Use E5GC-CX1D6M-015 connected with interface converter model K3SC.
E5GN-C101T-FLK	Use E5GC-CX1A6M-015 connected with interface converter model K3SC

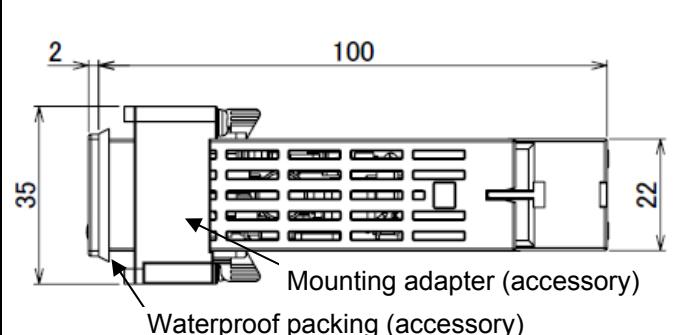
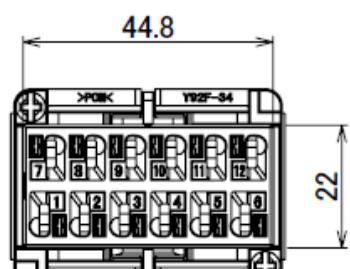
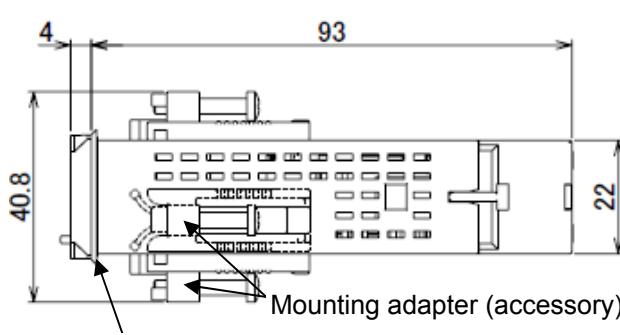
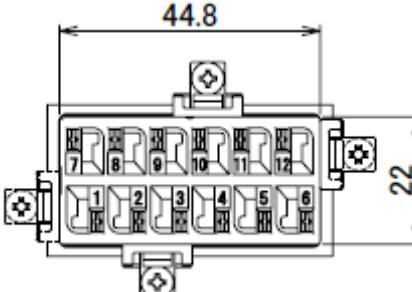
Product discontinuation	Recommended replacement
E5GN-Q101T-C-FLK	Use E5GC-QX1ACM-015 connected with interface converter model K3SC.
E5GN-Q101TD-C-FLK	Use E5GC-QX1DCM-015 connected with interface converter model K3SC.
E5GN-Q101TD-FLK	Use E5GC-QX1D6M-015 connected with interface converter model K3SC.
E5GN-Q101T-FLK	Use E5GC-QX1A6M-015 connected with interface converter model K3SC.
E5GN-R101T-C-FLK	Use E5GC-RX1ACM-015 connected with interface converter model K3SC
E5GN-R101TD-C-FLK	Use E5GC-RX1DCM-015 connected with interface converter model K3SC
E5GN-R101TD-FLK	Use E5GC-RX1D6M-015 connected with interface converter model K3SC.
E5GN-R101T-FLK	Use E5GC-RX1A6M-015 connected with interface converter model K3SC.

[Terminal arrangement / Wire connection]

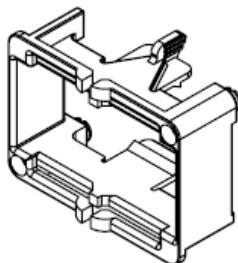
Product discontinuation Model E5GN series	Recommended replacement Model E5GC series
<p>Terminal arrangement 2 independent auxiliary outputs (TB and product lateral)</p>  <p>* Side View of E5GN-series Controller</p>  <p>Auxiliary output 2 connection screws</p>  <p>Auxiliary output 2</p>	<p>Terminal arrangement 2 common terminals for auxiliary output</p>  <p>Auxiliary output 2 and event input 2 are provided for exclusive specifications.</p>

[Dimensions]

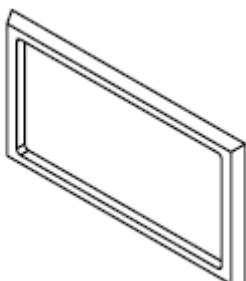
Product discontinuation Model E5GN series	Recommended replacement Model E5GC series
Screw terminal blocks 	Screw terminal blocks 
<p>* Diagram includes a mounting adapter.</p>	<p>* Diagram includes mounting adapter.</p>
	
<p>* Diagram includes a mounting adapter.</p> 	<p>* Diagram includes mounting adapters.</p> 
<p>Screwless clamp terminal blocks</p> 	<p>Screwless clamp terminal blocks</p> 
<p>* Diagram includes a mounting adapter.</p>	<p>* Diagram includes mounting adapter</p>

Product discontinuation Model E5GN series	Recommended replacement Model E5GC series
 <p>Mounting adapter (accessory) Waterproof packing (accessory)</p> 	 <p>Mounting adapter (accessory) Waterproof packing (accessory)</p> 
<p>* Diagram includes mounting adapter.</p>	<p>* Diagram includes mounting adapter.</p>

Mounting adapter

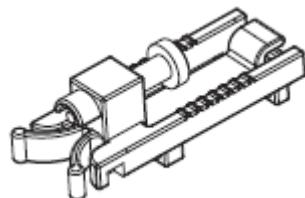


Waterproof packing



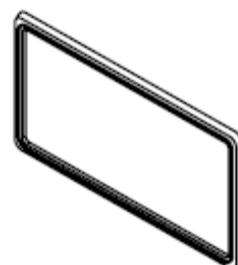
Mounting adapter

2 mounting adapters are used for E5GC.
(vertical or horizontal direction)
Mounting adapter for E5GN can not be used.



Waterproof packing

When using E5GC, be sure to use accessory waterproof packing for E5GC.



[Ratings]

Item		Product discontinuation Model E5GN series	Recommended replacement Model E5GC series
Power consumption		AC 100 to 240 V: 5.5 VA (Max.) AC/DC 24 V: 3 VA/ 2 W (Max.)	AC 100 to 240 V: 5.9 VA (Max.) AC/DC 24 V: 3.2 VA/ 1.8 W (Max.)
Input impedance		Current input 150 Ω max./ Voltage input 1 MΩ minimum	Current input 150 Ω max./ Voltage input 1 MΩ minimum (No change)
Control output	Relay output	1a AC 250 V 2 A (resistive load) Electrical life 100,000 operations Min. applicable load 5 V 10 mA (reference)	1a AC 250 V 2 A (resistive load) Electrical life 100,000 operations Min. applicable load 5 V 10 mA (reference)(No change)
	Voltage output (for driving SSR)	Output voltage DC 12 V±15% (PNP) Max. load current 21 mA, with short-circuit protection circuit	Output voltage DC 12 V±20% (PNP) Max. load current 21 mA, with short-circuit protection circuit
	Current output	DC 4 to 20 mA/ DC 0 to 20 mA/ Load: 500 Ω max./ Resolution Approx. 10,000	DC 4 to 20 mA/ DC 0 to 20 mA/ Load: 500 Ω max./ Resolution Approx. 10,000
Indication method		11 segment digital display and single-lighting indicator (7 segment also available) / Character height: PV: 7.5 mm, SV: 3.6 mm	11 segment digital display and single-lighting indicator (7 segment also available) / Character height: PV: 10.5 mm, SV: 5 mm
Multi-SP function		Max.4 set points (SP0 to SP3) can be stored and selectable by using event inputs, key operations or serial communications.	Max. 8 set points (SP0 to SP7) can be stored and selectable by using event inputs, key operations or serial communications.
Other functions (change points)		---	<p>Functions to be deleted: heater overcurrent (OC) functions Control output ON/OFF count monitor Color change function/ Character select</p> <p>Functions to be added: Moving average of input/ Luminance display setup/ Work bit message/ Parameter changes/ Digit shifting</p>

[Characteristics]

Item	Product discontinuation Model E5GN series	Recommended replacement Model E5GC series
Input sampling cycle	250 ms	50 ms
Integral time (I)	0 to 3999 s (1 s digit)	0 to 9999s (1 s digit), 0.0 to 999.9 s (0.1 s digit)
Derivative time (D)	0 to 3999 s (1 s digit)	0 to 9999 s (1 s digit), 0.0 to 999.9 s (0.1 s digit)
Control cycle	0.5, 1 to 99 s (1 s digit)	0.1, 0.2, 0.5, 1 to 99 s (1 s digit)
Withstand voltage	AC 2,300 V 50 or 60 Hz 1 min (opposite polarity of terminal)	For AC 100 V to 240 V: AC 3,000 V 50 or 60 Hz 1 min (opposite polarity of terminal) For AC/DC 24 V: AC 2300 V 50 or 60 Hz 1 min (opposite polarity of terminal)
Weight	Body: approx. 90 g Adaptor: approx. 10 g	Body: approx. 80 g Adaptor: approx. 4 g × 2
Setup tool	CX-Thermo Ver.4.2 or higher	CX-Thermo Ver.4.62 or higher
Setup tool port	E5GN lateral port: by using USB-serial conversion cable E58-CIFQ1, connect USB port on computer and the port on lateral side of E5GN.	E5GC lateral port: by using USB-serial conversion cable E58-CIFQ2, connect USB port on computer and the port on lateral side of E5GC. E5GC underside port: by using USB-serial conversion cable E58-CIFQ2 and conversion cable E58-CIFQ2-E, connect USB port on PC and the port on underside of E5GC.
Standards	Certifications	cULus UL61010-1 2nd edition (CSA C22.2 No.61010-1 2nd edition evaluated by UL) Korean Radio Waves Act (Act 10564)

[Communication performance]

Item	Product discontinuation Model E5GN series	Recommended replacement Model E5GC series
Connection of transmission path	RS-485: Multiple point RS-232C: Point to point	RS-485: Multiple point
Communication method	RS-485 (2-wire, half duplex), RS-232C	RS-485 (2-wire, half duplex)
Protocol	CompoWay/F, Sysway, Modbus	CompoWay/F, Modbus
DTE speed	1200, 2400, 4800, 9600, 19200, 38400, 57600 bps	9600, 19200, 38400, 57600 bps
Error detection	Vertical parity (non, even, or odd) FCS (frame check sequence) During Sysway communications BCC (block check character) During CompoWay/F communications During CRC-16 Modbus communications	Vertical parity (non, even, or odd) BCC (block check character) During CompoWay/F communications During CRC-16 Modbus communications
Interface	RS-485, RS-232C	RS-485

[Operation ratings]

Product discontinuation Model E5GN series

Input range

Set value number of Input range is changed.

Thermocouple/Platinum Resistance Thermometer (Universal 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	W	PL II	10 to 70°C	60 to 120°C	115 to 165°C	140 to 260°C								
Setting number	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	24	25	19	20	21	22	23	
Temperature range (°C)	-200	-199.9	-199.8	-200	-199.9	-199.8	-200	-199.9	-199.8	-200	-199.9	-199.8	-200	-199.9	-199.8	-200	-199.9	-199.8	-200	2300	1700	1700	1800	2300	1300	1300	200
Setting number	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	24	25	19	20	21	22	23	

Models with Analog Inputs

Input Type	Current	Voltage
Input specification	4 to 20 mA	0 to 20 mA
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

Shaded settings are the default settings.

Recommended replacement Model E5GC series

Input range

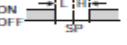
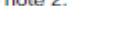
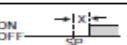
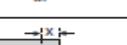
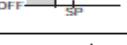
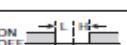
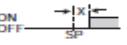
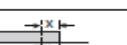
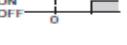
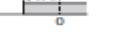
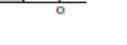
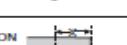
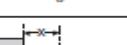
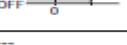
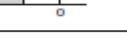
Set value number of Input range is changed. Also, analog input 0 to 50 mV range can not be used.

	Specifications	Set value	Temperature range in °C	Temperature range in °F	
Resistance thermometer	Pt100	0	-200 to 850	-300 to 1500	
		1	-199.9 to 500.0	-199.9 to 900.0	
		2	0.0 to 100.0	0.0 to 210.0	
	JPT100	3	-199.9 to 500.0	-199.9 to 900.0	
Thermocouple	K	4	0.0 to 100.0	0.0 to 210.0	
		5	-200 to 1300	-300 to 2300	
	J	6	-20.0 to 500.0	0.0 to 900.0	
		7	-100 to 850	-100 to 1500	
	T	8	-20.0 to 400.0	0.0 to 750.0	
		9	-200 to 400	-300 to 700	
	E	10	-199.9 to 400.0	-199.9 to 700.0	
		11	-200 to 600	-300 to 1100	
	L	12	-100 to 850	-100 to 1500	
		13	-200 to 400	-300 to 700	
	U	14	-199.9 to 400.0	-199.9 to 700.0	
		15	-200 to 1300	-300 to 2300	
	N	16	0 to 1700	0 to 3000	
		17	0 to 1700	0 to 3000	
	R	18	100 to 1800	300 to 3200	
		19	0 to 2300	0 to 3200	
	S	20	0 to 1300	0 to 2300	
		21	0 to 90	0 to 190	
Infrared temperature sensor ES1B	10 to 70°C	22	0 to 120	0 to 240	
		23	0 to 165	0 to 320	
		24	0 to 260	0 to 500	
		25	One of the following ranges according to the scaling: -1999 to 9999 -199.9 to 999.9 -19.99 to 99.99 -1.999 to 9.999		
Current output	4 to 20 mA	26	One of the following ranges according to the scaling: -1999 to 9999 -199.9 to 999.9 -19.99 to 99.99 -1.999 to 9.999		
	0 to 20 mA	27	One of the following ranges according to the scaling: -19.99 to 99.99 -1.999 to 9.999		
Voltage input	1 to 5 V	28	One of the following ranges according to the scaling: -1.999 to 9.999		
	0 to 5 V	29	One of the following ranges according to the scaling: -1.999 to 9.999		

The default is 5.

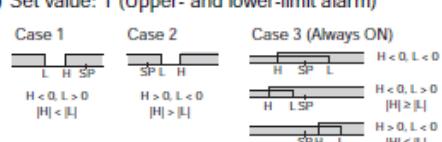
Product discontinuation
Model E5GN series

Alarm types

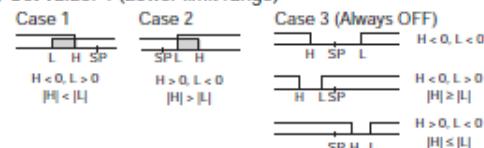
Set value	Alarm type	Alarm output operation		Description of function
		When alarm value X is positive	When alarm value X is negative	
0	Alarm function OFF	Output OFF		No alarm
1 (See note 1.)	Upper- and lower-limit			See note 2.
2	Upper-limit			Set the upward deviation in the set point by setting the alarm value (X).
3	Lower-limit			Set the downward deviation in the set point by setting the alarm value (X).
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.		A standby sequence is added to the upper- and lower-limit alarm (1). (See note 6.)
6	Upper-limit with standby sequence			A standby sequence is added to the upper-limit alarm (2). (See note 6.)
7	Lower-limit with standby sequence			A standby sequence is added to the lower-limit alarm (3). (See note 6.)
8	Absolute-value upper-limit			The alarm will turn ON if the process value is larger than the alarm value (X) regardless of the set point.
9	Absolute-value lower-limit			The alarm will turn ON if the process value is smaller than the alarm value (X) regardless of the set point.
10	Absolute-value upper-limit with standby sequence			A standby sequence is added to the absolute-value upper-limit alarm (8). (See note 6.)
11	Absolute-value lower-limit with standby sequence			A standby sequence is added to the absolute-value lower-limit alarm (9). (See note 6.)
12	LBA (alarm 1 type only)	---		Refer to page 118. (See note 7.)
13	PV change rate alarm	---		Refer to page 72. (See note 8.)

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 (Lower limit range)



- (4) Set value: 5 (Upper- and lower-limit with standby sequence)

- For the lower-limit alarms in cases 1 and 2 above, the alarm is always OFF if upper- and lower-limit hysteresis overlaps.
- In case 3, the alarm is always OFF.

- (5) Set value: 5 (Upper- and lower-limit with standby sequence)

- The alarm is always OFF if upper- and lower-limit hysteresis overlaps.

- (6) Refer to 4-2-1 Standby Sequence for information on the operation of the standby sequence.

- (7) Refer to 4-12-1 Loop Burnout Alarm (LBA).

- (8) Refer to PV Change Rate Alarm on page 72.

- Set the alarm type independently for each alarm in the Alarm 1 to 3 Type parameters in the initial setting level. The default is 2 (Upper-limit alarm).

**Recommended replacement
Model E5GC series**

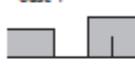
Alarm type

Set value	Alarm type	Alarm output operation		Description of function
		When alarm value X is positive	When alarm value X is negative	
0	Alarm function OFF	Output OFF		No alarm
1	Upper- and lower-limit*1			*2 Set the upward deviation in the set point for the alarm upper limit (H) and the lower deviation in the set point for the alarm lower limit (L). The alarm is ON when the PV is outside this deviation range.
2 (default)	Upper-limit			Set the upward deviation in the set point by setting the alarm value (X). The alarm is ON when the PV is higher than the SP by the deviation or more.
3	Lower-limit			Set the downward deviation in the set point by setting the alarm value (X). The alarm is ON when the PV is lower than the SP by the deviation or more.
4	Upper- and lower-limit range*1			*3 Set the upward deviation in the set point for the alarm upper limit (H) and the lower deviation in the set point for the alarm lower limit (L). The alarm is ON when the PV is inside this deviation range.
5	Upper- and lower-limit with standby sequence*1 *5			A standby sequence is added to the upper- and lower-limit alarm (1).*6
6	Upper-limit with standby sequence			A standby sequence is added to the upper-limit alarm (2).*6
7	Lower-limit with standby sequence			A standby sequence is added to the lower-limit alarm (3).*6
8	Absolute-value upper-limit			The alarm will turn ON if the process value is larger than the alarm value (X) regardless of the set point.
9	Absolute-value lower-limit			The alarm will turn ON if the process value is smaller than the alarm value (X) regardless of the set point.
10	Absolute-value upper-limit with standby sequence			A standby sequence is added to the absolute-value upper-limit alarm (8).*6
11	Absolute-value lower-limit with standby sequence			A standby sequence is added to the absolute-value lower-limit alarm (9).*6
12	LBA (alarm 1 type only)	*7		
13	PV change rate alarm	*8		
14	SP absolute-value upper-limit alarm			This alarm type turns ON the alarm when the set point (SP) is higher than the alarm value (X).
15	SP absolute-value lower-limit alarm			This alarm type turns ON the alarm when the set point (SP) is lower than the alarm value (X).
16	MV absolute-value upper-limit alarm*9 Heating/Cooling Control (Heating MV)	Standard Control 	Standard Control 	This alarm type turns ON the alarm when the manipulated variable (MV) is higher than the alarm value (X).
			Always ON	Heating/Cooling Control (Heating MV) Always ON

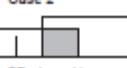
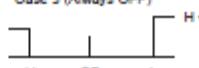
17	MV absolute-value lower-limit alarm*9	Standard Control ON OFF 	Standard Control ON OFF 	This alarm type turns ON the alarm when the manipulated variable (MV) is lower than the alarm value (X).
		Heating/Cooling Control (Cooling MV) ON OFF 	Heating/Cooling Control (Cooling MV) ON OFF 	Always ON

*1 With set values 1, 4, and 5, the upper- and lower-limit values can be set independently for each alarm ■

*2 Set value: 1 (Upper- and lower-limit alarm)

Case 1	Case 2	Case 3 (Always ON)
		
$H < 0, L > 0$ $ H < L $	$H > 0, L < 0$ $ H > L $	$H < 0, L < 0$ $H < 0, L > 0$ $ H \geq L $ $H > 0, L < 0$ $ H \leq L $

*3 Set value: 4 (Upper- and lower-limit range)

Case 1	Case 2	Case 3 (Always OFF)
		
$H < 0, L > 0$ $ H < L $	$H > 0, L < 0$ $ H > L $	$H < 0, L < 0$ $H < 0, L > 0$ $ H \geq L $ $H > 0, L < 0$ $ H \leq L $

*4 Set value: 5 (Upper- and lower-limit alarm with standby sequence)

- For the upper- and lower-limit alarms in cases 1 and 2 above, the alarm is always OFF if upper- and lower-limit hysteresis overlaps.
- In case 3, the alarm is always OFF.

*5 Set value: 5 (Upper- and lower-limit alarm with standby sequence)

- The alarm is always OFF if upper- and lower-limit hysteresis overlaps.

*6 Refer to Standby Sequence Reset on page 6-62 for information on the operation of the standby sequence.

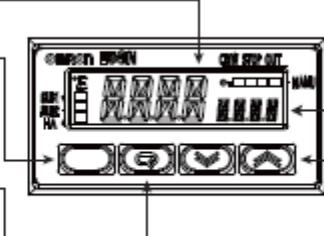
*7 Refer to 5-11-1 Loop Burnout Alarm (LBA).

*8 Refer to PV Change Rate Alarm on page 4-35.

[Operation methods]

Product discontinuation Model E5GN series

- No.1 display
Process value or set data symbol
- Level key
Use this key to change levels:



- Mode key
Press this key to change the contents of the display.
Press this key for 1 s or longer for reverse scroll.
- Press the key and the key together for at least 3 seconds to switch to protect level.

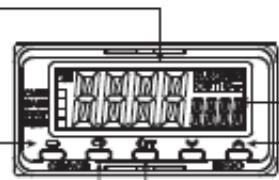
- No.2 display
Set point, set data read-out value or changed input value
- Up and Down keys
Use the keys to change the values displayed on the No.2 display.
Each press of key increments or advances the values displayed on the No.2 display.
Each press of key decrements or returns the values displayed on the No.2 display.

Recommended replacement Model E5GC series

Compared with E5GN, shift key (PF key) is added for E5GC.

By making this shft key (PF key) disabled, the same key operations as E5GN become available.

- No.1 display
Process value or set data symbol
- Level key
Use this key to change levels:
- Mode key
Press this key to change the contents of the display.
Press this key for 1 s or longer for reverse scroll.
- Press the key and the key together for at least 3 seconds to switch to protect level.



- No.2 display
Set point, set data read-out value or changed input value
- Up and Down keys
Use the keys to change the values displayed on the No.2 display.
Each press of key increments or advances the values displayed on the No.2 display.
Each press of key decrements or returns the values displayed on the No.2 display.
- Shift key (PF key)
The default PF Setting parameter is for shifting the digit.
This is a function key. When it is pressed, the function set for the PF Setting parameter will operate.

Specifications and prices in this product news are as of the issue date and are subject to change without notice.
Only main changes in specifications are described in this document. Please be sure to read the relevant catalogs, datasheets, product specifications, instructions, and manuals for precautions and necessary information when using products.