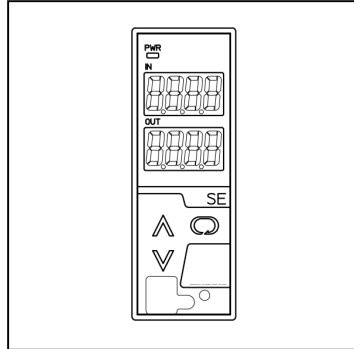


1ch Alarm Detector (RTD) (with two large displays)

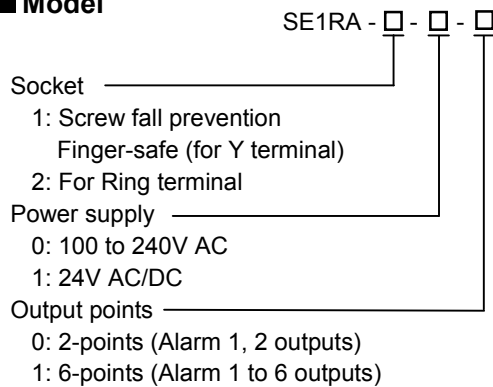
Model: **SE1RA**

■ Features

- Alarm Energized/De-energized
- Alarm HOLD function
- Alarm delay function
- Set value lock



■ Model



■ How to Order

Specify a model. (E.g.) SE1RA-1-0-0

Factory adjusted value:

Input	Pt100 -200 to 850°C
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■ Input Specifications

RTD (3-wire type)

- Input detection current: Approx. 0.2mA
- Allowable lead wire resistance: 10Ω or less per wire
- Burnout: Upscale

Input:

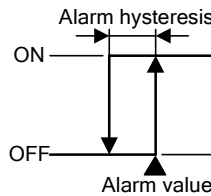
RTD	Input range	
Pt100	-200 to 850 °C	-328 to 1562 °F
JPt100	-200 to 500 °C	-328 to 932 °F

Minimum span: 50°C (100°F)

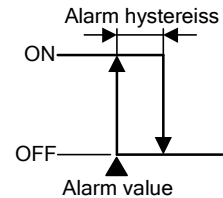
■ Output Specifications

A maximum of 6 points of alarm output available. For each alarm output, one of the following types can be selected in [Alarm type]: High limit alarm, Low limit alarm, High limit alarm with standby and Low limit alarm with standby.

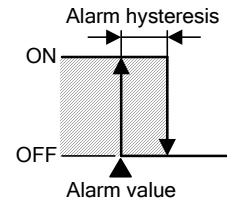
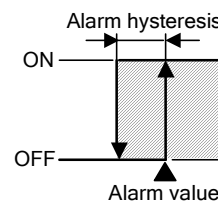
• High limit alarm



• Low limit alarm



• High limit alarm with standby • Low limit alarm with standby



▨ Standby functions.

Alarm action: ON/OFF action

Alarm hysteresis: 0.1 to 100.0%FS

Alarm delay time: 0 to 9999 sec

Alarm Energized/De-energized, Selectable

Alarm HOLD function Enabled/Disabled, Selectable

Alarm 1, 2 outputs: Relay contact 1a

Control capacity: 3A 250V AC (resistive load)

1A 250V AC (inductive load $\cos\phi=0.4$)

Electric life: 100,000 cycles

Alarm 3 to 6 outputs: Open collector

Control capacity: 0.1A 24V DC

■ Performance

Reference accuracy (Ambient temperature: 23°C)

• **RTD input:** Within $\pm 0.1\%$ of each input span

Indication accuracy: Within Reference input accuracy ± 1 digit

Input sampling period: 25msec, 125msec, 250msec

(Selectable by keypad)

Temperature coefficient: $\pm 0.015\%/^{\circ}\text{C}$ or less

Insulation resistance: 10MΩ or more, at 500V DC

(Input - Output - Power)

Dielectric strength: 1.5kV AC for 1 minute

(Input - Output - Power)

■ General Structure

Case: Flame-resistant resin Color: Light gray

Front panel: Membrane sheet

Setting: Using the front keypad

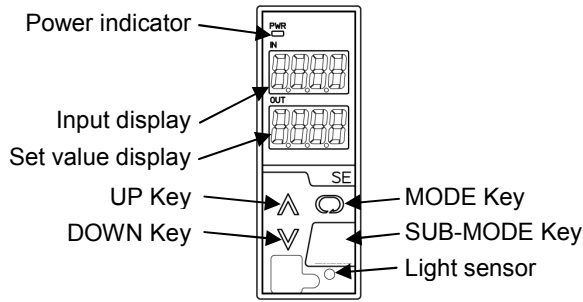
Display: Input display: 7-segment Red LED display

4-digit, Character size, 10x4.6mm (HxW)

Set value display: 7-segment Red LED display

4-digit, Character size, 10x4.6mm (HxW)

Power indicator: Green LED



■ Installation Specifications

- Power supply: 100 to 240V AC 50/60Hz
24V AC/DC 50/60Hz
- Allowable voltage range: 85 to 264V AC, 20 to 28V AC/DC
- Power consumption: Approx. 9VA
- Ambient temperature: -5 to 55°C
- Ambient humidity: 35 to 85%RH (non-condensing)
- Mounting: DIN rail
- External dimensions: W30xH88xD108mm (socket included)
- Weight: Approx. 200g (socket included)

■ Attached Functions

- Auto-light function: Automatically measures and controls brightness of the displays to conserve power.
- Power failure countermeasure: The data is backed up in non-volatile IC memory.
- Self diagnosis: The CPU is monitored by a watchdog timer, and when an abnormal status is found on the CPU, the unit is switched to warm-up status turning all outputs OFF.

■ Environmental Specification

RoHS directive compliance

■ Settings

Function keys

- UP Key: Increases a numerical value.
- DOWN Key: Decreases a numerical value.
- MODE Key: Selects a setting mode.
- SUB-MODE Key: Re-lights displays. (UP Key, DOWN Key or MODE Key also re-lights displays.)

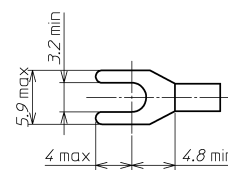
■ Displays and Indicator

- Input display: Indicates the input value.
 - Indication of -200.0 or less (ranges with decimal point): The minus (-) sign and input value light alternately.
 - Under range: -10% of input span or less: " _ _ _ _ " flashes on the Input display.
 - Over range: 110% of input span or more: " _ _ _ _ " flashes on the Input display.
- Warm-up indication: The input type is indicated on the Input display for 3 seconds after power is turned ON.

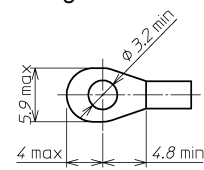
- Set value display: Alarm 1 (A1) to Alarm 6 (A6) values are indicated (follows the selection in "Display selection"). If the UP Key is pressed for 1 second during alarm value indication, alarm values will be switched thus. (A1 → A2 •••• A6 → A1). When power is turned ON, A1 value is indicated. When alarm output is ON, "AL" and the value selected in [Display selection] are alternately indicated on the Set value display. If the UP Key is pressed together with the DOWN Key in the above status, the alarm output currently being turned ON will be displayed. (E.g.) If Alarm 1 and Alarm 3 outputs are ON, "AL 1" and "AL 3" are displayed in order.

Power indicator: The green LED is lit when power is turned ON.

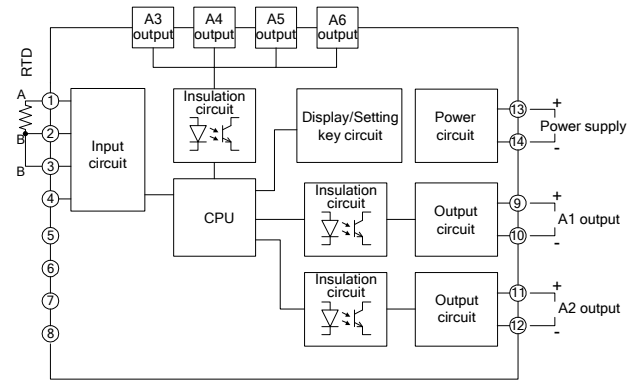
■ Ferrules



Ring terminal

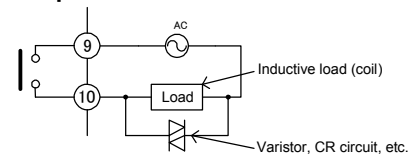


■ Circuit Configuration & Terminal Arrangement

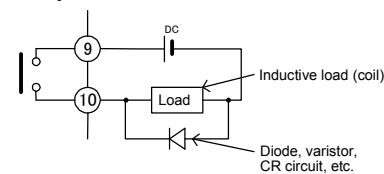


Alarm 1, 2 outputs: Take the following measures for relay contact protection and noise reduction.

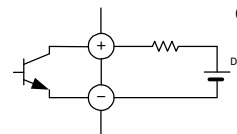
• AC power



• DC power



Alarm 3 to 6 outputs: Connection example of Open collector output



■ External Dimensions (Scale: mm)

