

SA series

SPEC. SHEET

HIGH/LOW SELECTOR (with indication function)

Model: **SAAS**

Model

SAAS -

Power supply
0: 100 to 240V AC
1: 24V AC/DC

How to order

Specify a model.
(e.g.) SAAS-0

Default value

Input 1, Input 2	4 to 20mA DC
Output	4 to 20mA DC

Accessories (sold separately)

Name	Model	Specification
Shunt resistor	RES-S02-050	50Ω ±0.1%

Input specifications

DC current

Input range	Shunt resistor
4 to 20mA DC	50Ω

Common to Input 1 and Input 2.

Connect a shunt resistor (sold separately) between input terminals.

Output specifications

DC current

Output range	Allowable load resistance	Zero adjustment range	Span adjustment range
4 to 20mA DC	700Ω or less	-5 to 5%	95 to 105%

Input High/Low selection [Default: Input High (High input signal)]

Performance

Accuracy:

- Input: Within ±0.1% (Common to Input 1 and Input 2)
- Output: Within ±0.1%

Display accuracy: Within input accuracy ±1 digit

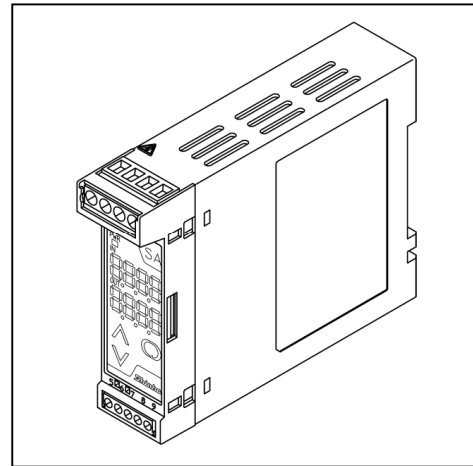
Response time : 0.5 sec. (typical) (0 → 90%)

Temperature coefficient: ±0.015%/°C

Insulation resistance : 10MΩ or more, at 500V DC
(Input - Output - Power)

Dielectric strength : 2.0kV AC for 1 minute
(Input - Output - Power)

Isolation: 3-port isolation (between Input - Output - Power)



Action

Indicates and outputs a value by comparing Input 1 with Input 2 depending on the selection of Input High/Low. When the Input indicator is lit, Input 1 value is indicated on the Input display.

When the Input indicator is flashing, Input 2 value is indicated on the Input display.

General structure

Case : Flame-resistant resin Color: Light gray

Front panel: Membrane sheet

Setting : By the front keypad

Indication : Input display:

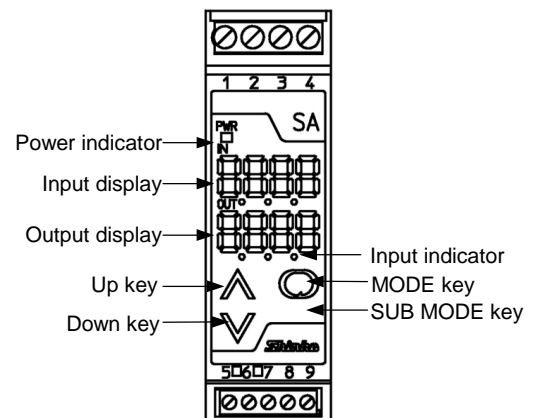
7-segment, Red LED display 4-digit
Character size, 7.4 x 4.0mm (H x W)

Output display:

7-segment, Green LED display 4-digit
Character size, 7.4 x 4.0mm (H x W)

Power indicator: Green LED

Input 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. 6VA
Ambient temperature	: -5 to 55°C
Ambient humidity	: 35 to 85%RH (non-condensing)
Weight	: Approx. 120g
Mounting method	: DIN rail mounting
External dimensions	: 22.5 (W) x 75 (H) x 100 (D)mm

■ Attached functions

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 any abnormal status is found on the CPU, the unit is switched to warm-up status with turning all outputs off.

■ Environmental specification

RoHS directive compliance

■ Settings

Function keys

- (1) Up key : Increases the numeric value.
- (2) Down key : Decreases the numeric value.
- (3) MODE key : Selects the setting mode.
- (4) SUB MODE key : Press with the MODE key to select the setting mode.

Setting items

Setting by pressing the MODE key for 3 seconds

- (1) Output zero adjustment
- (2) Output span adjustment

Setting by the MODE key and SUB MODE key

- (1) Set value lock
- (2) Decimal point place
- (3) Output 0% value
- (4) Output 100% value
- (5) Input 1 filter time constant
- (6) Input 1 sensor correction
- (7) Input 2 filter time constant
- (8) Input 2 sensor correction
- (9) Output Normal/Reverse
- (10) Display selection
- (11) Indication time
- (12) Input High/Low

■ Displays and indicators

Input display: Indicates the input value.

Indication of -2000 or less: The minus (-) sign and input value light alternately.

Indication of 10000 or more: The lower 4 digits flash.

Output display: Indicates the output volume in percentage (%) form.

Power indicator: The green LED lights when the power to the instrument is turned on.

Input indicator: Lights when Input 1 is indicated on the Input display.

Flashes when Input 2 is indicated on the Input display.

Under range: " _ _ _ _ " flashes on the Input display.

Over range: " _ _ _ _ " flashes on the Input display.

Warm-up indication: For approx. 3 seconds after the power to the instrument is turned on, "4200" is indicated on the Input and Output display.

■ Ferrules

Terminals from 1 to 4

Insulation sleeve attached (Phoenix Contact GMBH & CO.)

AI0.25-8YE	0.2 – 0.25mm ²
AI0.34-8TQ	0.25 – 0.34mm ²
AI0.5-8WH	0.34 – 0.5mm ²
AI0.75-8GY	0.5 – 0.75mm ²
AI1.0-8RD	0.75 – 1.0mm ²
AI1.5-8BK	1.0 – 1.5mm ²

Crimping pliers (Phoenix Contact GMBH & CO.)

CRIMPFOX ZA3
CRIMPFOX UD6

Terminals from 5 to 9

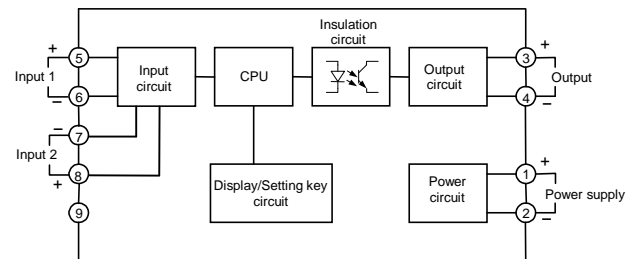
Insulation sleeve attached (Phoenix Contact GMBH & CO.)

AI0.25-8YE	0.2 – 0.25mm ²
AI0.34-8TQ	0.25 – 0.34mm ²
AI0.5-8WH	0.34 – 0.5mm ²

Crimping pliers (Phoenix Contact GMBH & CO.)

CRIMPFOX ZA3
CRIMPFOX UD6

■ Circuit configuration and terminal arrangement



■ External dimensions (Scale: mm)

