

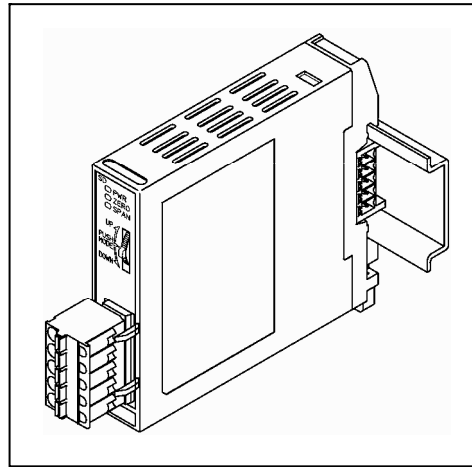
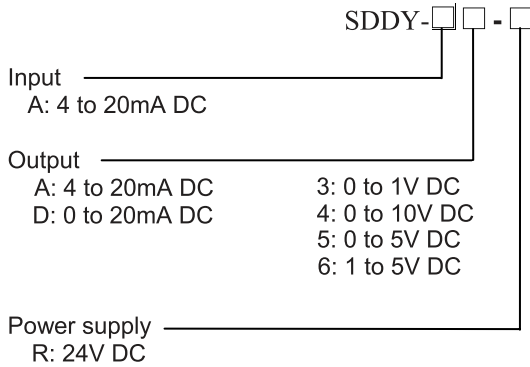
Current Loop Supply Built-in Type

MODEL SDDY

■ Features

- Simple wiring by plug-in socket
- Compact
- 3-port insulation (Input-Output-Power)
- Reduced wiring (power supply by bus plug)

■ Model



■ How to order

Specify a model name.
(e.g.) SDDY-AA-R

Default value

Input	4 to 20mA DC
Output	4 to 20mA DC

■ Accessories (Sold separately)

Name	Model	Specification
Terminal block	ATB-001-1	Terminal to supply power to bus plug (for 1.5mm ² wire, and screw connection)
End plate	AEP-001-1	Fixes the unit at both ends of a unit on a DIN rail.

■ Input specifications

DC current

DC current input	Shunt resistance	Allowable input current
4 to 20mA DC	50Ω	50mA DC or less

■ Output specifications

DC current

Output range	Allowable load resistance	Zero adjustment range	Span adjustment range
4 to 20mA DC	550Ω or less	-2.5 to 2.5%	97.5 to 102.5%
0 to 20mA DC	550Ω or less	0 to 2.5%	97.5 to 102.5%

DC voltage

Output range	Allowable load resistance	Zero adjustment range	Span adjustment range
0 to 1V DC	100kΩ or greater	0 to 2.5%	97.5 to 102.5%
0 to 5V DC	400kΩ or greater	0 to 2.5%	97.5 to 102.5%
1 to 5V DC	400kΩ or greater	-2.5 to 2.5%	97.5 to 102.5%
0 to 10V DC	600kΩ or greater	0 to 2.5%	97.5 to 102.5%

■ Power for 2-wire transmitter

Output voltage: 24 ±3V DC (when load current is 20mA)

Ripple voltage: Within 200mV DC (when load current is 20mA)

Max. load current: 25mA DC

SD series

■ Performance

Accuracy	: Within $\pm 0.2\%$ of input span
Response time	: 1 sec. (typical) (0 \rightarrow 90%)
Temperature coefficient	: $\pm 0.015\%/^{\circ}\text{C}$
Input resolution	: 10000
Output resolution	: 10000
Insulation resistance	: $10\text{M}\Omega$ or more, at 500V DC (Input-Output-Power)
Dielectric strength	: 2.0kV AC for 1 minute (Input-Output-Power)

■ Instrument specifications

Case	: Flame resistant resin	Color: Light gray
Base	: Flame resistant resin	Color: Light gray
Front panel	: Polycarbonate	
Spring type plug	: Polyamide	Color: Green
Bus plug	: Polyamide	Color: Green
Adjustment	: Use the Dial (for output zero/span adjustment) & Push switch.	

Zero adjustment : $\pm 2.5\%$

Span adjustment : $\pm 2.5\%$

(1) The ZERO indicator lights by pressing the Push switch for 3 sec.

The unit enters Output ZERO adjustment mode.

(2) The SPAN indicator lights by pressing the Push switch.

The unit enters Output SPAN adjustment mode.

(3) Returns to Step (1) by pressing the Push switch for 3 sec or by leaving it as it is for 30 sec.

Indication:

POWER (PWR) indicator: Green

Lights when power-on.

Flashes in 500ms cycles when an error has occurred in non-volatile IC memory.

Flashes in 250ms cycles for an input error.

ZERO indicator: Yellow

Lights when adjusting Output ZERO.

SPAN indicator: Yellow

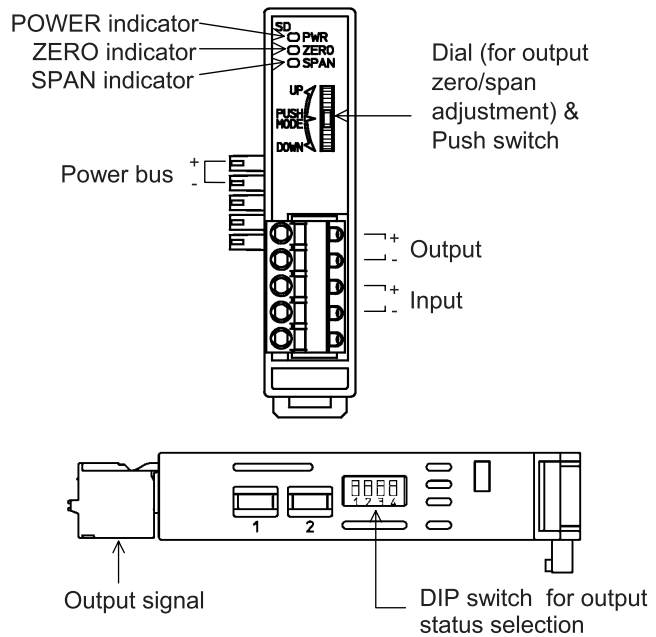
Lights when adjusting Output SPAN.

Output status selection: Selects Normal or Reverse with the DIP switch.

No.1 OFF: Normal, ON: Reverse

Self diagnosis:

The CPU is monitored by a watchdog timer, and when an abnormal status is found on the CPU, the unit restarts by reset action.



■ Installation specifications

Power supply	: 24V DC
Allowable voltage range	: 20 to 28V DC
Power consumption	: Approx. 1.5W
Ambient temperature	: -5 to 55 $^{\circ}\text{C}$
Ambient humidity	: 35 to 85%RH (non-condensing)
Weight	: Approx. 82g
Mounting method	: DIN rail mounting
	Be sure to use end plates to fix units after the unit is mounted to the DIN rail.
Max. linkable units	: 90 units
External dimensions	: 17.5 (W) x 75 (H) x 85 (D) mm

■ Environmental specification

RoHS directive compliance

■ Ferrules

Made by Phoenix Contact GMBH & CO.

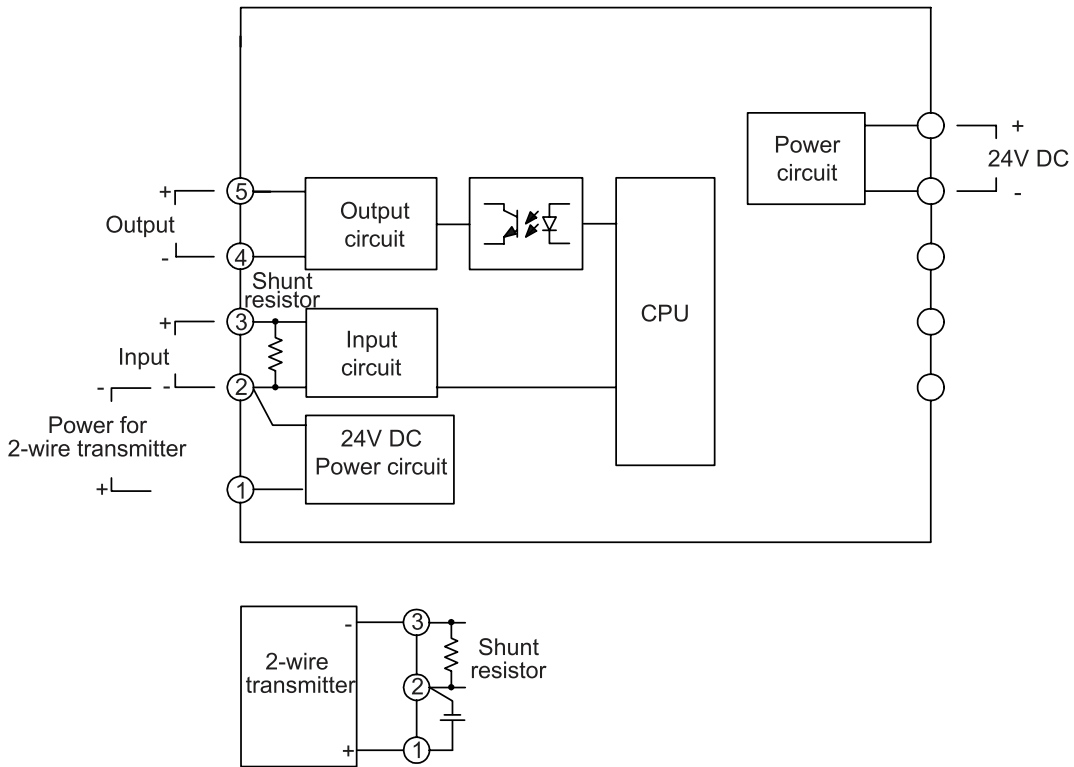
Insulation sleeve attached:

Model	Conductor cross section
AI0.25-6BU	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
AI1-8RD	0.75 – 1.0mm ²
AI1.5-8BK	1.0 – 1.5mm ²
AI2.5-8BU	1.5 – 2.5mm ²

Crimping pliers:

CRIMPFOX ZA3
CRIMPFOX UD6

■ Circuit configuration and terminal arrangement



■ External dimensions (Scale: mm)

