General Specifications

Model SISD (Style S) Isolator

yew**SERIES** 80

GS 01B04N01-02E

■ GENERAL

The Model SISD Isolator accepts a 1 to 5V DC input signal. The input signal is isolated from the power supply common and from the Isolator output signal. There are two outputs: 1 to 5V and 4 to 20mA DC.

With the VJ77 Parameter Setting Tool you can do the following:

· *Read/write all parameters at once*
· *Save read parameters to a file*
· *Copy parameters to other devices of the same model and suffix code (only with style code R or S).*

■ STANDARD SPECIFICATIONS

Input Signal

Input: 1 to 5V DC(one input)
Input Resistance: 1 MΩ

Square Root Characteristic

Computation: $E_0 = 2\sqrt{E_1 - 1} + 1$

E_0 : Output Signal from computation function, E : Input Signal

Lowcut Function: At E_1 is less than 1% , the output is proportional to input.

Output Signals

Output: 1 to 5V DC(one output), 4 to 20 mA DC(one output)
Load Resistance: At least 2 kΩ(1 to 5 V DC output), up to 750 Ω (4 to 20 mA DC output)

BRAIN Communication Function

Setting of each parameter, monitoring of input/output values, and configuration by a PC (VJ77), JHT200 Handy Terminal* or BT200 BRAIN Terminal*.
 *:   When connecting a PC (VJ77) or the JHT200 Handy Terminal, the adapter for modular-jack (model E9786WH) is required. When using the BT200 BRAIN Terminal of YOKOGAWA Electric Corporation, the communication cable of 5-pin connector type (model F9182EE) and the adapter for modular-jack (model E9786WH) are required.

■ MOUNTING AND APPEARANCE

Mounting: Rack mounting.
Wiring
  Signal Wiring: ISO M4 size (4mm) screws on terminal block.
  Power and Ground Wiring
    100 V version: JIS C 8303 two-pin plug with earthing contact(IEC A5-15, UL458)
                Cable length: 300 mm
                Power supply terminal type (option code /TB)
    220 V version: CEE 7 VII(CENELEC standard) plug (option code /A2ER).

Cable length: 300 mm
Power supply terminal type (option code /A2TB)
External Dimensions: 180 (H)× 48(W)× 300 (D)
                Depth behind panel(mm)
Weight: 1.7 kg (including rack-mounting case)

■ STANDARD PERFORMANCE

Accuracy: ±0.2% of span(±0.5% of span with square root characteristic)
Maximum Power Consumption:
        70 mA with 24 V DC supply,
        5.0 VA with 100 V AC supply,
        6.0 VA with 220 V AC supply.

■ POWER SUPPLY AND ISOLATION

Power Supply Rated Voltage:
100 V version:
  24-110 VDC ⎓ , -10 %, +10 %, 100 mA
  100-120 VAC ∼ , -10 %, +10 %, 50/60 Hz, 7.0 VA
220 V version:
  135-300 VDC ⎓ , -10 %, +10 %, 15 mA
  200-240 VAC ∼ , -10 %, +10 %, 50/60 Hz, 10.0 VA
Power Supply Input Voltage: AC/DC both usage
  100 V version: DC drive 20 to 130 V, no polarity
                AC drive 80 to 138 V, 47 to 63 Hz
  220 V version: DC drive 120 to 340 V, no polarity
                AC drive 138 to 264 V, 47 to 63 Hz
Insulation Resistance
  Between I/O terminals and Ground:
                100 MΩ/500 V DC
  Between Power and Ground:
                100 MΩ/500 V DC.
Dielectric Strength
  Between I/O terminals and Ground:
                500 V AC for 1 minute.
  Between Power and Ground:
                1000 V AC for 1 minute(100 V version)
                1500 V AC for 1 minute(220 V version)
  Between Input terminal and Output terminal:
                1000 V AC for 1 minute

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■ NORMAL OPERATING CONDITIONS

Ambient Temperature: 0 to 50 °C
Ambient Humidity: 5 to 90% relative humidity (non-condensing)
Operating environment: Area free of hydrogen sulfide gas and other corrosive gases and dust and where the device is not exposed to sea breeze or direct sunlight.
Continuous vibration: (at 5 to 9 Hz) Half amplitude of 1.5 mm or less
(at 9 to 150 Hz) 4.9m/s^2 or less, 1 oct/min for 90 minutes each in the three axis directions
Impact: 49 m/s^2 or less, 11 ms, 3 axes, 6 directions, 3 times each
Installation altitude: 2,000 m or less above sea level
Warm-up time: 15 minutes or more after the power is turned on

■ TRANSPORT AND STORAGE CONDITIONS

Temperature: -25 to 70°C
Temperature change rate: 20°C per hour or less
Humidity: 5 to 95%RH (no condensation)

■ OPTIONS

/NHR: Without rack case (internal unit only)
/FBP: Power supply fuse bypass
/LOCK: Power supply plug with lock
/WSW: With spring washer
/REK: Mount to same line with EK series rack
/TB: With power supply terminal
/A2TB: 220V version with power supply terminal
/A2ER: 220V version with power supply plug
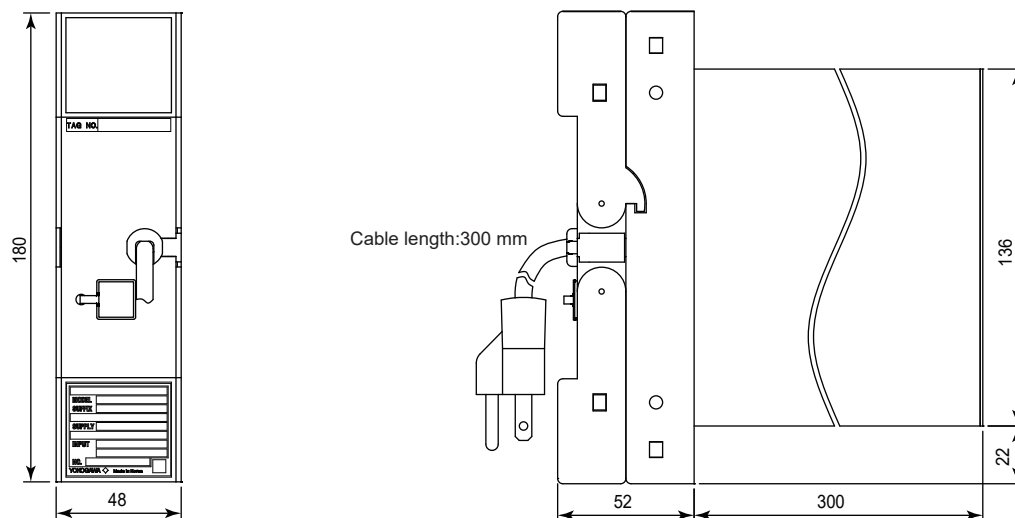
■ TERMINAL CONNECTIONS

Terminal arrangement
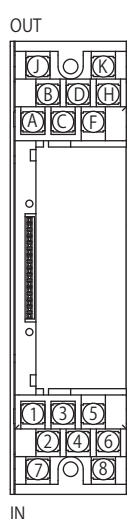
Terminal Designation	Description
A	+
B	- > Output1 (1 to 5 V DC)
C	
D	
F	+
H	- > Output2 (4 to 20 mA DC)
J	
K	

Do not connect to the output terminal when the terminal is not in use.

Terminal Designation	Description
1	+
2	- > Input (1 to 5 V DC)
3	
4	
5	
6	
7	
8	

■ EXTERNAL DIMENSIONS

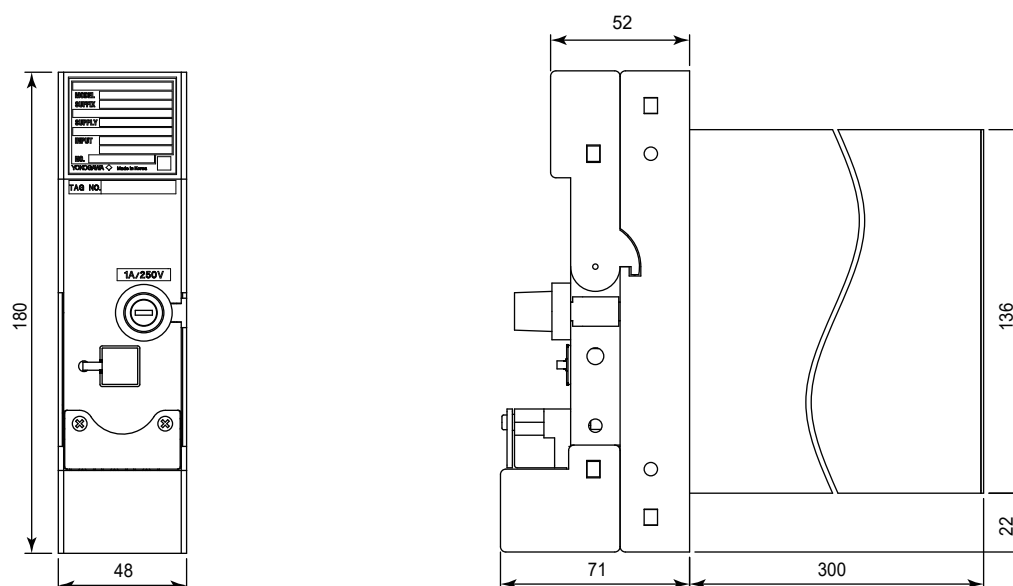### Power supply plug type

Cable length:300 mm

180

48

136

22

52

300

Trigonometry
Unit: mm
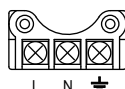General tolerance = ±(value of tolerance class IT18 based on JIS B 0401-2016) / 2

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Power supply terminal type(option /TB or /A2TB)

1A/250V

180

48

52

136

22

71

300

Power supply
terminal block

L N ⏚

Power and Ground Terminal connection
(Connection screw: M4)

Symbol	Description
L	+
N	- Power supply
⏚	Ground

Trigonometry
Unit: mm
General tolerance = ±(value of tolerance class IT18 based on JIS B 0401-2016) / 2

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Power supply terminal type(option /REK)

Power supply terminal block

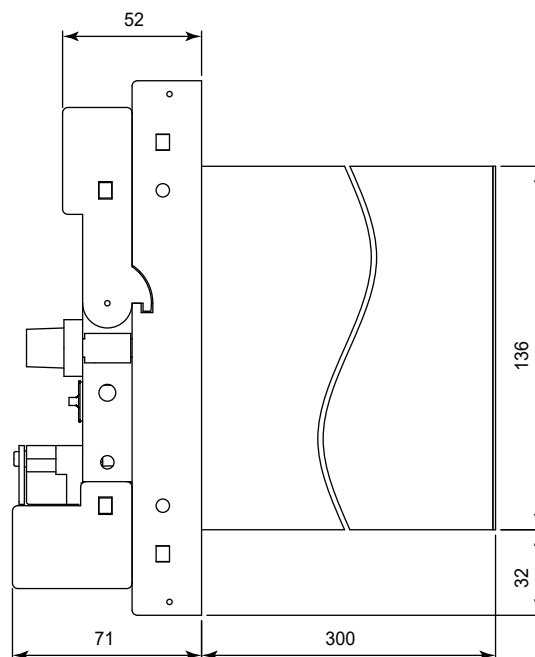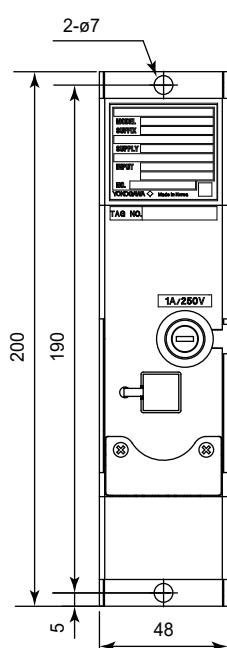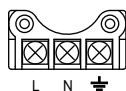**Power and Ground Terminal connection**
(Connection screw: M4)

Symbol	Description
L	+ > Power supply
N	-
⏚	Ground

Trigonometry
Unit: mm
General tolerance = ±(value of tolerance class IT18 based on JIS B 0401-2016) / 2

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■ MODEL AND SUFFIX CODES

Model	Suffix Codes	Option Codes	Descriptions
SISD			Isolator
Number of Input	-1		1 input
Square Root Function	00		Not provided
	01		Provided
Style Code		*S	Style S
Option Codes [*1] [*2]		/NHR	Without rack case
		/FBP	Power supply fuse bypass
		/LOCK	Power supply plug with lock
		/WSW	With spring washer
		/REK	Mount to same line with EK series rack
		/TB	With power supply terminal
		/A2TB	220V version with power supply terminal
		/A2ER	220V version with power supply plug

*1: /LOCK, /REK, /TB, /A2TB, and /A2ER cannot be specified together.
*2: /FBP, /A2TB, and /A2ER cannot be specified together.

■ ORDERING INSTRUCTIONS

Specify the following when ordering:
Model and suffix codes and option codes, if necessary.

■ BASIC CONDITIONS AND INDIVIDUAL CONTRACTS AT THE TIME OF PURCHASE

The warranty for this product is defined in the basic conditions and individual contracts at the time of purchase. The individual conditions are as follows.

• **Warranty period of firmware**
  The warranty conditions for the firmware installed in this products are same as that of the hardware.