Dual Channel No-Power-Supply Isolator

This compact plug-in isolator isolates between inputs and outputs from each other without power supply. Two channels availability allows the user to save the mounting space significantly.

Features

- Dielectric strength of 2000 V AC between input and output
- This compact and tightly mountable isolator allows the user to downsize the system.
- No power supply permits placement almost anywhere.
- Accuracy: ±0.1%, Response time: 25 ms
- Shortened time of completion and high serviceability thanks to plug-in design

Model name

WSP-2NDS

2 channels
Dielectric strength: 2000 V AC for 1 minute
Response time: 25 ms (0-90%)

Design

Supply Voltage

0 No power supply

Test Report

X No
T Yes

Output Signal Allowable Load

A 4-20 mA DC 50-350 Ω or less
H 1-5 V DC 50 kΩ or more

Input Signal

36 4-20 mA DC
Input Resistance
- 4-20 mA DC of output, approx. 250Ω of load resistance
- 1-5 V DC of output, approx. 250Ω

Input Signal

No. Symbol Description
1 No.1 + No.1 Input
4 INPUT – Signal
5 No.2 + No.2 Input
8 OUTPUT – Signal
9 No.1 + No.1 Output
12 OUTPUT – Signal
13 No.2 + No.2 Output
14 OUTPUT – Signal

Specifications

Accuracy: ±0.1% fs (at 23˚C)
Response time: 25 ms (time required to reach 90% of final value)
Allowable load:
- Voltage output: Load resistance 50 kΩ or more
- Current output: 50-350Ω, 250Ω before shipment
Zero & span adjustment:
- ±5%/fs (3-turn trimmer)
Operating temperature:
- -5 to +55˚C, 90% RH or less
Influence of ambient temperature:
- For 10˚C of temperature fluctuation,
  Voltage output: ±0.15%/fs
  Current output: ±0.2%/fs
Isolation:
- Between input and output terminals, and between channels
Insulation resistance:
- 100 MΩ or more with a 500 V DC megger
- Between input and output terminals
Dielectric strength:
- 2000 V AC for 1 minute between input and output terminals
Dimensions:
- Refer to Dimensional Drawing I
Weight:
- Approx. 150g
Structure:
- Plug-in (consisting of main unit and socket part)
Connection part:
- M3 SEMS screw part of the base socket
Material of terminal screw:
- Chromated iron
Case color and material:
- Ivery, heat-resistant ABS resin (94V-0)
Mounting:
- DIN rail or wall surface

*1 The output is adjusted to DC 4-20 mA at 250Ω before shipment. It is required to adjust the span depending on the load.