masibus
A Sonepar Company

9000E

Signal Isolator

Stable | Robust | Accurate | HART Protocol Supported

RoHS

Masibus 9000E is compact DIN rail mount Signal Isolator which is used to isolate 4-20mA Analog Field Signals. Separate Inbuilt Transmitter Power supply is available in each channel to energise the 2-wire field Transmitter, and this will eliminate the requirement of external Transmitter Power Supply. 9000E is suitable for 2-W and 4-W Field Transmitters.

9000E is available in one and two channel options. Both channels are isolated from each other. 9000E is highly accurate, have low Temperature drift and fast response time. It allows bidirectional HART signal communication between the field transmitter and HART Communicator.

9000E have slim design which occupy less space and accommodate more number of Signal Isolators in single panel. The Power consumption of device is very less which eliminate the Bulky power supply requirement. 9000E is designed with advance technology for low power dissipation to ensure minimal heat generation. This feature allows for the efficient use of multiple isolator devices on a single panel, providing a reliable and space-saving solution for industrial applications.

9000E Two channel Model also acts as a signal distributer by series connection of input channels. A typical application could be where the signal has to be distributed for indication on local panel, field control room, main control room or DCS system. The isolator provides a protection for sensitive system parts against voltage spikes.

Features

- Compact DIN-Rail mount design of 17.6mm width
- 2W transmitter input with HART Pass
- High KV 3 port isolation of each channel
- High Accuracy, low drift, low temperature effect
- Input and Output well protected
- Fast response suits all applications
- Low power dissipation

Applications

- Isolation of process field signals
- Signal isolation in VFD panels
- Distribution of signals in Automation Panels
- Protect Systems against Field over voltage/Lightning
- Convert/distribute signals
- Impedance matching of transmitters and receiver instruments
- Powering of field transmitters

TECHNICAL SPECIFICATIONS

Input

Input type	Current
Input Range	4 to 20mA
Input Impedance	≤ 30Ω
Temperature Coefficient	≤ 50 ppm/°C
CMRR	≥ 100 dB
NMRR	≥ 70 dB
No. of channels	One/Two
Transmitter Power Supply	Open circuit voltage: ≥24VDC Available voltage: ≥ 23VDC @ 4mA, ≥ 21.5VDC @ 20mA
Communications Supported	HART pass supported in both channels*

*HART Pass supported with 2W transmitter only

Output

Output Type	Current
Output Range	4 to 20mA
Response Time	≤ 50µS
Accuracy	± 0.1% of FS
Output Load Resistance	≤ 450Ω@20mA

Power Supply

Voltage	20 to 35 VDC
Power Consumption (20mA Signal)	≤1.3W/Channel @ 24VDC
Power Dissipation (20mA Signal)	≤0.8W/Channel @ 24VDC
Power ON status LED	Red
Isolation (Withstanding voltage)	
Between Power to Inputs and Outputs	Galvanic Isolation of 2KVAC for 1 minute
Between Inputs to Outputs	Galvanic Isolation of 2KVAC for 1 minute
Between Output to Output	Galvanic Isolation of 2KVAC for 1 minute
Between Input to Input	Galvanic Isolation of 2KVAC for 1 minute

Insulation resistance: >200MΩ@1000V DC between All Ports.

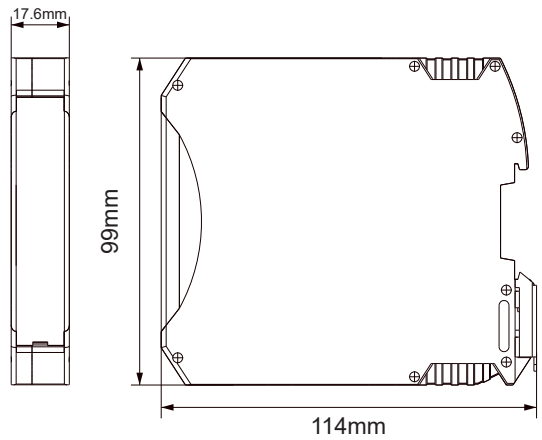
Physical

Mounting Type	DIN Rail (35 mm)
Terminal Block	UL,CSA standard
Terminal Cable Size	2.5mm²
Enclosure Material	PA66
IP Rating	IP20
Dimension (in mm)	17.6(W)x99(H)x114(D) mm
Weight	≤ 150 g

Environmental

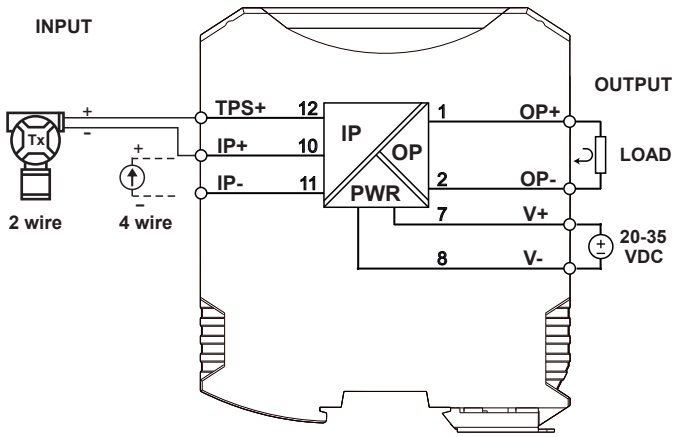
Operating Temperature	-20 to 60 °C
Storage Temperature	-20° to 70 °C
Relative Humidity	30 to 95% RH (Non-Condensing)
Protection	Conformal Coating on PCB

Dimensions



Connection Diagram

9000E-1



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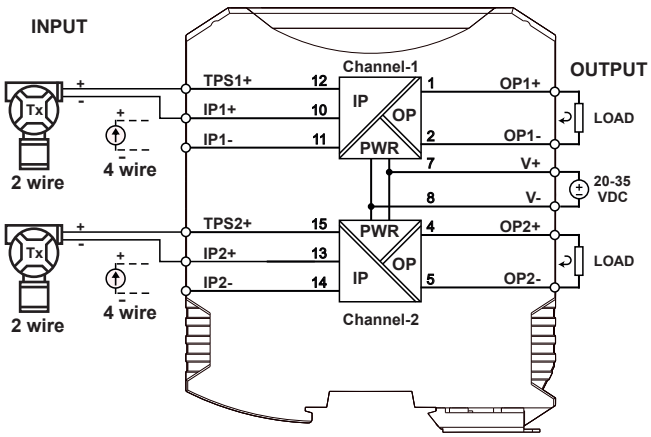

Ordering Code

Model	No. of Channels	
9000E	X	
	1	One
	2	Two

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