General Specifications

VJC1 Loop Powered Isolator (1-channel and 2-channel Types)

General

The VJC1 is a plug-in signal isolator that receives current signals from a signal source and converts them into isolated DC voltage or isolated DC current signals. The VJC1 isolator can operate without any driving power source.

- a choice of single-channel and dual-channel models; and
 close side-by-side mounting.
- Model and Suffix Codes

 VJC1-0 N- NO/

 Model

 Output configuration

 1: Single-channel

 2: Dual-channel

 (Channels 1 and 2 share

 the same input/output ranges.)

 Input signal

 A: 4 to 20 mA DC

 H: 10 to 50 mA DC

 Output signal

 A: 4 to 20 mA DC

 6: 1 to 5 V DC

 Options

/SN: Without socket Blank: With socket

• Items to be specified when ordering

• Model and Suffix Code: e.g. VJC1-02N-AAN0

■ Input/Output Specifications

Input signal: 4 to 20 mA DC or 10 to 50 mA DC

Input resistance:					
Input signal	Current output mode Voltage output mode		put mode		
4 to 20 mA DC	$250 \ \Omega$ + Secondary stage load resista	nce	500 Ω		
10 to 50 mA DC	$100 \ \Omega$ + Secondary stage load resista	nce	350 Ω		
Allowable voltage level: 30 V DC Output signal: 4 to 20 mA DC or 1 to 5 V DC Allowable load resistance:					
Input signal	Current output mode	Voltage out	put mode		
4 to 20 mA DC	Allowable load resistance of input signal source - 250 Ω	500 kΩ 1	minimum		
10 to 50 mA DC	Allowable load resistance of input				

signal source - 100Ω 500 k Ω minimum

Output resistance: 250 Ω (for voltage output)

Standard Performance

- Accuracy rating: $\pm 0.1\%$ of span; $\pm 0.3\%$ of span for 10 to 50 mA input
- Response: 100 ms for a 63% response when in current output mode (10 to 90% change of range)
- Insulation resistance: 100 M Ω minimum at 500 V DC across input and output terminals, and

between channels

Withstanding voltage: 1500 V AC for one minute across input and output terminals;

2000 V AC for one minute between channels Operating temperature range: 0 to 50°C

Operating humidity range: 5 to 90% RH (no condensation) Effects of ambient temperature variations: Up to ±0.2% of span per 10°C

Mounting and Appearance

Material: ABS resin (casing) Mounting: Wall mounting, DIN rail mounting, or mounting on a side-by-side multiple mounting

base Connection: Terminals with M3 size screws

External dimensions: 76 (H) \times 29.5 (W) \times 124.5 (D) mm Weight: Main unit = approx. 124 g; socket = approx. 51 g

Accessories

F01.EPS

Tag number label: One



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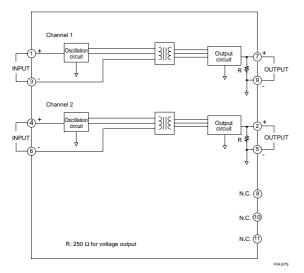
Terminal Assignments

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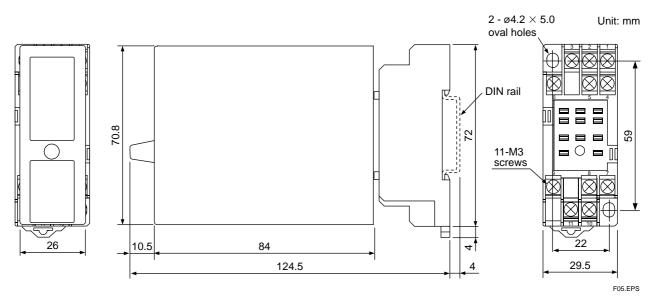
1	INPUT	(+) (Channel 1)
2	OUTPUT	(+) (Channel 2)
3	INPUT	(-) (Channel 1)
4	INPUT	(+) (Channel 2)
5	OUTPUT	(-) (Channel 2)
6	INPUT	(-) (Channel 2)
7	OUTPUT	(+) (Channel 1)
8	N.C.	
9	OUTPUT	(-) (Channel 1)
10	N.C.	
11	N.C.	

F03.EPS

Block Diagram



External Dimensions



• The information covered in this document is subject to change without notice for reasons of improvements in quality and/or performance.

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