# 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 $\Omega$	500 kΩ 1	minimum		
10 to 50 mA DC	Allowable load resistance of input				

signal source -  $100 \Omega$  500 k $\Omega$  minimum

Output resistance: 250  $\Omega$  (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 $\Omega$  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  $50^{\circ}\text{C}$ 

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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# **JUXTV**

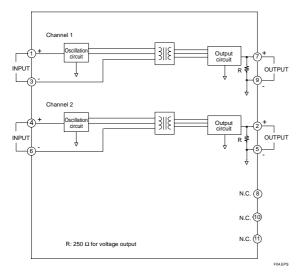
#### Terminal Assignments

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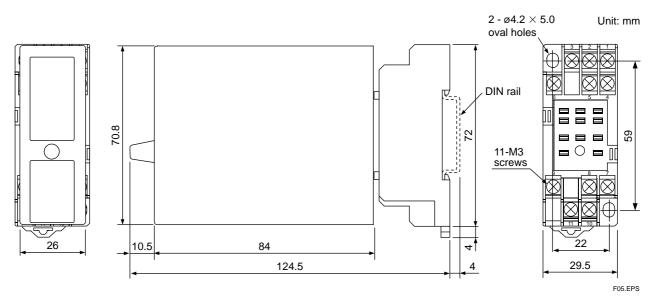
1	INPUT	(+) (Channel 1)
2	OUTPUT	(+) (Channel 2)
3	INPUT	(-) (Channel 1)
4	INPUT	(+) (Channel 2)
5	OUTPUT	(-) (Channel 2)
6	INPUT	(-) (Channel 2)
7	OUTPUT	(+) (Channel 1)
8	N.C.	
9	OUTPUT	(-) (Channel 1)
10	N.C.	
11	N.C.	

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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