General Specifications

Model VJA4 Distributor (non-isolated)



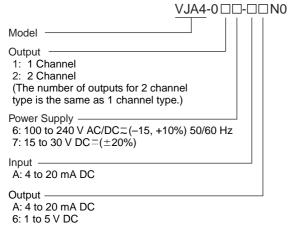
GS 77J01A04-01E

General

This plug-in type distributor is used in combination with 2-wire type transmitters and converts 4 to 20 mA DC signals into DC current or DC voltage signals. The input/output signal is nonisolated.

• One-channel or two-channel type can be selected.

Model and Suffix Codes



Input

Input Signal: 4 to 20 mA DC from 2-wire transmitter, 1 point Input Resistance: 250 Ω (for voltage output) Transmitter Power Supply: 24 to 28 V DC (with current limit circuit at 25 to 35 mA) Permissible Conductor Resistance: RL \leq (20 - transmitter minimum operating voltage) V/0.02 A (Ω) Permissible Input Current: 40 mA or less

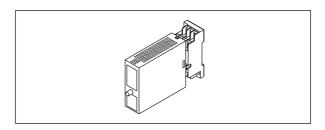
Output

Output signal: 4 to 20 mA DC or 1 to 5 V DC Permissible load resistance: For 4 to 20 mA DC output: [(24 V – Transmitter's minimum operating voltage)/20 mA] – Input wiring resistance For 1 to 5 V DC output: 250 kΩ or more

Standard Performance

Accuracy rating: ±0.1% of span (for voltage output) Effect of Power Supply Voltage Fluctuation: ±0.1% or less of span for power supply voltage fluctuation of 85 to 264 V AC (47 to 63 Hz)/DC and 12 to 36 V DC

Effect of Ambient Temperature Change: $\pm 0.2\%$ or less of span for change of 10 °C



Safety and EMC Standards

The followings will be acquired.

Safety:

Conforms to IEC1010-1: 1990 and EN61010-11: 1993. Certified for CSA1010 CSA1010 category: CAT II (IEC1010-1) Certified for UL508 EMC Standards:

Conforms to the following EMC standards. EN55011: 1991 Class A Group1 for EMI (emissions) EN50082-2: 1995 for EMS (immunity) The above conformed instrument is only for voltage of 15 to $30 \text{ V DC} = (\pm 20\%).$

Environmental Conditions

Temperature: 0 to 50 °C Humidity: 5 to 90% RH (no condensation) Ambient Condition: Avoid installation in such environments as corrosive gas like hydrogen sulfide, dust, sea breeze and direct sunlight. Installation altitude 2000 m or less above sea level.

Power Supply and Isolation

Power supply voltage: 100 to 240 V AC/DC \approx (-15, +10%) 50/60 Hz 15 to 30 V DC \approx (±20%) Power dessipation: 24 V DC 2.5 W, 110 V DC 2.5 W 100 V AC 4.8 V A, 200 V AC 5.3 V A Insulation resistance: 100 MΩ/500 V DC between channel 1, channel 2, power supply, and ground mutually Withstand voltage: 2000 V AC/minute between (channel 1, channel 2), power supply, and ground mutually 1000 V AC/minute between channel 1 and channel 2



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Mounting and Appearance

Construction: Compact plug-in type Material: Modified Polyphenylene Oxide (Case body) Mounting Method: Wall, DIN rail, or dedicated VJ mounting base mountings Connection Method: M3 screw terminal External Dimension: 29.5 (W)×76 (H)×124.5 (D) mm Weight: Approx. 170 g

Standard Accessories

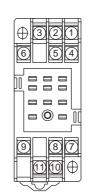
Tag number label: 1

■ Items to Specify When Ordering

• Model and suffix codes

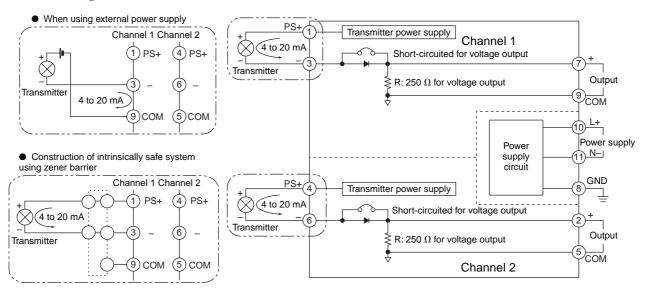
Block Diagram





Terminal No.	Signal
1	Input (PS+) for channel 1
2	Output (+) for channel 2
3	Input () for channel 1
4	Input (PS+) for channel 2
5	COM for channel 2
6	Input (–) for channel 2
7	Output (+) for channel 1
8	GND
9	COM for channel 1
10	Power supply (L+)
11	Power supply (N–)

Note 1: With channel 1 type, terminals for channel 2 are not connected.



External Dimensions

Unit: mm

