

General Specifications

Models FG3A, FG3V
AC Voltage Converter (RMS)

JUXTA

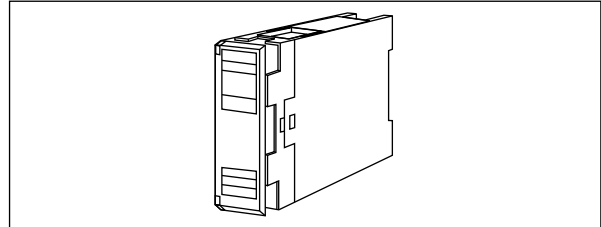
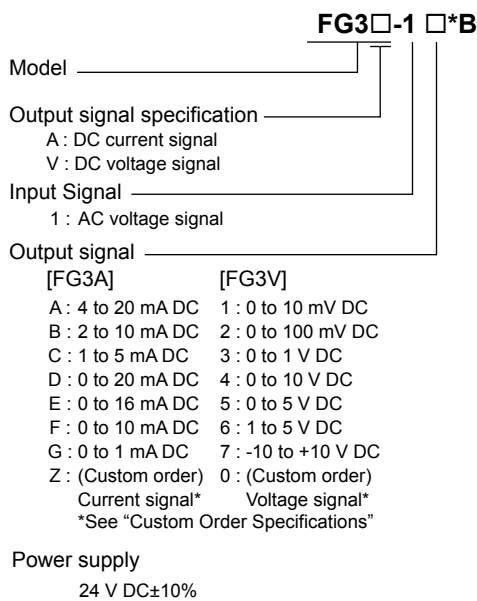
GS 77J08G03-01E

General

The FG3A/FG3V is a compact, front terminal connection type AC voltage converter that converts AC voltage signals into isolated DC current or DC voltage signals.

- AC/DC conversion is made by root mean square value.

Model and Suffix Codes



Zero adjustment: -5 to +5%
Span adjustment: 95 to 105%

Standard Performance

- Accuracy rating: ±0.3% of span
Accuracy is not guaranteed for output level less than 0.5% of the span of a 0 to X mA output range type.
- Response speed: 300 ms, 63% response (10 to 90%)
- Insulation resistance: 100 MΩ or more at 500 V DC between input and output, output and power supply, and input and power supply.
- Withstand voltage: 1500 V AC/min. between input and (output and power supply).
500 V AC/min. between output and power supply.

Environmental Conditions

- Operating temperature range: 0 to 50°C
- Operating humidity range: 5 to 90% RH (no condensation)
- Power supply voltage: 24 V DC±10% (percentage ripple is 5%p-p or less)
- Effect of power supply voltage fluctuations: ±0.1% of span or less for the fluctuation within the operating range of power supply voltage specification.
- Effect of ambient temperature change: ±0.2% of span or less for a temperature change of 10°C.
- Current consumption:
24 V DC 90 mA (FG3A), 60 mA (FG3V)

Ordering Information

Specify the following when ordering.

- Model and suffix codes :e.g. FG3V-16*B
- Input range :e.g. 0 to 100 V AC

Input/Output Specifications

Input signal: 0 to V_{100} V AC
 $0.1 \leq V_{100} \leq 150$ V AC (V_{100} =100% Input voltage)
 Input resistance: approx. 1 MΩ
 Input frequency range: 40 Hz to 10 kHz
 Maximum allowable input: 120% (continuous);
 200% (one minute)

Output signal: DC current or DC voltage signal

Allowable load resistance:

DC current output	Allowable load resistance	DC voltage output	Allowable load resistance
4 to 20 mA	750 Ω or less	0 to 10 mV	250 kΩ or more
2 to 10 mA	1500 Ω or less	0 to 100 mV	250 kΩ or more
1 to 5 mA	3000 Ω or less	0 to 1 V	2 kΩ or more
0 to 20 mA	750 Ω or less	0 to 10 V	10 kΩ or more
0 to 16 mA	900 Ω or less	0 to 5 V	2 kΩ or more
0 to 10 mA	1500 Ω or less	1 to 5 V	2 kΩ or more
0 to 1 mA	15 kΩ or less	-10 to +10 V	10 kΩ or more

Mounting and Dimensions

- Material: ABS resin (Case body)
- Mounting method: Rack, Wall or DIN rail mounting
- Connection method: M4 screw terminals
- External dimensions: 72 (H) × 24 (W) × 127 (D) mm
- Weight: Approx.130g

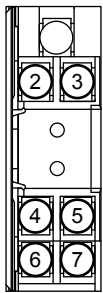
Standard Accessories

- Tag number label: 1
- Mounting block: 2
- Mounting screw: M4 screw x 2

■ Custom Order Specifications

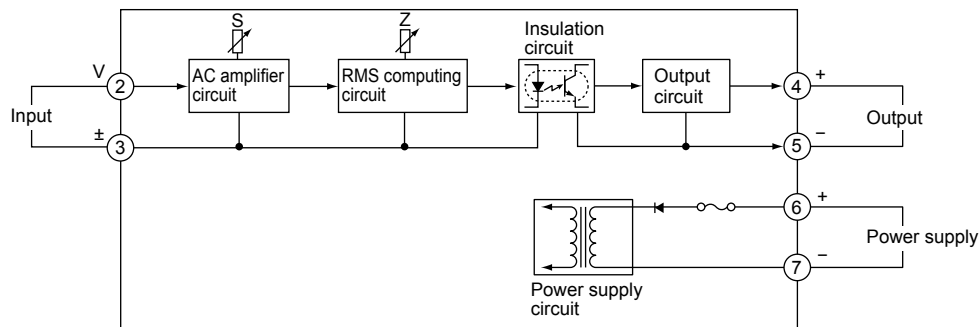
	Current signal	Voltage signal
Input range (AC)	-----	0 to 150 V
Span (AC)	-----	0.1 to 150 V
Zero elevation	-----	0% only
Output range (DC)	0 to 24 mA	-10 to +10 V
Span (DC)	1 to 24 mA	10 mV to 20 V
Zero elevation	0 to 200%	-100 to +200%

■ Terminal Assignments



2	Input (+)
3	Input (-)
4	Output (+)
5	Output (-)
6	Supply (+)
7	Supply (-)

■ Block Diagram



■ External Dimensions

