

General Specifications

Models FB1A, FB1V
CT Converter (RMS)

JUXTA

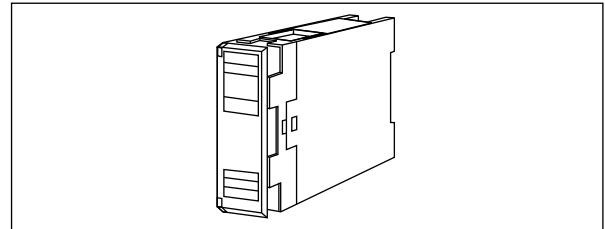
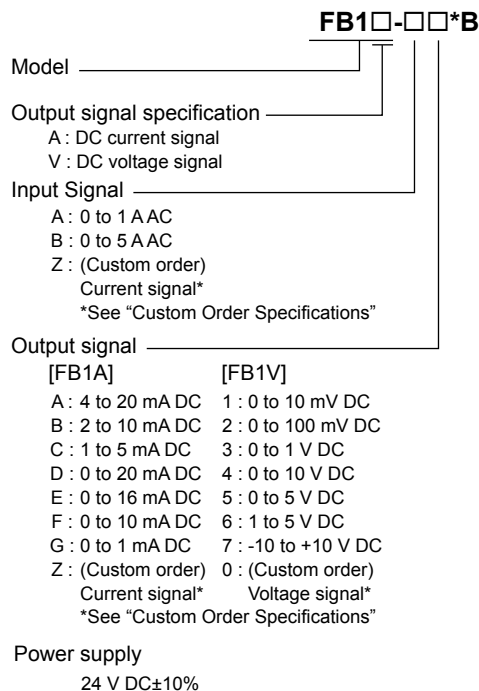
GS 77J08B01-01E

General

The FB1A/FB1V is a compact, front terminal connection type CT converter that converts AC current signals into isolated DC current or DC voltage signals.

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

Model and Suffix Codes



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

Zero adjustment: -5 to +5%

Span adjustment: 95 to 105%

Standard Performance

Accuracy rating: ±0.2% 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: 170 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: 2600 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 (FB1A), 60 mA (FB1V)

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

Ordering Information

Specify the following when ordering.

- Model and suffix codes :e.g. FB1V-A6*B

Input/Output Specifications

Input signal: 0 to 1 AAC or 0 to 5 AAC

Input loss: 0.5 VA or less

Input frequency range: 40 Hz to 10 kHz

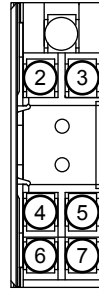
Maximum allowable input: 200% (continuous);
500% (one minute)

Output signal: DC current or DC voltage signal

Standard Accessories

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

Terminal Assignments

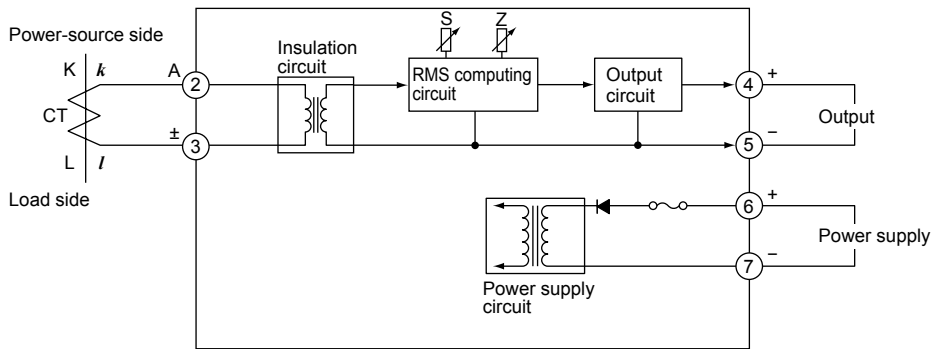


2	Input	(+)
3	Input	(-)
4	Output	(+)
5	Output	(-)
6	Supply	(+)
7	Supply	(-)

Custom Order Specifications

	Current signal	Voltage signal
Input range (AC)	0 to 5 AAC (where, the value of "5/I ₁₀₀ [I ₁₀₀ =current for 100% input] equals a integer)	-----
Span (AC)	0.1 to 5 A	-----
Zero elevation	0%	-----
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%

Block Diagram



External Dimensions

