General Specifications

Models WB2A, WB2V CT Converter (Mean Value)

NTXUL

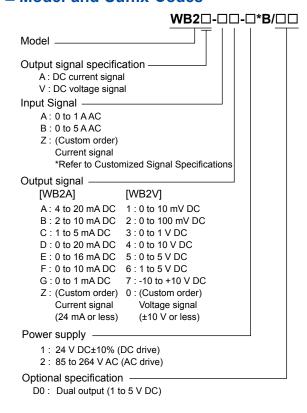
GS 77J09B02-01E

■ General

The WB2A/WB2V 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 mean value.
- Dual output specifications are available upon requests.

■ Model and Suffix Codes



Ordering Information

Specify the following when ordering.

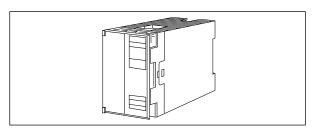
• Model and suffix codes :e.g. WB2V-BA-2*B

■ Input/Output Specifications

Input signal: 0 to 1 A AC or 0 to 5 A AC (sine wave) Input loss: 0.5 VA or less Input frequency range: 40 Hz to 1 kHz Maximum allowable input: 200% (continuous);

500% (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

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.

Dual output (optional): Relative error between output 1 and 2 is within ±0.2%. These outputs are not insulated.

Response speed: 150 ms, 63% response (10 to 90%) Insulation resistance: 100 $\text{M}\Omega$ or more at 500 V

DC between input and output, input and power supply, input and ground, output and power supply, output and ground, and power supply and ground.

Withstand voltage:

DC drive 2600 V AC/min. between input and (output and power supply).

500 V AC/min. between output and

power supply.

AC drive 2600 V AC/min.between input and (out-

put, power supply and ground). 1500 V AC/min. between output and power supply, power supply and ground,

and output and ground.

■ Environmental Conditions

Operating temperature range: 0 to 50°C Operating humidity range: 5 to 90% RH (no condensation)

Power supply voltage: 85 to 264 V AC, 47 to 63Hz or 24 V DC±10%

Effect of power supply voltage fluctuations: ±0.1% of span or less for 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 (WB2A-1), 60 mA (WB2V-1)

Power consumption:

100 V AC 7 VA (WB2A-2), 6 VA (WB2V-2)

■ Mounting and Appearance

Material: ABS resin (Case body)

Mounting method: Rack, Wall or DIN rail mounting Connection method: M4 screw terminals External dimensions: 72 (H) × 48 (W) × 127 (D) mm Weight: DC; Approx. 150 g, AC; Approx. 300 g

Standard Accessories

Tag number label: 1 Mounting block: 2

Mounting screws: M4 screw x 4

■ Custom Order Specifications

	Current signal	Voltage signal
Input range (AC)	0 to 5 AAC (where, the value of "5/1 ₁₀₀ [1 ₁₀₀ =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%

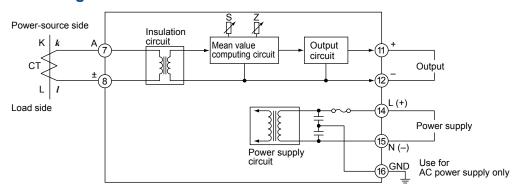
■ Terminal Assignments

	0 0
90	00
14	(15) (16)

			_	
7	Input	(A)		
8	Input	(±)		
9	Output 2	(+)		
10	Output 2	(-)		
11	Output 1	(+)		
12	Output 1	(-)		
14	Supply	(L+)		
15	Supply	(N-)		
16	Ground	(GND)*		
* Use for AC power supply only				

Terminal 9-10 are used for output 2 in case dual output is specified.

■ Block Diagram



■ External Dimensions

