

**General****Specifications**

AC Current Transmitter (R.M.S.)

**1. GENERAL**

This signal conditioner converts AC current signals to current or voltage signals.

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

**2. SPECIFICATIONS**

IO Specifications	
Input signal	0~I <sub>100</sub> AC (I <sub>100</sub> = 100% input current) 4≤I <sub>100</sub> ≤1000mA AC
Input resistance	4≤I <sub>100</sub> <10mA AC (25Ω max) 10≤I <sub>100</sub> <100mA AC (10Ω max) 100≤I <sub>100</sub> <1000mA AC (1Ω max)
Input frequency	40Hz~1kHz
Permissible over-input	120% (continuous), 200% (1 minute)
Output signal	DC current or voltage signal
Zero point adjustment range	±5% of span
Span adjustment range	±5% of span
Standard performance	
Precision rating	±0.3% of span
Response speed	300ms 63% response (10~90%)
Insulation resistance	100MΩ min (at 500V DC) between input~output~power supply (DC drive) input~output~power supply~ground (AC drive)
Voltage withstand	1500V AC/minute between input~output, input~power supply 500V AC/minute between output~power supply (DC drive) 1500V AC/minute between input~output~power supply~ground (AC drive)
Ambient temperature and humidity	Normal operating condition: 0~50°C, 5~90% RH Operating limit: -10~60°C, 5~95% RH Storage condition: -40~70°C, 5~95% RH (no condensation)
Power supply voltage	85~264V AC 47~63Hz, 24V DC ±10%
Effect of power supply voltage fluctuation	±0.1% max of span per 24V DC ±10% fluctuation
Effect of change in ambient temperature	±0.2% max of span per 10°C change in temperature
Current dissipation	24V DC 90mA (WB3A-1), 60mA (WB3V-1)
Power dissipation	100V AC 7VA (WB3A-2), 6VA (WB3V-2)
Mountings and dimensions	
Material	Case: ABS plastic
Boards	Both sides glass-epoxy
Mounting methods	Rack, wall, or DIN rail
Connection method	M4-screw terminals
External dimensions	72 x 48 x 127 mm (h x w x d)
Weight	DC drive: approx. 150g, AC drive : approx. 300g
Accessories	
Tag number labels: 1	
Mounting blocks: 2	M4 mounting screws: 4

WB3□-1□-\*B

TYPE NO.

OUTPUT SPECIFICATION

A: Current

V: Voltage

INPUT SIGNAL

1: AC current signals

OUTPUT SIGNAL

WB3A WB3V

A: 4~20mA DC 1: 0~10mV DC

B: 2~10mA DC 2: 0~100mV DC

C: 1~5mA DC 3: 0~1V DC

D: 0~20mA DC 4: 0~10V DC

E: 0~16mA DC 5: 0~5V DC

F: 0~10mA DC 6: 1~5V DC

G: 0~1mA DC 7: -10~+10V DC

Z: (custom) current signal 0: (custom) voltage signal  
(24mA max) (±10V max)

POWER SUPPLY

1: 24V DC±10% 2: 85~264V AC

### High Voltage Withstand Specifications

The JUXTA W Series is also available in 2000V AC voltage withstand specifications. Contact your dealer for details.

### OUTPUT RESISTANCE AND PERMISSIBLE LOAD RESISTANCE

WB3A (DC Current Output)		
Output Signal	Output Resistance	Permissible Load Resistance
4~20mA DC	5MΩ min	0~750Ω
2~10mA DC		0~1500Ω
1~5mA DC		0~3000Ω
0~20mA DC		0~750Ω
0~16mA DC		0~900Ω
0~10mA DC		0~1500Ω
0~1mA DC		0~15kΩ
Others where I <sub>100</sub> =24mA max		(15/I <sub>100</sub> )Ω max

I<sub>100</sub> : 100% output current

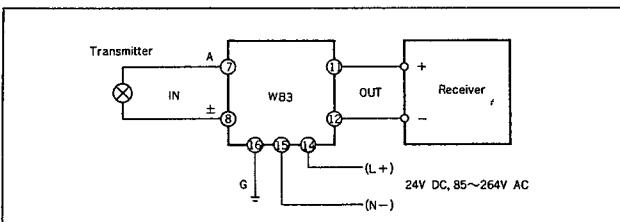
WB3V (DC Voltage Output)		
Output Signal	Output Resistance	Permissible Load Resistance
0~10mV DC	1Ω max	250kΩ min
0~100mV DC		2kΩ min
0~1V DC		10kΩ min
0~10V DC		2kΩ min
0~5V DC		2kΩ min
1~5V DC		10kΩ min
-10~+10V DC		250kΩ min
Others where V <sub>100</sub> ≤100mV	100Ω max	10kΩ min

V<sub>100</sub> : 100% output voltage

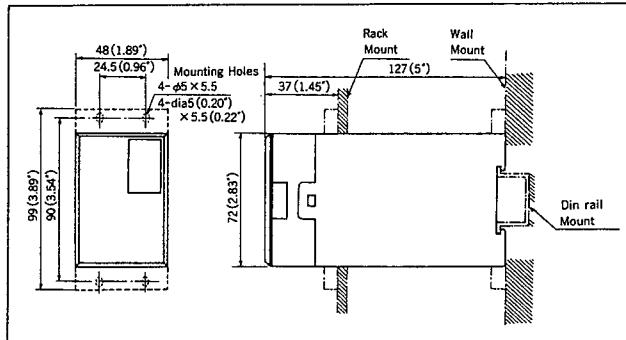
DUAL OUTPUT SPECIFICATIONS		
Model	1st Output (selectable)	2nd Output
WB3A	4~20mA DC 2~10mA DC 1~5mA DC 0~20mA DC 0~16mA DC 0~10mA DC 0~1mA DC	1~5V DC
WB3V	0~10mV DC 0~100mV DC 0~1V DC 0~10V DC 0~5V DC 1~5V DC -10~+10V DC	1~5V DC

The JUXTA W Series allows dual output.  
Enter/DO after the model code when ordering.

### WIRING DIAGRAM



### EXTERNAL DIMENSION



Subject to change without notice for grade up quality and performance