

General

Specifications

AC Voltage Transmitter (R.M.S.)

1. GENERAL

- This signal conditioner converts AC voltage signals to current or voltage signals.
- AC/DC conversion is made by root mean square.

2. SPECIFICATIONS

IO Specifications	
Input signal	0~150V AC 0.1 ≤ V ₁₀₀ ≤ 150V AC
Input resistance	Approx. 1MΩ
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 85~264V AC or 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 (WG3A-1), 60mA (WG3V-1)
Power dissipation	100V AC 7VA (WG3A-2), 6VA (WG3V-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

WG3 -1 - * B

TYPE NO. _____

OUTPUT SPECIFICATION _____

A: Current

V: Voltage

Input signals _____

1: AC voltage signals

Input signal range:

$0.1 \leq V_{100} \leq 150V$ AC, where V_{100} =100% input voltage

Input frequency range:

$40 \leq F_{100} \leq 1000Hz$, where F_{100} =100% input frequency

OUTPUT SIGNAL _____

WG3A

A: 4~20mA DC

B: 2~10mA DC

C: 1~5mA DC

D: 0~20mA DC

E: 0~16mA DC

F: 0~10mA DC

G: 0~1mA DC

Z: (custom) current signal
(24mA max)

WG3V

1: 0~10mV DC

2: 0~100mV DC

3: 0~1V DC

4: 0~10V DC

5: 0~5V DC

6: 1~5V DC

7: -10~+10V DC

0: (custom) voltage signal
(±10V max)

POWER SUPPLY _____

1: 24V DC±10% 2: 85~264V AC

DUAL OUTPUT SPECIFICATIONS

Model	1st Output (selectable)	2nd Output
WG3A	4~20mA DC 2~10mA DC 1~5mA DC 0~20mA DC 0~16mA DC 0~10mA DC 0~1mA DC	1~5V DC
WG3V	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.

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

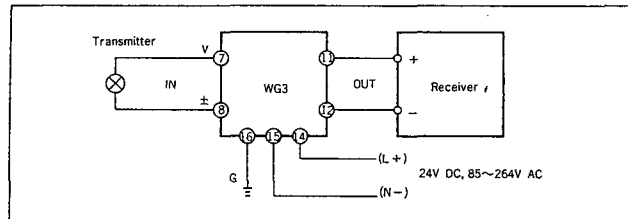
WG3A (DC Current Output)		
Output Signal	Output Resistance	Permissible Load Resistance
4~20mA DC	5MΩ min	0~750Ω
2~10mA DC		0~1500Ω
1~5mA DC		0~3000Ω
0~20mA DC		0~750Ω
0~16mA DC		0~900Ω
0~10mA DC		0~1500Ω
0~1mA DC		0~15kΩ
Others where $I_{100}=24mA$ max		

I_{100} : 100% output current

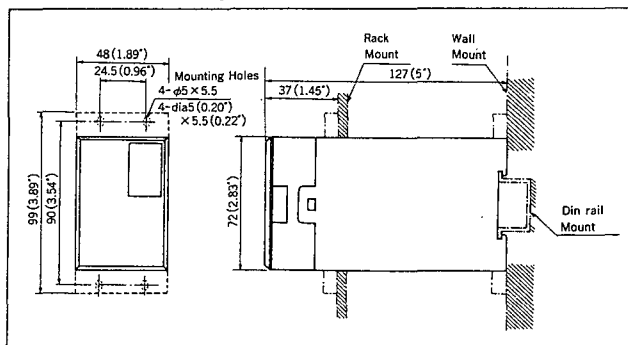
WG3V (DC Voltage Output)		
Output Signal	Output Resistance	Permissible Load Resistance
0~10mV DC	100Ω max	250kΩ min
0~100mV DC		2kΩ min
0~1V DC	1Ω max	10kΩ min
0~10V DC		2kΩ min
0~5V DC		2kΩ min
1~5V DC		10kΩ min
-10~+10V DC		10kΩ min
Others where $V_{100}=10V$ max	$V_{100} \leq 100mV$	100Ω max
	$V_{100} > 100mV$	1Ω max

V_{100} : 100% output voltage

WIRING DIAGRAM



EXTERNAL DIMENSION



Subject to change without notice for grade up quality and performance