

JUXTA F Series

General Specifications

Model : FG3A/V

JUXTA

AC Voltage Transmitter (R.M.S.)

1. GENERAL

This instrument 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~V ₁₀₀ V AC (V ₁₀₀ =100% input voltage) 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, input~power supply and output~power supply
Voltage withstand	1500V AC/minute between input~output, input~power supply 500V AC/minute between output~power supply
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	24V DC ±10% (ripple : 10% P-P max)
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 (FG3A), 60mA (FG3V)
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 24 x 127 mm (h x w x d)
Weight	130g
Accessories	
Tag number label : x 1	
Mounting blocks: x2	M4 mounting screws: x2

FG3□-1□*B

TYPE NO.

OUTPUT SPECIFICATION

A: Current

V: Voltage

Input signals

1: AC voltage signals

OUTPUT SIGNAL

FG3A

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)

FG3V

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

24V DC±10%

OUTPUT RESISTANCE AND PERMISSIBLE LOAD RESISTANCE

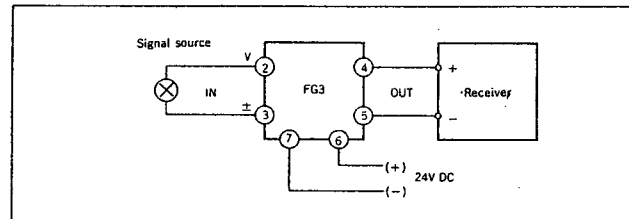
FG3A (DC Current Output)		
Output Signal	Output Resistance	Permissible Load Resistance
4~20mA DC	5MΩ min	0~750Ω
2~10mA DC		0~1500Ω
1~5mA DC		0~3000Ω
0~20mA DC		0~750Ω
0~16mA DC		0~900Ω
0~10mA DC		0~1500Ω
0~1mA DC		0~15kΩ
Others where I ₁₀₀ =24mA max		(15/I ₁₀₀)Ω max

I₁₀₀ : 100% output current

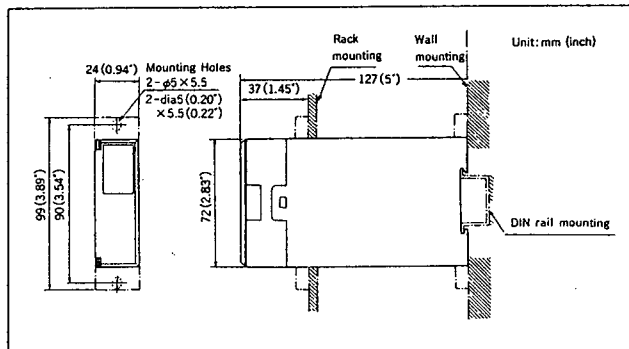
FG3V (DC Voltage Output)		
Output Signal	Output Resistance	Permissible Load Resistance
0~10mV DC	100Ω max	250kΩ min
0~100mV DC		250kΩ min
0~1V DC	1Ω max	2kΩ min
0~10V DC		10kΩ min
0~5V DC		2kΩ min
1~5V DC		2kΩ min
-10~+10V DC		10kΩ min
Others where V ₁₀₀ ≤100mV	100Ω max	250kΩ min
V ₁₀₀ =24mA max V ₁₀₀ >100mV	1Ω max	10kΩ min

V₁₀₀ : 100% output voltage

WIRING DIAGRAM



EXTERNAL DIMENSION



Subject to change without notice for grade up quality and performance