

# JUXTA F Series

## General Specifications

Model : FB3A/V

JUXTA

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~I100mA AC (I100 = 100% input current) 4≤I100≤1000mA AC
Input resistance	4≤I100<10mA AC (25Ω max) 10≤I100<100mA AC (10Ω max) 100≤I100<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, 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 (FB3A), 60mA (FB3V)
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 : x1	
Mounting blocks: x2	M4 mounting screws: x2

FB3-1\*B

TYPE NO.

OUTPUT SPECIFICATION

A: Current

V: Voltage

INPUT SIGNAL

I: AC current signals

OUTPUT SIGNAL

FB3A

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)

FB3V

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

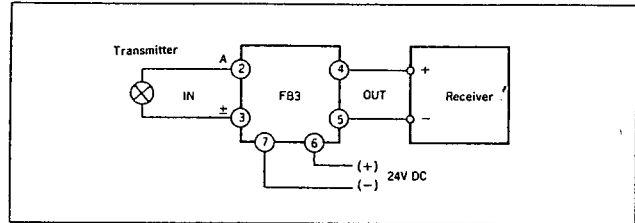
FB3A (DC Current Output)			
Output Signal	Output Resistance	Permissible Load Resistance	
4~20mA DC	5MΩ min	0~750Ω	
2~10mA DC		0~1500Ω	
1~5mA DC		0~3000Ω	
0~20mA DC		0~750Ω	
0~16mA DC		0~900Ω	
0~10mA DC		0~900Ω	
0~1mA DC		0~15kΩ	
Others where I <sub>100</sub> =24mA max			(15/I <sub>100</sub> )Ω max

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

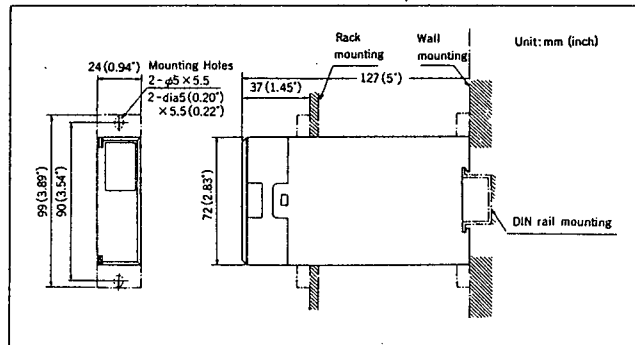
FB3V (DC Voltage Output)			
Output Signal	Output Resistance	Permissible Load Resistance	
0~10mV DC	100Ω max	250kΩ min	
0~100mV DC		250kΩ min	
0~1V DC	1Ω max	2kΩ min	
0~10V DC		10kΩ min	
0~5V DC		2kΩ min	
1~5V DC		2kΩ min	
-10~+10V DC		10kΩ min	
Others where V <sub>100</sub> ≤100mV		100Ω max	250kΩ min
V <sub>100</sub> =24mA max	1Ω max	10kΩ min	

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

WIRING DIAGRAM



EXTERNAL DIMENSION



Subject to change without notice for grade up quality and performance