

JUSTA F Series

General Specifications

Model : FB1A/V

CT Transmitter (R.M.S.)

JUSTA

1. GENERAL

This instrument converts AC current signals from CT output, etc. to current or voltage signals.

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

2. SPECIFICATIONS

IO Specifications	
Input signal	0~1A AC or 0~5A AC
Input loss	0.5VA max
Input frequency	40Hz~10kHz
Permissible over-input	200% (continuous), 500% (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	±0.2% of span
Response speed	150ms 63% response (10~90%)
Insulation resistance	100MΩ min (at 500V DC) between input~output, input~power supply and output~power supply
Voltage withstand	2600V 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 (FB1A), 60mA (FB1V)
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

FB1□-□□*B

TYPE NO. _____

OUTPUT SPECIFICATION _____

A: Current

V: Voltage

INPUT SIGNAL _____

A: 0~1A AC

B: 0~5A AC

Z: Custom AC current signal

(N=5/I, where I:100% input and N is an integer)

OUTPUT SIGNAL _____

FB1A FB1V

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

POWER SUPPLY

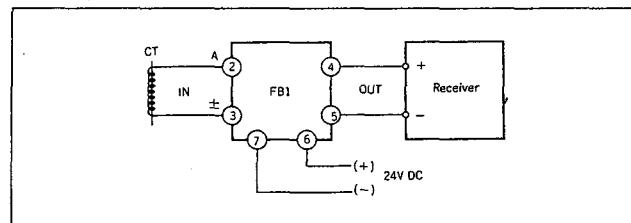
24V DC±10%

OUTPUT RESISTANCE AND PERMISSIBLE LOAD RESISTANCE

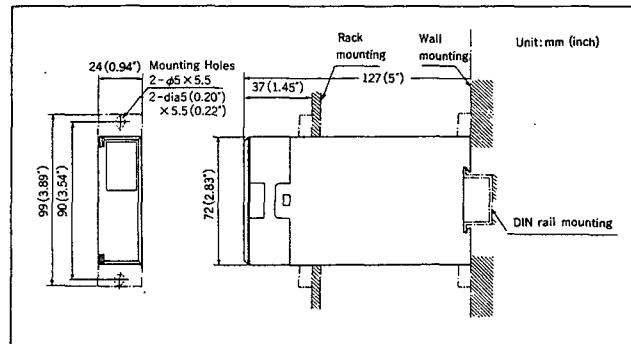
FB1A (DC Current Output)		
Output Signal	Output Resistance	Permissible Load Resistance
4~20mA DC	5MΩ min	0~750Ω
2~10mA DC		0~1500Ω
1~5mA DC		0~3000Ω
0~20mA DC		0~750Ω
0~16mA DC		0~900Ω
0~10mA DC		0~1500Ω
0~1 mA DC		0~15kΩ
Others where $I_{100}=24mA$ max		$(15/I_{100})\Omega$ max

I_{100} : 100% output current

WIRING DIAGRAM



EXTERNAL DIMENSION



FB1V (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		10kΩ min
0~10V DC		2kΩ min
0~5V DC		2kΩ min
1~5V DC		2kΩ min
-10~+10V DC		10kΩ min
Others where $V_{100} \leq 100mV$	100Ω max	$250k\Omega$ min
$V_{100} > 100mV$	1Ω max	10kΩ min

V_{100} : 100% output voltage

Subject to change without notice for grade up quality and performance