JUXTA F Series General Specifications

Model : FHRA/V

Reverse Isolator

JUXTA

1. GENERAL

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

- Input-output relationship is reversed.

2. SPECIFICATIONS

IO Specifications	
Input signal	DC voltage or current signals
Input resistance	1 MΩ for voltage input. 100Ω ~ 1kΩ for current input
Permissible applied voltage	±30V DC max
Input computation function	Eo (output voltage) = 6V-Ei (input voltage)
Output signal	DC current or voltage signal
Zero point adjustment range	±5% of span
Span adjustment range	±5% of span
Standard performance	
Precision rating	±0.1% 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	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 85mA (FHRA), 50mA (FHRV)
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

FHR□-□□*B

TYPE NO.

OUTPUT SPECIFICATION

A: Current
V: Voltage

INPUT SIGNAL

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
H: 10~50mA DC
Z: (custom) current signal (150mA max)

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 (±300V max)

OUTPUT SIGNAL

FHRA
A: 20~4mA DC
B: 10~2mA DC
C: 5~1mA DC
D: 20~0mA DC
E: 16~0mA DC
F: 10~0mA DC
G: 1~0mA DC
Z: (custom) current signal (24mA max)

FHRV
1: 10~0mV DC
2: 100~0mV DC
3: 1~0V DC
4: 10~0V DC
5: 5~0V DC
6: 5~1V DC
7: +10~−10V DC
0: (custom) voltage signal (±10V max)

POWER SUPPLY

24V DC±10%

OUTPUT RESISTANCE AND PERMISSIBLE LOAD RESISTANCE

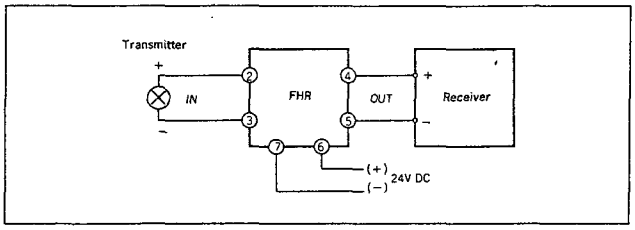
FHRA (DC Current Output)		
Output Signal	**Output Resistance**	**Permissible Load Resistance**
20~4mA DC	5MΩ min	0~750Ω
10~2mA DC		0~1500Ω
5~ 1mA DC		0~3000Ω
20~0mA DC		0~750Ω
16~0mA DC		0~900Ω
10~0mA DC		0~1500Ω
1~ 0mA DC		0~15kΩ
Others where I_{100}=24mA max		(15/I_{100})Ω max

I_{100} : 100% output current

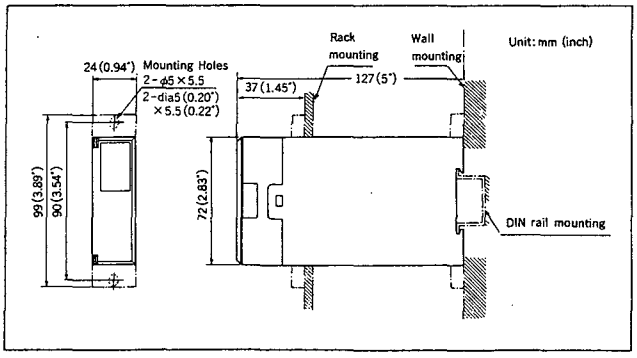
FHRV (DC Voltage Output)			
Output Signal		**Output Resistance**	**Permissible Load Resistance**
10~0mV DC		100Ω max	250kΩ min
100~0mV DC			
1~0V DC		1Ω max	2kΩ min
10~0V DC			10kΩ min
5~0V DC			2kΩ min
5~1V DC			2kΩ min
+10~−10V DC			10kΩ min
Others where V_{100}=24mA max	$V_{100} \leqq 100mV$	100Ω max	250kΩ min
	$V_{100} > 100mV$	1Ω max	10kΩ min

V_{100} : 100% output voltage

WIRING DIAGRAM



EXTERNAL DIMENSION



Subject to change without notice for grade up quality and performance