

General
Specifications

Hi-Speed Isolator

1. GENERAL

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

- Conversion is performed in high speed of 15ms max with 63% response.

2. SPECIFICATIONS

IO Specifications	
Input signal	DC voltage or current signals
Input resistance	1 M Ω for voltage input. 100 Ω - 1k Ω for current input
Permissible applied voltage	\pm 30V DC max
Output signal	DC current or voltage signal
Zero point adjustment range	\pm 3% of span
Span adjustment range	\pm 6% of span
Standard performance	
Precision rating	\pm 0.1% of span
Response speed	15ms 63% response (10~90%)
Insulation resistance	100M Ω 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 \pm 10%
Effect of power supply voltage fluctuation	\pm 0.1% max of span per 85~264V AC or 24V DC \pm 10% fluctuation
Effect of change in ambient temperature	\pm 0.2% max of span per 10°C change in temperature
Current dissipation	24V DC 102mA (WH3A-1), 80mA (WH3V-1)
Power dissipation	100V AC 10VA (WH3A-2), 6VA (WH3V-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

WH3 - - - * B

TYPE NO.

OUTPUT SPECIFICATION

A: Current

V: Voltage

INPUT SIGNAL

- | | |
|----------------------------|----------------------------|
| 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 |
| H: 10~50mA DC | 0: (custom) voltage signal |
| Z: (custom) current signal | (±300V max) |
| (150mA max) | |

OUTPUT SIGNAL

- | | |
|----------------------------|----------------------------|
| WH3A | WH3V |
| 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 | 0: (custom) voltage signal |
| (24mA max) | (±10V max) |

POWER SUPPLY

- 1: 24V DC±10% 2: 85~264V AC

DUAL OUTPUT SPECIFICATIONS

Model	1st Output (selectable)	2nd Output
WH3A	4~20mA DC 2~10mA DC 1~5mA DC 0~20mA DC 0~16mA DC 0~10mA DC 0~1mA DC	1~5V DC
WH3V	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

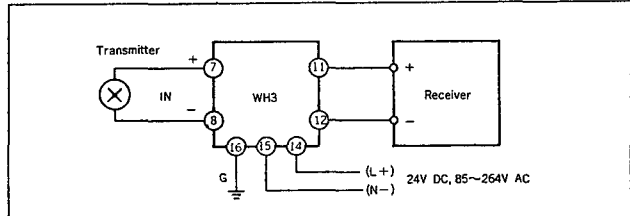
WH3A (DC Current Output)		
Output Signal	Output Resistance	Permissible Load Resistance
4~20mA DC	5MΩ min	0~750Ω
2~10mA DC		0~1500Ω
1~5mA DC		0~3000Ω
0~20mA DC		0~750Ω
0~16mA DC		0~900Ω
0~10mA DC		0~1500Ω
0~1mA DC		0~15kΩ
Others where I ₁₀₀ =24mA max		

I₁₀₀: 100% output current

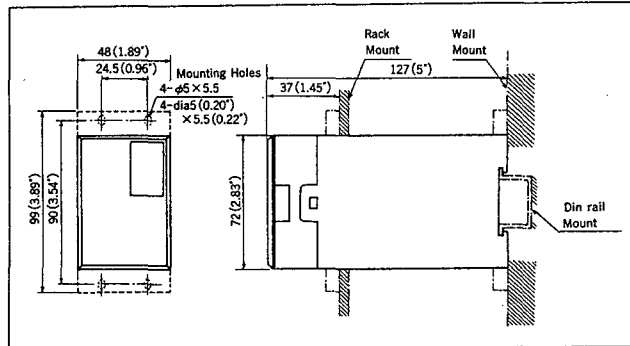
WH3V (DC Voltage Output)			
Output Signal	Output Resistance	Permissible Load Resistance	
0~10mV DC	100Ω max	250kΩ min	
0~100mV DC		250kΩ min	
0~1V DC	1Ω max	2kΩ min	
0~10V DC		10kΩ min	
0~5V DC		2kΩ min	
1~5V DC		2kΩ min	
-10~+10V DC		10kΩ min	
Others where V ₁₀₀ ≤100mV		100Ω max	250kΩ min
V ₁₀₀ =10V 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