

General

Specifications

Voltage Transmitter (non-isolated)

1. GENERAL

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

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 |
| Output signal | DC current or voltage signal |
| Zero point adjustment range | ±3% of span |
| Span adjustment range | ±6% 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~power supply (DC drive) input~output~power supply~ground (AC drive) |
| Voltage withstand | 500V AC/minute between input~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±10% |
| Effect of power supply voltage fluctuation | ±0.1% max of span per 85~264V AC or 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 102mA (WH4A-1), 80mA (WH4V-1) |
| Power dissipation | 100V AC 10VA (WH4A-2), 6VA (WH4V-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 |

WH4 - - * 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

| | |
|----------------------------|----------------------------|
| WH4A | WH4V |
| 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 |
|-------|-------------------------|------------|
| WH4A | 4~20mA DC | 1~5V DC |
| | 2~10mA DC | |
| | 1~5mA DC | |
| | 0~20mA DC | |
| | 0~16mA DC | |
| | 0~10mA DC | |
| | 0~1mA DC | |
| WH4V | 0~10mV DC | 1~5V DC |
| | 0~100mV DC | |
| | 0~1V DC | |
| | 0~10V DC | |
| | 0~5V DC | |
| | 1~5V DC | |
| | -10~+10V 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

| WH4A (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

| WH4V (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 | 1Ω max | 10kΩ min | |
| 0~10V DC | | 2kΩ min | |
| 0~5V DC | | 2kΩ min | |
| 1~5V DC | | 10kΩ 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