

**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**

| <b>IO Specifications</b>                   |  |
|--|--|
| Input signal                               | DC voltage or current signals  |
| Input resistance                           | 1 M $\Omega$ for voltage input. 100 $\Omega$ - 1k $\Omega$ 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   |
| <b>Standard performance</b>                |  |
| Precision rating                           | $\pm$ 0.1% of span   |
| Response speed                             | 15ms 63% response (10~90%)   |
| Insulation resistance                      | 100M $\Omega$ min (at 500V DC) between<br>input-output-power supply (DC drive)<br>input-output-power supply-ground (AC drive)  |
| Voltage withstand                          | 1500V AC/minute between input-output, input-power supply<br>500V AC/minute between output-power supply (DC drive)<br>1500V AC/minute between input-output-power supply-ground (AC drive) |
| Ambient temperature and humidity           | Normal operating condition: 0~50°C, 5~90% RH<br>Operating limit: -10~60°C, 5~95% RH<br>Storage condition: -40~70°C, 5~95% RH<br>(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)  |
| <b>Mountings and dimensions</b>            |  |
| 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  |
| <b>Accessories</b>                         |  |
| 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               | 1~5V DC    |
|       | 2~10mA DC               |            |
|       | 1~5mA DC                |            |
|       | 0~20mA DC               |            |
|       | 0~16mA DC               |            |
|       | 0~10mA DC               |            |
| WH3V  | 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

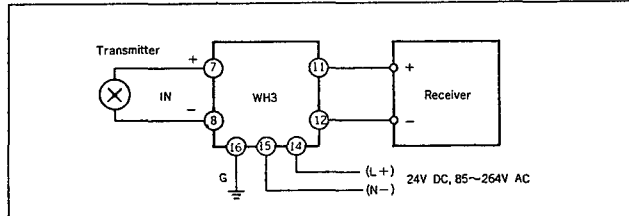
| WH3A (DC Current Output)                |                   |                             |
|---|-------------------|-----------------------------|
| Output Signal                           | Output Resistance | Permissible Load Resistance |
| 4~20mA DC                               | 5MΩ min           | 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 <sub>100</sub> =24mA max |                   |                             |

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

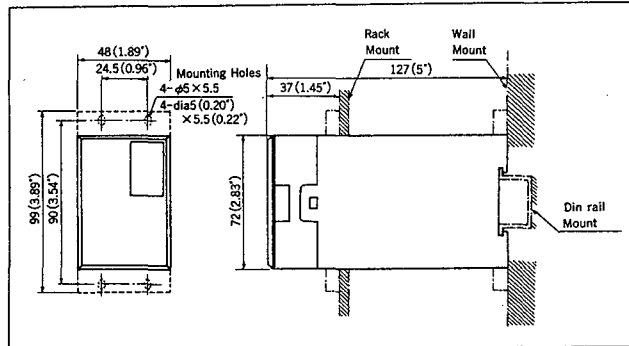
| WH3V (DC Voltage Output)             |                         |                             |           |
|--------------------------------------|-------------------------|-----------------------------|-----------|
| Output Signal                        | Output Resistance       | Permissible Load 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 <sub>100</sub> ≤100mV |                         | 100Ω max                    | 250kΩ min |
| V <sub>100</sub> =10V max            | V <sub>100</sub> >100mV | 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