# JUXTA W Series General Specifications

Model WH2A/V Isolator

JUXTA

## 1. GENERAL

Model WH2A/V Isolator, μP built-in type, converts DC current or voltage signals into various current or voltage signals. Change of input/output ranges, adjustment of zero span and monitoring of input/output can easily be made in the field by handy terminal.

## 2. SPECIFICATIONS

| | |
|---|---|
| **Input & Output** | |
| Input signal | DC voltage or current signal See Table 1 |
| Input resistance | [current input] 100Ω See Table 1<br>[voltage input] 1MΩ (when power on), 100KΩ (when power off) |
| Permissible applied input | See Table 1 |
| Output signal | DC voltage or current signal See Table 2 |
| Zero point adjust range | ±1% of span (input adjust), ±10% of span (output correction) |
| Span adjust range | ±1% of span (input adjust) ±10% of span (output correction) |
| **Standard Performance** | |
| Accuracy rating | ±0.1% of span |
| Response speed | 150ms 63% response (10~90%) |
| Insulation resistance | More than 100MΩ (at 500V DC) between input~output~power supply mutually |
| Withstand voltage | 1500V AC/1 minute between input~output, input~power supply<br>500V AC/1 minute between output~power source (DC Drive)<br>1500V AC/1 minute between input~output~power supply~ground mutually (AC Drive) |
| Ambient temperature & humidity | Normal operating condition: 0~50°C, 5~90%RH<br>Operating limit: -10~60°C, 5~95%RH<br>Storing condition: -40~70°C, 5~95%RH (no condensation) |
| Power supply voltage | 85~264V AC, 47~63Hz, 24V DC±10% |
| Effect of power source voltage fluctuation | Less than ±0.1% of span per fluctuation of 85~264V AC or 24V DC±10% |
| Effect of ambient temperature change | Less than ±0.2% of span per change of 10°C |
| Current dissipation | 24V DC 92mA(WH2A-1), 60mA(WH2V-1) |
| Power dissipation | 100V AC 11VA(WH2A-2), 7.5VA(WH2V-2) |
| **Mounting & Dimension** | |
| Material | ABS plastic case |
| Boards | Both sides glass-epoxy |
| Mounting method | Rack, wall or DIN rail |
| Connection method | M4-screw terminals |
| External dimension | 72x48x127mm (HxWxD) |
| Weight | 200g(DC Drive) 300g(AC Drive) |
| **Accessories** | |
| Tag number label ... 1<br>Mounting block ..... 2 | Range label ... 1<br>M4 mounting screw ...2 |

WH2□−□□−□＊A

Type

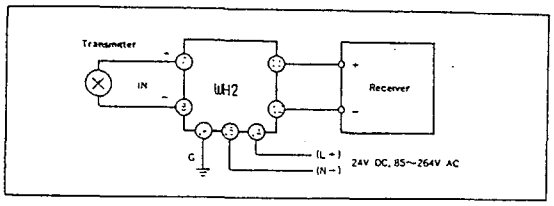
Output Specfications
A: Current
V: Voltage

Input Signal (See Table 1 for setting range)
A: 0～50mA DC
B: 0～10mA DC
Z: (CUSTOM) Current Signal
1: −10～+10V DC
2: −1 ～+1V DC
0: (CUSTOM) Voltage Signal

Output Signal (See Table 2 for setting range)
[WH2A]
A: 0～20mA DC
B: 0～5mA DC
[WH2V]
1: 0～10V DC
2: 0～100mV DC
0: (CUSTOM) Voltage Signal

Power Supply
1: 24V DC±10%
2: 85～264V AC 47～63Hz

WIRING DIAGRAM




EXTERNAL DIMENSION

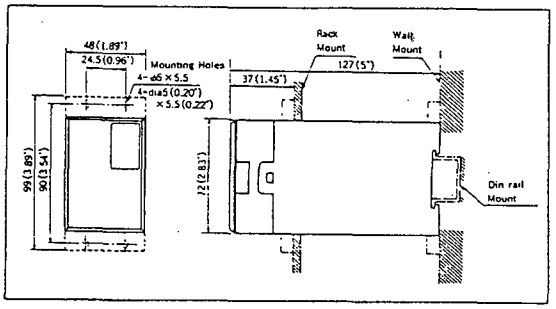



TABLE 1

| Input Type | Input Range Setting | Permissible Applied Input | Input Resistance |
|---|---|---|---|
| 1 | -10～+10V DC, Span 1V min., Elevation -50～50% | ±15V | 1MΩ (when power on) 100KΩ (when power off) |
| 2 | -1～+ 1V DC, Span 0.1V min., Elevation -50～50% | ±15V | |
| 0 | -30～+30V DC, Span 3V min., Elevation -50～50% | ±50V | |
| A | 0～50mA DC, Span 10mA min., Elevation 0～50% | 70mA | 100Ω |
| B | 0～10mA DC, Span 1mA min., Elevation 0～50% | 70mA | 100Ω |
| Z | 0～5mA DC, Elevation 0～50%<br>Span should be $R_i$ x Is ≧ 1(V)<br>100% point should be $R_i$ x $I_{100}$ ≦ 10 (V) | Current 1(mA) when $R_i$ x$I^2$ ≦ 0.5(W) | Specify by customer (satisfy conditions mentioned left) |

$R_i$ : Input resistance Is : Input current span I : Permissible maximum input current
$I_{100}$ : 100% input current

TABLE 2

| Output Type | Output Range Setting | Output Resistance | Permissible Load Resistance |
|---|---|---|---|
| 1 | 0～10V DC, Span 1V min., Elevation 0～50%<br>where accuracy limit exsists in span less than 2V | 1Ω maximum | 10KΩ minimum |
| 2 | 0～100mV DC, Span 10mV min., Elevation 0～50%<br>where accuracy limit exsists in span less than 20mV | 100Ω maximum | 250KΩ minimum |
| 0 | *manufacture available range<br>-10～ +10V DC, Span 10mV min., Elevation -50～50% | 1Ω or 100Ω maximum | 10KΩ or 250KΩ minimum |
| A | 0～5mA DC, Span 1mA min., Elevation 0～50%<br>where accuracy limit exsists in span less than 2mA | 500KΩ mimimum | (15/$OUT_{100}$)Ω max. |
| B | 0～20mA DC, Span 4mA min., Elevation 0～50%<br>where accuracy limit exsists in span less than 8mA | | |

Subject to change without notice for grade up quality and performance