

# JUSTA W Series

## General Specifications

Model WH2A/V  
Isolator

JUSTA

### 1. GENERAL

Model WH2A/V Isolator,  $\mu$ P 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<br>[voltage input] 1MΩ (when power on), 100KΩ (when power off)   | See Table 1 |
| Permissible applied input                  | See Table 1   |             |
| Output signal                              | DC voltage or current signal  | See Table 2 |
| Zero point adjust range                    | $\pm 1\%$ of span (input adjust), $\pm 10\%$ of span (output correction)  |             |
| Span adjust range                          | $\pm 1\%$ of span (input adjust) $\pm 10\%$ of span (output correction)   |             |
| Standard Performance                       |   |             |
| Accuracy rating                            | $\pm 0.1\%$ 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 $\pm 10\%$  |             |
| Effect of power source voltage fluctuation | Less than $\pm 0.1\%$ of span per fluctuation of 85~264V AC or 24V DC $\pm 10\%$  |             |
| Effect of ambient temperature change       | Less than $\pm 0.2\%$ 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 (HxDxW)   |             |
| Weight                                     | 200g(DC Drive)    300g(AC Drive)  |             |
| Accessories                                |   |             |
| Tag number label ... 1                     | Range label ... 1   |             |
| Mounting block .... 2                      | M4 mounting screw ...2  |             |

WH 2 □—□□—□ \* A

Type \_\_\_\_\_

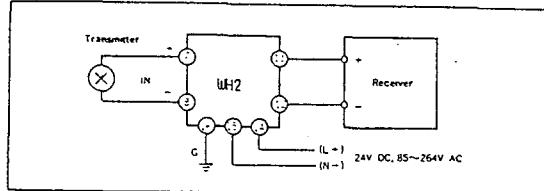
Output Specifications \_\_\_\_\_  
A: Current  
V: Voltage

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

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

Power Supply  
1: 24V DC ± 10%  
2: 8.5~26.4V AC 47~63Hz

#### WIRING DIAGRAM



#### EXTERNAL DIMENSION

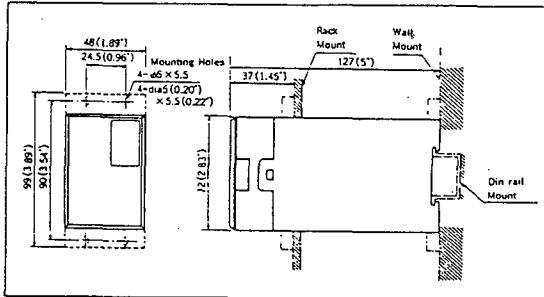


TABLE 1

| Input Type | Input Range Setting  | Permissible Applied Input                                 | Input Resistance   |
|------------|--|---|--|
| 1          | -10~+10V DC, Span 1V min., Elevation -50~50%   | ±15V  |  |
| 2          | -1~+1V DC, Span 0.1V min., Elevation -50~50%   | ±15V  | 1MΩ (when power on)<br>100KΩ (when power off)              |
| 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 $R_s \times I_s \geq 1(V)$<br>100% point should be $R_s \times I_{s,0} \leq 10(V)$ | Current $I_s$ (mA) when<br>$R_s \times I_s^2 \leq 0.5(W)$ | Specify by customer<br>(satisfy conditions mentioned left) |

$R_s$  : Input resistance     $I_s$  : Input current span  
 $I_{s,0}$  : 100% input current

I : Permissible maximum 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 exists in span less than 2V       | 1Ω maximum            | 10KΩ minimum                   |
| 2           | 0~100mV DC, Span 10mV min., Elevation 0~50%<br>where accuracy limit exists 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<br>100Ω maximum | 10KΩ or<br>250KΩ minimum       |
| A           | 0~5mA DC, Span 1mA min., Elevation 0~50%<br>where accuracy limit exists in span less than 2mA     | 500KΩ minimum         | (15/OUT <sub>s,0</sub> )Ω max. |
| B           | 0~20mA DC, Span 4mA min., Elevation 0~50%<br>where accuracy limit exists in span less than 8mA    |                       |                                |

Subject to change without notice for grade up quality and performance