JUXTA W Series General Specification

Model WX1□-DV (Variable software type) Divider

JUXTA

1. GENERAL

This is a variable software type computing unit which accepts two voltage signal inputs from various converters and outputs an isolated DC voltage or current signal after 2-input division are performed.

2. SPECIFICATIONS

Model No.	WX1A-DV, WX1V-DV
Input signal	DC voltage signal: 2 points V_0 to V_{100} correspond to 0 to 100%.
Measuring range	0 to 10 V DC (Measuring span: More than 2 V) (*1)
Input resistance	1 MΩ (At power failure: More than 100 KΩ)
Output signal	4 to 20mA, 2 to 10mA, 1 to 5mA, 0 to 20mA, 0 to 16mA, 0 to 10mA or 0 to 1mA DC 0 to 10mV, 0 to 100mV, 0 to 1V, 0 to 10V, 0 to 5V, 1 to 5V or −10 to +10V DC
Computing equation	$Y = \frac{K3\ (K1 \cdot X1 + A1)}{K2 \cdot X2 + A2} + A3$ Where, Y: Output signal (%) X1 and X2: Input signal (%) K1 to K3: Gain (No unit) (*2) A1 to A3: Bias (%) (*3)
Gain/bias setting range	Gain: ±7.990 and bias: ±799.0% Both correspond to ±799.0%. Determine the ranges so that the computing and the computed values do not exceed ±800.0%.
Basic accuracy	±0.3% of measuring span
Signal insulation	Between any of input signal, output signal, power supply circuits and grounding
Insulation resistance	Between any of input, output and power (DC driven) Between any of input, output, power and grounding (AC driven) 100 MΩ/500 V DC
Dielectric strength	Between input and output/power: 1500 V AC/min. and between output and power: 500 V AC/min. (DC driven) Between any of input, output, power and grounding: 1500 V AC/min. (AC driven)
Power supply voltage	85 to 264 V AC 47 to 63 Hz, or 24 V DC ±10%
Ambient temperature/humidity	0 to 50°C (32 to 122°F) and 5 to 93% relative humidity (No condensation)
Effect of ambient temperature	±0.2% of span for 10°C (50°F) change
Effect of power supply voltage	±0.1% of span for 85 to 264 V AC or 24 V DC ±10% variation
Power consumption	100 V AC, 7.0 VA (voltage output) and 100 V AC, 8.5 VA (current output) 24 V DC, 60 mA (voltage output) and 24 V DC, 82 mA (current output)
Dimensions	72 (2.83") H × 48 (1.89") W × 127 (5.00") D mm (inch)
Weight	Approx. 150 g (DC driven), 280 g (AC driven)
Accessories	Tag number label : 1 sheet Mounting blocks: 2 pcs.

Specify the following when ordering:
(*1) Measuring range from □ to □ V
(*2) Gain K1, K2 and K3 within the range between −7.990 and 7.990
(*3) Biases A1, A2 and A3 within the range between −799.0 and 799.0%

WX1□-□□-□□-□*B

MODEL

SOFTWARE TYPE
1: Variable type

OUTPUT
A: Current
V: Voltage

INPUT SIGNAL
1: Voltage signal
0: Current signal (non standard)

OUTPUT 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 DC	7: −10~+10 DC
Z: Specify current. (30mA max.)	0: Specify voltage. (−10V~+10V)

POWER SOURCE
1: 24V DC ±10%
2: 85~264V AC

Ordering Information

Measuring Range of Input	
Voltage input signal: 2V min. Span for 0~10V DC Current input signal (input resist: 250Ω): (250Ω) x (Input current) shall be within the measuring span of voltage input signal.	
	Recommended Range
Current signal	4~20mA DC 2~10mA DC 0~20mA DC 0~16mA DC 0~10mA DC
Voltage signal	0~10V DC 0~ 5V DC 1~ 5V DC

(Note) Change of input between voltage and current is impossible by Handy Terminal.

OUTPUT RESISTANCE AND LOAD RESISTANCE

Output Signal	Load Resistance	Output Impedance
4 to 20mA DC	0 to 750Ω	5MΩ or more
2 to 10mA DC	0 to 1500Ω	
1 to 5mA DC	0 to 3000Ω	
0 to 20mA DC	0 to 750Ω	
0 to 16mA DC	0 to 900Ω	
0 to 10mA DC	0 to 1500Ω	
0 to 1mA DC	0 to 15kΩ	

Output Signal	Load Resistance	Output Impedance
0 to 10mV DC	100kΩ or more	100Ω or less
0 to 100mV DC		
0 to 1V DC	2kΩ or more	1Ω or less
0 to 5V DC		
1 to 5V DC		
0 to 10V DC	10kΩ or more	
−10 to +10V DC		