## 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 temperature compensation is performed.

## 2. SPECIFICATIONS

Model No.	WX1A-TR, WX1V-TR		
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	$Y = \frac{K1 \cdot X1}{\sqrt{K2 \cdot X2 + A2}}$ Where, Y: Flow output signal already compensated (%) X1: Flow input signal not yet compensated (%) (*2) X2: Temperature input signal (%) K1: Gain (No unit) (*3) K2: Gain (No unit) (*4) A2: Bias (%) (*5)		
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:

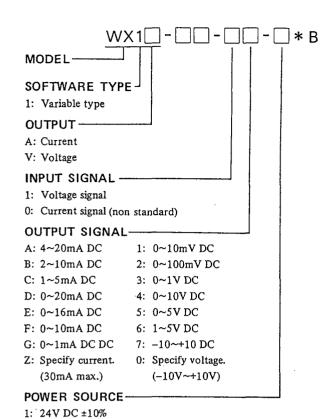
(\*1) Measuring range from  $\square$  to  $\square$  V

(\*2) Square root extraction of uncompensated flow input

(\*3) Gain K1 within the range between -7.990 and 7.990 (\*4) Gain K2 within the range between -7.990 and 7.990

(\*5) Bias A2 within the range between -799.0 and 799.0%





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

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

## OUTPUT RESISTANCE AND LOAD RESISTANCE

2: 85~264V AC

Output Signal	Load Resistance	Output Impedance
4 to 20mA DC	0 to 750Ω	
2 to 10mA DC	0 to 1500Ω	
1 to 5mA DC	0 to 3000Ω	
0 to 20mA DC	0 to 750Ω	5MΩ or more
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		1Ω or less
0 to 5V DC	2kΩ or more	
1 to 5V DC		
0 to 10V DC		
-10 to +10V DC	10kΩ or more	