DEVIATION ALARM SETTER

SDDV - 105 - LCD TYPE

Use

A compact plug-in setter for instrumentation. The device inputs two DC signals, calculates deviation between inputs and deviation of each input, compares the results with preset signal, then outputs the over-and-short. Because the device is software compatible, besides full scale of input can be set at will in accordance with process quantity, each setting value (operation value, moving average constant, contact delay, etc) can be set and changed freely as well. Also, input (actual scale) and each setting value can be displayed by a LCD (with back light) in 4 digits.



SDDV-105 (80 × 50 × 133mm/380g)

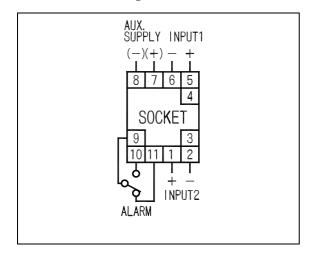
Features

- 1. Setting accuracy $\pm 0.5\%$
- 2. Indication accuracy $\pm 0.5\% \pm 1$ digit.
- 3. Withstand voltage between input/output/power source/outer case is AC2, 000V.
- 4. Display and setting of actual scale by LCD can be done freely with front SW button, also suitable for scaling change and so on.
- 5. Setting values are stored in a nonvolatile RAM and are free from the affection of a power failure.
- 6. By sufficient derating of parts used and reduction of internal heat generation, liability is improved.
- 7. Back light turns on during key operation. It turns off automatically 30 sec. after key operation finished.

Specification

Input (input resistance)	Auxiliary supply	
A4 : DC0-100mV (approx.1M) C3 : DC0-1mA (approx.100) A5 : DC0-1V (approx.1M) C4 : DC0-5mA (approx.100) A6 : DC0-5V (approx.1M) C5 : DC0-10mA (approx.100) A7 : DC0-10V (approx.1M) C6 : DC0-16mA (approx.100) A8 : DC1-5V (approx.1M) C7 : DC4-20mA (approx.100) O0 : other than those above	1: AC100V(±15%), 50/60Hz 2: AC110V(±15%), 50/60Hz 5: DC24V(±15%) 6: DC48V(±15%) 7: DC110V(+30%, -20%) 8: DC100V(+43%, -12%) 0: other than those above (AC200/220V is not manufacturable.)	
Input product range : Voltage input: DC50mV-60V Current input : DC100 \mu A-100mA	VA consumption: AC power source 4.5 VA DC power source 4.5 W	

Connection diagram



UR-1 precise resistance unit (Selling separately)

Use UR-1 combined with an alarm setter of voltage input. When changing the alarm setter in a hot line state at the time of current input, if measures against open are necessary, connect UR-1 to socket and convert it into a voltage signal before using it.

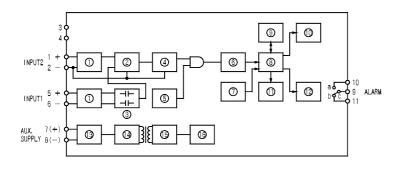
(UR-1, resistance specified)

Factory preset

Product is shipped in the following setting if nothing was specified.

Item		Setting range	Factory preset		
Measurement display (display against 0.0-100.0% of input span)	Reference i	nput	-9999-9999 -99.9-999.9 -9.99-99.99	0.0-100.0	
	Measureme	ent input	0.000-9.999 (decimal point can be set at will)	0.0 100.0	
Display of deviation between inputs (Reference input - measurement input)		by setting of measurement display	0.0-100.0		
Unit display		m, Tpm	m		
Deviation action value between inputs (moving average detection, actual scale)		4% against full scale of measurement actual scale. (can not be set to be less than 4%)	10.0		
Deviation action value of individual input (instantaneous detection, actual scale)			30.0		
Dead band (% against input span) At the time of deviation between inputs		0.5-50%	3.0%		
Output mode		Excitation/ non-excitation	Excitation		
Contact delay At the	elay At the time of deviation between input		0-30S	1S	
(C.D.) At the input	At the time of deviation of individual input			1S	
Start delay (S.D.)		1-30S	5S		
Calibration (% against input span) Bias Span		-9.99-9.99%	0.00		
		-9.99-9.99%	0.00		
Sampling time (S)		1-30S	1S		
Number of data sampling (N)		1-8	8		

Block diagram



Input circuit Analog multiflexer Capacitively coupled isolation amplifier

Pulse width modulation

Reference clock Pulse counter

Operating switch

CPU operational circuit

 $Nonvolatile\ RAM \qquad \ LED\ indicator$

 $\begin{array}{ll} LCD \ indicator & Relay \\ Rectification \ smoothing \\ DC/DC \ power \ source \\ \end{array}$

Smoothing

Constant voltage circuit

Purchase specifications

