Digital Setting Meter Relay

SMT

Description

Model SM series are a Potentiometer setting meter relays with dual Hi & Lo setting. The setters are used multi-turns resistive potentiometers as preset buffers which setting able to be read directly in display for switch selection. The input functions of the units are of wide varieties & ranges, including many parameters of industry process and power system as DCV, ACV, DCA, ACA, DC rate, temperature as standard products. For wide application, with some external transducers, the series can be extended to a wider field application as watt, var, power factor & etc.

Features

- ◎ Multi-turns Potentiometer setting
- ◎ Dual Hi & Lo setting
- ◎ Wide input parameters & ranges
- ◎ Output with adjustable time delayer
- ◎ 4 digits up to 9999 counts

The unit provides four digits display up to 9999 counts with find resolution & the displays are of high rate-super bringhtness LED, 0.56" size.

Dual control outputs compliant Hi & Lo setting of SPDT relay contacts of an on-off control type. The outputs also comply delaying function adjusted 0-30 seconds standardly & longer requirement for 0-60 or 0-120 secs based on specified request. Dead band also an option availably is selectively & alternatively to time delayer.

Special design in meter front of an open-door type, it keeps convenience in presetting & protects setting to avoid undesired misschange in field application.

Specification

Accuracy	0.25% fs ± 0.5℃ for temperature related input (cjc. error included)
Stability	Temperatue < 100 ppm per ℃, 5-50℃
	Long term stability < 0.15% draft per year
Input burden	≧1 Megaohms
Display	4 digits maximum 9999 counts, 0.56" super rate LED
Setting	(1) Hi & Lo set standard, Hi-Hi set optional
	(2) Hi comparator setting < meter input output relay energied
	(3) Lo comparator setting > meter input output relay energied
	(4) multi-turns potentiometer for each setting
	(5) switchable display range for S1, S2 & M (input measured)
Response time	Analog conversion < 1 sec of average integration typically
	Analog to Digital conversion 2 sample rate per second
Input over capability	Maximum for 100V rms or 2 x full input which ever great
Control output	(1) on-off control type
	(2) relay contact output of spdt type for each setting
	(3) capacity AC250V / 2A, AC125V / 3A, DC24V / 3A
	(4) time delayer adjustable 0-30 sec. typically, 0-60, 0-120 sec. for option
	(5) dead band for option alternatively & availably to time delayer
	(6) output indication : led lamp energied in front panel
Comm. mode voltage	2KV rms 50/60 Hz 1 minute
Impulse voltage	4KV 1.2 x 50 us common mode test
Operation condition	Temperature 0-50℃, 20-90% RH non-condensed
Storage condition	Temperature -10~70℃
Power supply	Standard AC 110/220V 50 / 60HZ ± 15%, < 5VA
	Option DC 12V / 24V / 48V / 125V, <6 Watts

Order information

Order form of Temperature

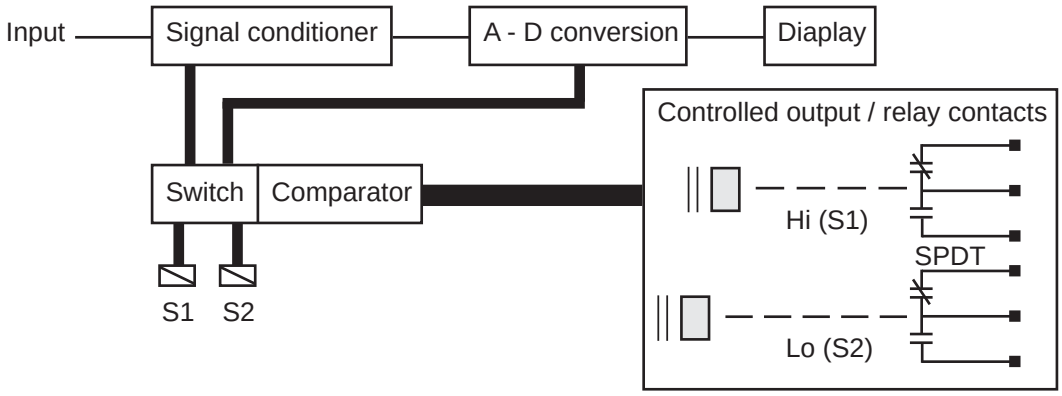
SMT — U — Tn — Pn

Sensor Input range		Tn	Input range	Tn	Auxiliary power	Pn
Thermocouple						
J	0 - 700.0 C	JC	0 - 1000.0 F	JF	AC110/220V	S
K	0 - 1000.0 C	KC	0 - 2200 F	KF	DC12V	1
E	0 - 800.0 C	EC	0 - 1400 F	EF	DC24V	2
T	0 - 400.0 C	TC	0 - 750.0 F	TF	DC48V	3
N	0 - 1000.0 C	NC	0 - 2200 F	NF	DC125V	4
R	300 - 1600 C	RC	600 - 3000 F	CF		
S	300 - 1700 C	SC	600 - 3200 F	SF		
B	500 - 1700 C	BC	900 - 3200 F	BF		
RTD						
PT 100	0 - 400.0 C	PC	0 - 750.0 F	PF		
customer specified		Y				

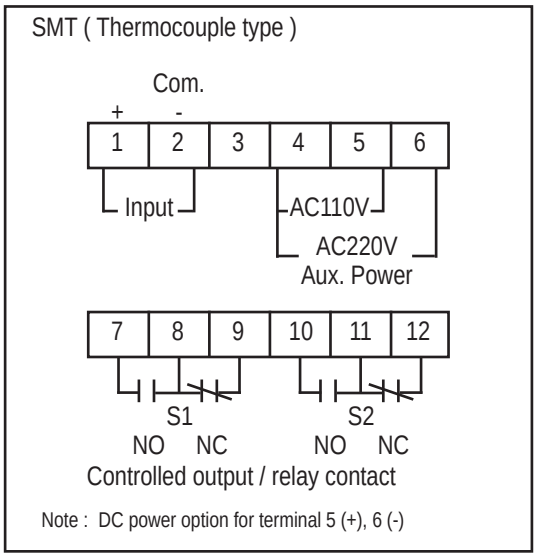
Operation

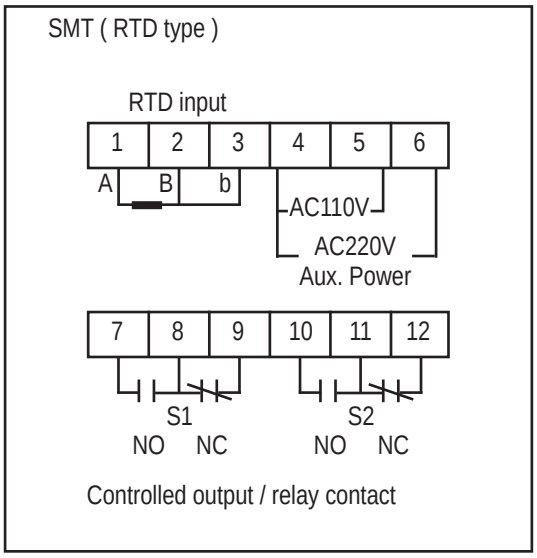
Setting function

Function	Measured status	Output status	Lead indicator
Hi - set	The measured input > setting	Controlled output relay energied	S1 on
Lo - set	The measured input < setting	Controlled output relay energied	S2 on



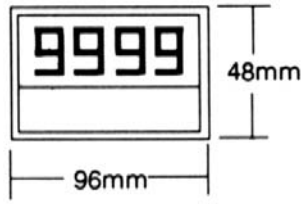
Terminal connection

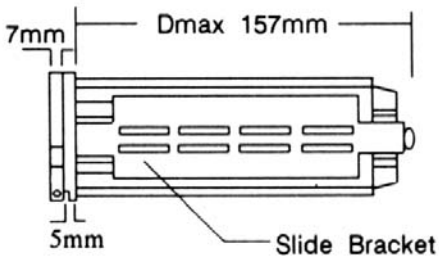


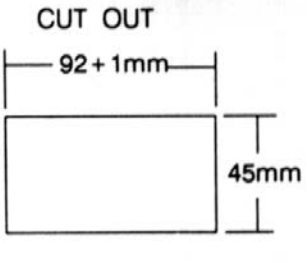


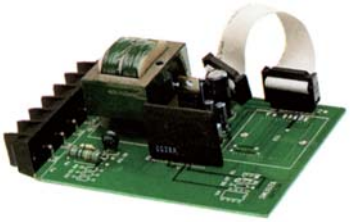
Dimension

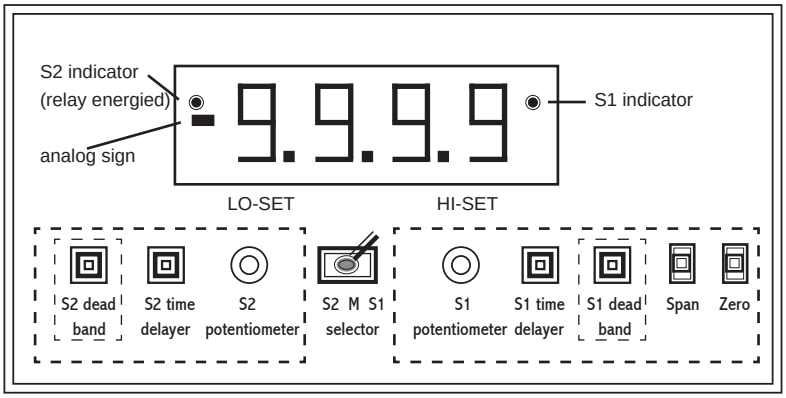
U type











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