

Temperature Control with Alarm output

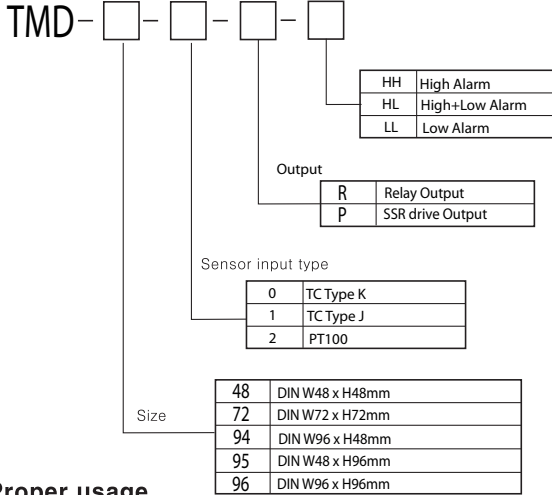
Features

- Alarm
- High accuracy measurement : $\pm F.S \ 1\%$
- Various size
- Temperature control range 0-400°C



⚠ Please read "Caution for your safety" in operation manual before using.

Ordering information



Specifications

Model	TMD-48	TMD-72	TMD-94	TMD-95	TMD-96
Power supply	90-260VAC 50Hz				
Power consumption	3VA				
Display method	7 Segment LED display				
Character size	W6 x H10mm	W7.2 x H9.8mm	W7.2 x H9.8mm	W7.2 x H9.8mm	W9.5 x H14.2mm
Setting type	Button switch setting				
accuracy	F.S $\pm 1\%$				
Sensor input	Thermocouple : K,J,R,T,N,S,E / RTD:PT100				
Input line resistance	Thermocouple : Max. 100ohm, RTD : Max. 5ohm per wire				
Control	ON/OFF	Hysteresis : Variable F.S 0-3%			
	Proportional	Proportional band : Variable F.S 1-10%, Period : 20 Sec. Fixed			
Alarm	Alarm : Variable F.S 1-10%				
RESET adjuster range	F.S $\pm 3\%$ Variable				
Control output	Relay output : 250VAC 5A / SSR Drive output 12V 3V \pm				
Control alarm	Relay output : 250VAC 3A				
Ambient temperature	-10 to 50°C (at non-freezing status)				
Storage temperature	-20 to 60°C (at non-freezing status)				
Ambient humidity	35 to 85 %RH				
Unit weight	Approx. 320g	Approx. 380g	Approx. 420g	Approx. 420g	Approx. 480g

Proper usage

Using front adjuster



HOLD + 2Sec.
For Lock and Unlock

DOWN UP

PV. adjuster

Up down button for setting previous value.



P.B adjuster Reset adjuster Alarm adjuster

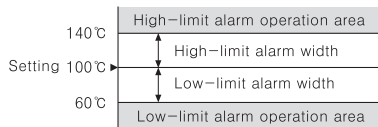
P.B adjuster

In case of ON/OFF control, set variable F.S 0.2 to 3% of hysteresis, and in case of proportional control, set variable F.S 1 to 10% of hysteresis.

Alarm adjuster

It adjusts alarm range (F.S 1 to 10%) and having 1:1 range for upper and lower limited range by set value.

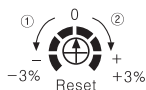
Ex) In case the full scale of temperature controller is 400°C, if setting alarm range is maximum, the value is $400^\circ\text{C} \times 0.1 = 40^\circ\text{C}$. And the alarm range is high-limit 40°C and lower-limit 40°C.



(Note) Full scale (F.S) of the alarm is from 0° up to max. temperature.

Reset adjuster

It corrects offset can be occurred by proportional control and has F.S $\pm 3\%$ of adjustable range.



Do not operate the adjuster when it is used as ON/OFF control.

① Turn left when offset value is higher than set value

② Turn right when offset value is lower than set value

How to select ON/OFF or proportional by plug pin

Factory specification is proportional control. When using ON/OFF control, transfer the switch of control method from P to F after detaching the case from its body. When control output is current output, P control is fixed, there is no switch Pin of control method.



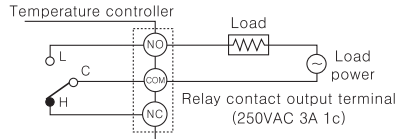
ON/OFF control



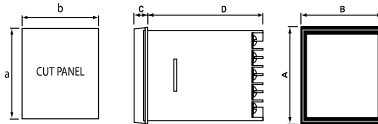
Proportional control

Application of temperature controller and load connection

Relay output



Dimensions



Type	A	B	C	D	a	b
TMD-48	48	48	100	8	45	45
TMD-72	72	72	100	11	68	68
TMD-94	48	96	100	11	45	92
TMD-95	96	48	100	11	92	45
TMD-96	96	96	100	11	92	92

Connections

