# Terminal Type Thermocouple Transducer (AC Power)

# **MODEL TZ-1CA**





## ■ Input Specification

Code No.	Thermo couple	Input signal	For code No.Y	Input resistance	Input allowable range
J0	J	0 to 1000°C	-50 to 1000°C span 200 to 1050°C	More than 1ΜΩ	±150%
JY		Other than the above			
K2	К	-50 to 200°C	-50 to 1200°C span 200 to 1250°C		
K3		0 to 200°C			
K4		-50 to 1200°C			
K5		0 to 1200°C			
KY		Other than the above			
R0	R	0 to 1700°C	0 to 1700°C span 400 to 1700°C		
RY		Other than the above			
S0	S	0 to 1700°C	0 to 1700°C span 500 to 1700°C		
SY		Other than the above			
T0	Т	-50 to 350°C	-50 to 350°C span 200 to 400°C		
T1		0 to 350°C			
TY		Other than the above			

# ■ Output Specification

Code No.	Output signal	Allowable Loadresistance	
0	0 to 5VDC	More than 2kΩ	
1	1 to 5VDC		
2	0 to 10VDC	More than $4k\Omega$ Negative output:more than $10k\Omega$	
3	-10 to 10VDC		
4	-2 to 2VDC	More than 2kΩ Negative output:more than 10kΩ	
5	-2.5 to 2.5VDC		
6	-5 to 5VDC		
7	0 to 4VDC	More than 2kΩ	
Α	4 to 20mADC	Less than 550Ω	
В	0 to 20mADC		
Υ	Othe	r than the above	

#### For code No. Y

Limit of specifications

Voltage output : Less than +15 VDC and more than -12 VDC Minimum span : Less than +27 VDC and more than 0.06 VDC (Road resistance :  $10 k\Omega$  at the output exceeding 10V, and a negative output) (Base accuracy :  $\pm 0.15$  %F.S and temperature characteristic :

±0.03 %F.S/°C for a span of less than 1V)

Current output: Less than +20 mADC and more than 0 mADC Minimum span: Less than +20 mADC and more than 1 mADC Outputs can be reversed for both voltage and current outputs.

#### General Specifications

Base Accuracy: ±0.2 %F.S (25 ±2°C)
Power supply variation: ±0.06 %F.S
Load resistance variation: ±0.06 %F.S
Temperature characteristic: ±0.02 %F.S/°C

Accuracy of cold junction compensation : ±1°C (10 to 30°C)

Disconnection detection : Upside (.135±15%F.S)
Response time : 500msec (0→90%)
Front adjustments : ±5% for zero and span

Insulation resistance : Between input and output/power supply ;

More than  $100M\Omega$  at 500 VDC

Dielectric strength: Between input and output/power supply;

For 1 min. at 2000VAC Power supply voltage: 100 to 240VAC ±10 %

Consuming current: Less than 35 mA (At current output 100VAC)

Less than 30 mA (At voltage output 100VAC) Frequency: 10 to 55Hz; amplitude (half): 0.15mm to

Vibration resistance : Frequency : 10 to 55Hz ; amplitude (half) : 0.15r 10 sweeps of 5min each in X,Y and Z directions

Operating ambient temperature: -5 to 50°C

Operating ambient humidity: Less than 90 %RH (No-condensing)

Storage temperature : -10 to 70°C

Storage humidity: Less than 60%RH (No-condensing)

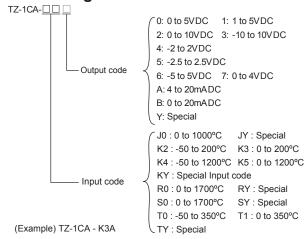
Case material: ABS resin (Black) 94V-2

Weight: Approx. 80g

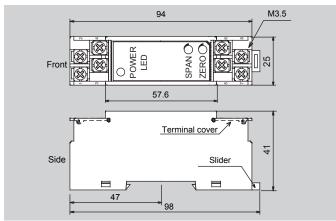
#### ■ Features

- · AC power supply 90 VAC to 240 VAC
- DIN rail mounting
- · Input/Output/Power supply isolated

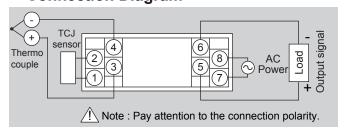
#### Ordering Code



#### Dimensions



### **■** Connection Diagram



# **■** Block Diagram

