

# T3NI/T4YI/T4WI/T3SI/T3HI/T4MI/T4LI

## Indication type only, Various sizes

### ■ Features

- Various size  
W48×H24, W72×H36, W48×H48, W48×H96,  
W72×H72, W96×H96mm
- No output function, Indication only
- High accuracy measuring function  
: F.S. ±0.3% or ±0.5%



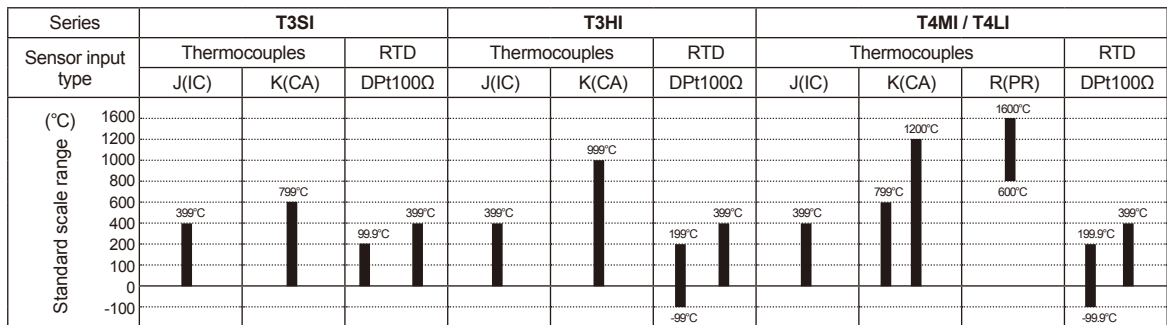
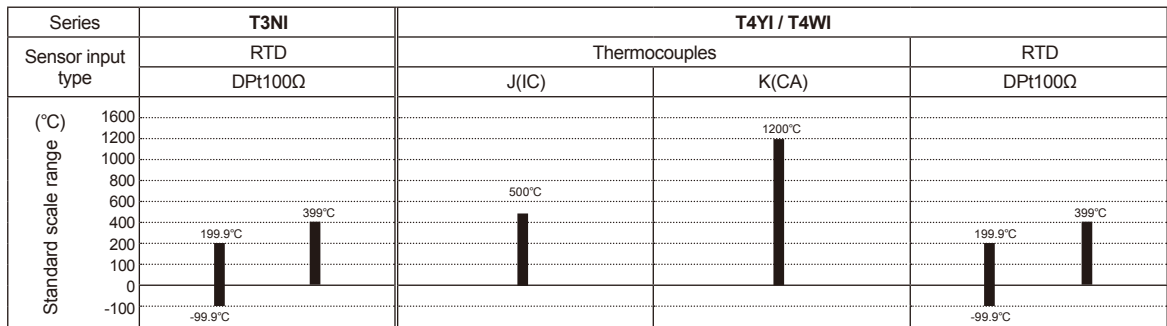
**⚠** Please read "Caution for your safety" in operation manual before using.

### ■ Ordering information

T	3	S	I	-	N	4	N	P	4	C	
Item	Digit	Size	Sub output mode	Control method	Power supply	Control output	Sensor input type	Temperature range	Unit	C	°C
										0	-99 to 199, -99.9 to 199.9, -99.9 to 99.9
										1	0 to 99.9
										2	0 to 199
										4	0 to 399
										5	0 to 500
										8	0 to 799
										A	0 to 999
										C	0 to 1200
										F	600 to 1600
										P	DPt100Ω
										J	J(IC)
										K	K(CA)
										R	R(PR)
N	No output										
X	12-24VDC										
3	110/220VAC 50/60Hz										
4	110-240VAC 50/60Hz										
N	No control function										
I	Indicator Type										
N	DIN W48×H24mm										
Y	DIN W72×H36mm										
W	DIN W96×H48mm										
S	DIN W48×H48mm										
H	DIN W48×H96mm										
M	DIN W72×H72mm										
L	DIN W96×H96mm										
3	999(3digit)										
4	9999(4digit)										
T	Temperature Controller										

※Refer to the H-103 about sensor temperature range for selection.

## Temperature range for each sensor



※In case input sensor is R(PR) type, it is not available to perform correct control under 600°C.

## Specifications

Series	T3NI	T4YI	T4WI	T3SI	T3HI	T4MI	T4LI
Power supply	12-24VDC	100-240VAC 50/60Hz	110-220VAC 50/60Hz	100/240VAC 50/60Hz	110/220VAC 50/60Hz		
Allowable voltage range	90 to 110% of rated voltage						
Power consumption	Max. 2W	Max. 3VA					
Display method	7 Segment(red) LED method						
Character size(W×H)	5.0×8.0mm	9.8×14.2mm		4.0×8.0mm	6.0×10.0mm	7.2×9.8mm	9.5×14.2mm
Display accuracy	F.S. ±0.3% rdg ±1digit	F.S. ±0.5% rdg ±1digit					
Sensor input	DPT100Ω	Thermocouples(T.C): K(CA), J(IC), R(PR) / RTD: DPT100Ω ※There is no R(PR) in T4MI, T4LI Series.					
Input line resistance	Allowable line resistance max. 5Ω per a wire	Thermocouples: Max. 100Ω / RTD: Allowable line resistance max. 5Ω per a wire					
Insulation resistance	Min. 100MΩ(at 500VDC megger)						
Dielectric strength	2,000VAC 50/60Hz for 1 min.						
Noise resistance	±500V	±1kV the square wave noise(pulse width: 1μs) by the noise simulator					
Vibration	Mechanical	0.75mm amplitude at frequency of 10 to 55Hz(for 1 min.) in each of X, Y, Z directions for 1 hour					
	Malfunction	0.5mm amplitude at frequency of 10 to 55Hz(for 1 min.) in each of X, Y, Z directions for 10 min.					
Shock	Mechanical	300m/s <sup>2</sup> (approx. 30G) in each of X, Y, Z directions for 3 times					
	Malfunction	100m/s <sup>2</sup> (approx. 10G) in each of X, Y, Z directions for 3 times					
Environment	Ambient temperature	-10 to 50°C, storage: -25 to 65°C					
	Ambient humidity	35 to 85%RH, storage: 35 to 85%RH					
Unit weight	Approx. 34g	Approx. 170g	Approx. 322g	Approx. 107g	Approx. 368g	Approx. 356g	Approx. 433g

※F.S. is same with sensor measuring temperature range.

Ex) In case of using temperature is from -99.9 to 199.9°C, Full scale is 299.8.

※Environment resistance is rated at no freezing or condensation.

(A)  
Photo  
electric  
sensor

(B)  
Fiber  
optic  
sensor

(C)  
Door/Area  
sensor

(D)  
Proximity  
sensor

(E)  
Pressure  
sensor

(F)  
Rotary  
encoder

(G)  
Connector/  
Socket

(H)  
Temp.  
controller

(I)  
SSR/  
Power  
controller

(J)  
Counter

(K)  
Timer

(L)  
Panel  
meter

(M)  
Tacho/  
Speed/  
Pulse  
meter

(N)  
Display  
unit

(O)  
Sensor  
controller

(P)  
Switching  
mode power  
supply

(Q)  
Stepper  
motor&  
Driver&Controller

(R)  
Graphic/  
Logic  
panel

(S)  
Field  
network  
device

(T)  
Software

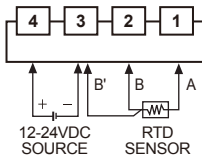
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Other

# T3NI/T4YI/T4WI/T3SI/T3HI/T4MI/T4LI

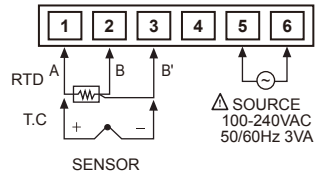
## ■ Connections

※RTD: DPT100Ω(3-wire type) ※Thermocouple: K, J, R

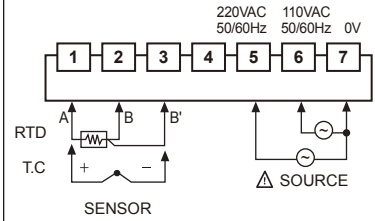
### ● T3NI



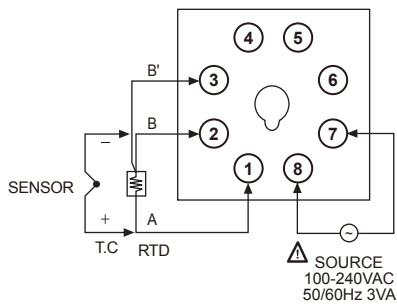
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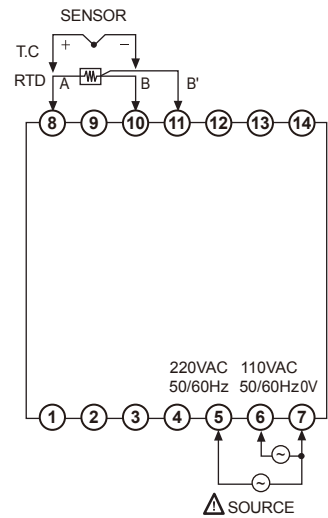
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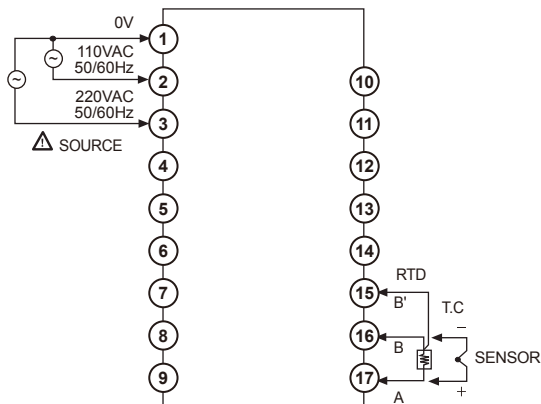
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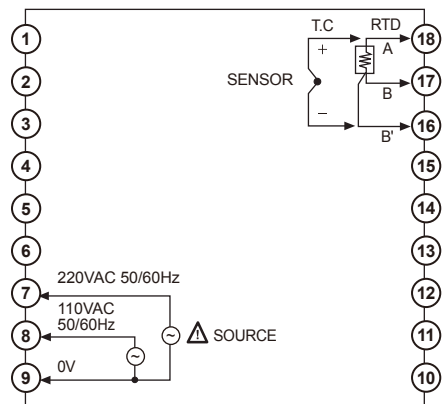
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### ● T3HI



### ● T4LI



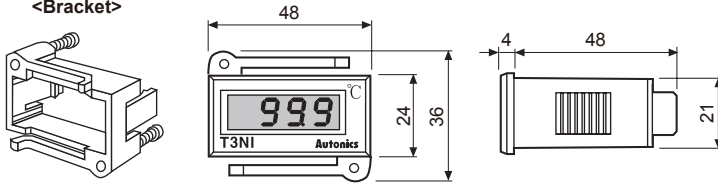
# Indicator type

## ■ Dimensions

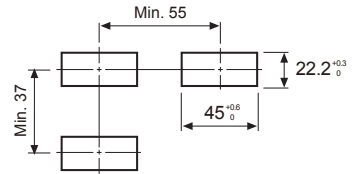
(unit: mm)

### ● T3NI

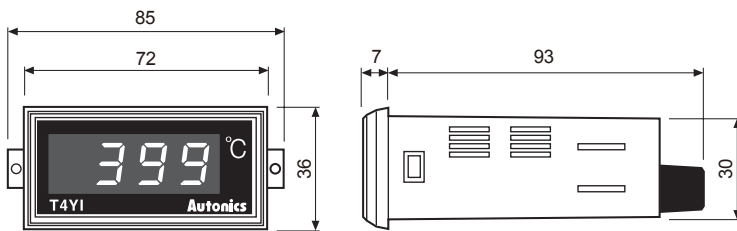
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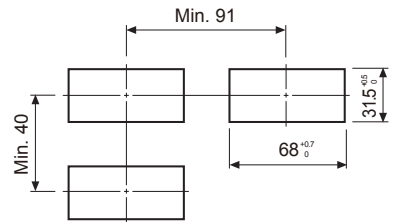
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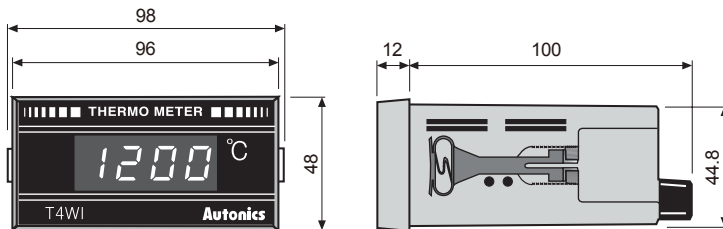
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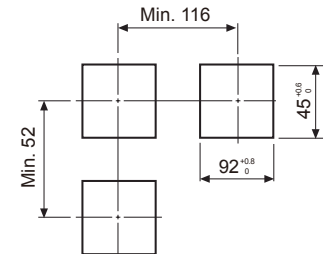
### ●Panel cut-out



### ● T4WI

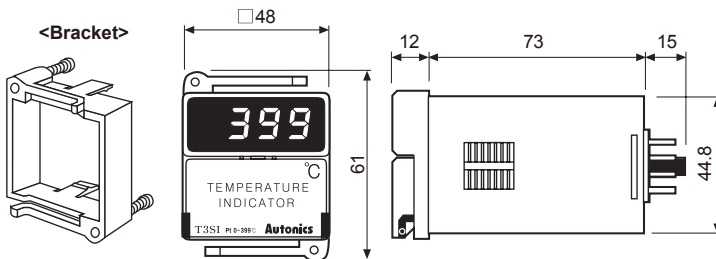


### ●Panel cut-out

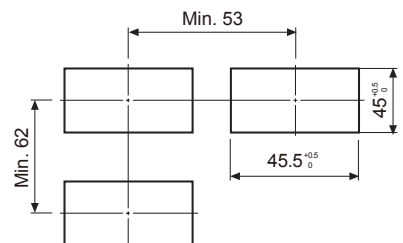


### ● T3SI

<Bracket>



### ●Panel cut-out



(A)  
Photo  
electric  
sensor

(B)  
Fiber  
optic  
sensor

(C)  
Door/Area  
sensor

(D)  
Proximity  
sensor

(E)  
Pressure  
sensor

(F)  
Rotary  
encoder

(G)  
Connector/  
Socket

(H)  
Temp.  
controller

(I)  
SSR/  
Power  
controller

(J)  
Counter

(K)  
Timer

(L)  
Panel  
meter

(M)  
Tacho/  
Speed/  
Pulse  
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(N)  
Display  
unit

(O)  
Sensor  
controller

(P)  
Switching  
mode power  
supply

(Q)  
Stepper  
motor&  
Driver&Controller

(R)  
Graphic/  
Logic  
panel

(S)  
Field  
network  
device

(T)  
Software

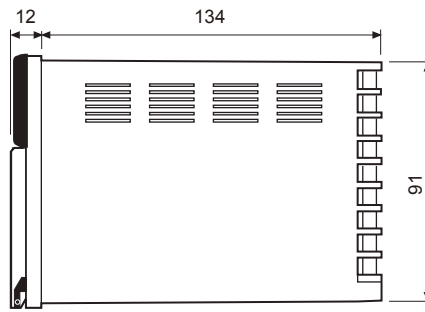
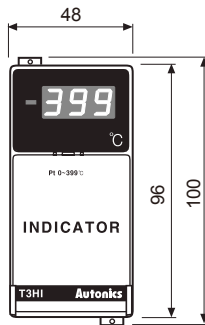
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Other

# T3NI/T4YI/T4WI/T3SI/T3HI/T4MI/T4LI

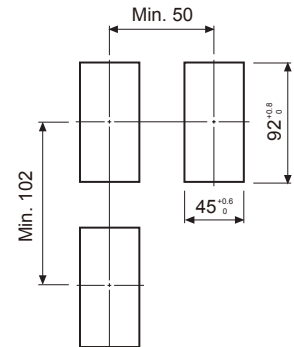
## ■ Dimensions

(unit: mm)

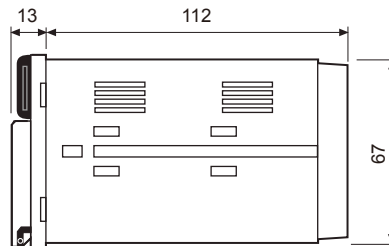
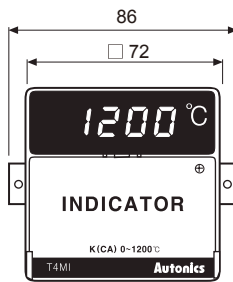
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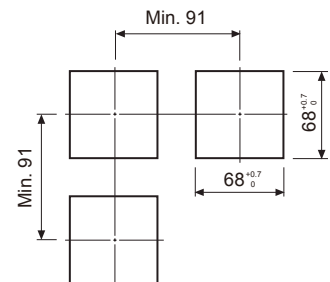
### ● Panel cut-out



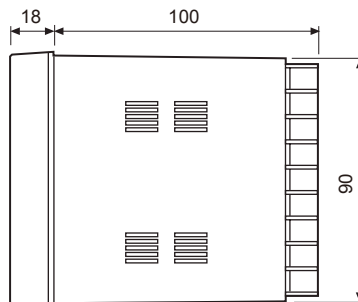
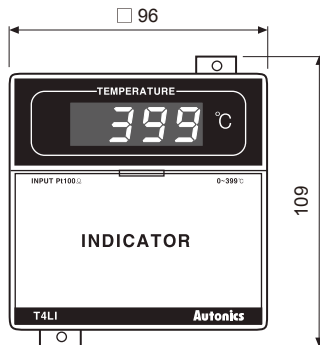
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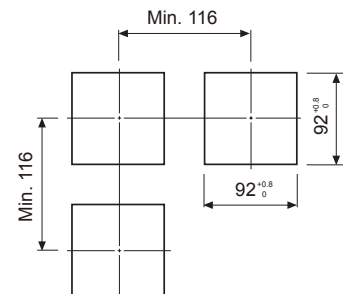
### ● Panel cut-out



### ● T4LI



### ● Panel cut-out



## ■ Proper usage

### ◎ T3NI

- T3NI is used exclusively for measuring the internal and actual temperature of panel.
- Since the Thermocouple type of T3NI is not produced, please check items before selecting the product.
- The power supply of T3NI is 12-24VDC and AC power is not produced.
- RTD requires to use DPt100Ω 3-wires type and same length and thickness of lead wire.

### ◎ The other Series

- Please check a model name when choose the item since the thermocouple is marked the same sign with DPt100Ω. Ex)T4WI-N3NPOC
- RTD requires to use DPt100Ω 3-wire type, and same length and thickness of lead wire.
- The extension wire of thermocouple must be used with the rated compensating wire or thermocouple strand.

※Refer to the H-141 page for caution for using and simple error diagnosis.