

Temperature Controller

KT Series



Part Number Description

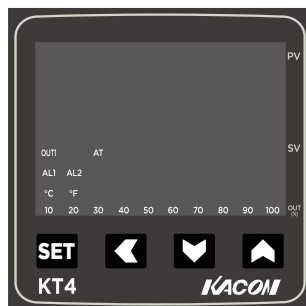
KT - **①** **②** **③** (Economical Type)

① Size	2 : W48 X H96mm	4 : W48 X H48mm	7 : W72 X H72mm
② Output Type	7 : Relay + Voltage for driving SSR		
③ Communication	0 : No Communication		

General Specification

Supply Voltage	100 - 240VAC 50/60 Hz	
Operation Voltage Range	90% to 110%, rated voltage	
Power Consumption	Max. 5VA	
Indication Method	7-segment 4digits LED : PV in red, SV in green	
Temperature Input	Thermocouple : K,E,J,N,S,T,R,B	Platinum resistance : (RTD) : Pt100, JPt100
Analog Input	Current : 4 - 20mA	Voltage : 0 - 10VDC
Display Accuracy	Normal temperature(23℃ ± 5℃):(PV ± 0.5% or ± 1℃, select the higher one) ± 1digit	
	Out of normal temperature range : (PV ± 0.5% or ± 2℃, select the higher one) ± 1digit	
Control Method	On/Off Control, PID Control	
Control Output	Relay output : 3A/250V AC, Voltage Pulse output (12VDC)	
Sampling Period	250ms	
Vibration Resistance	0.7mm amplitude at 10 ~ 55Hz in each 3 directions for 1.5 hours	
Ambient Temperature	-10 ~ +50℃ (with no icing)	
Storage Temperature	-12 ~ +60℃ (with no icing)	
Ambient Humidity	35 ~ 85%RH (non-condensing)	

General Function

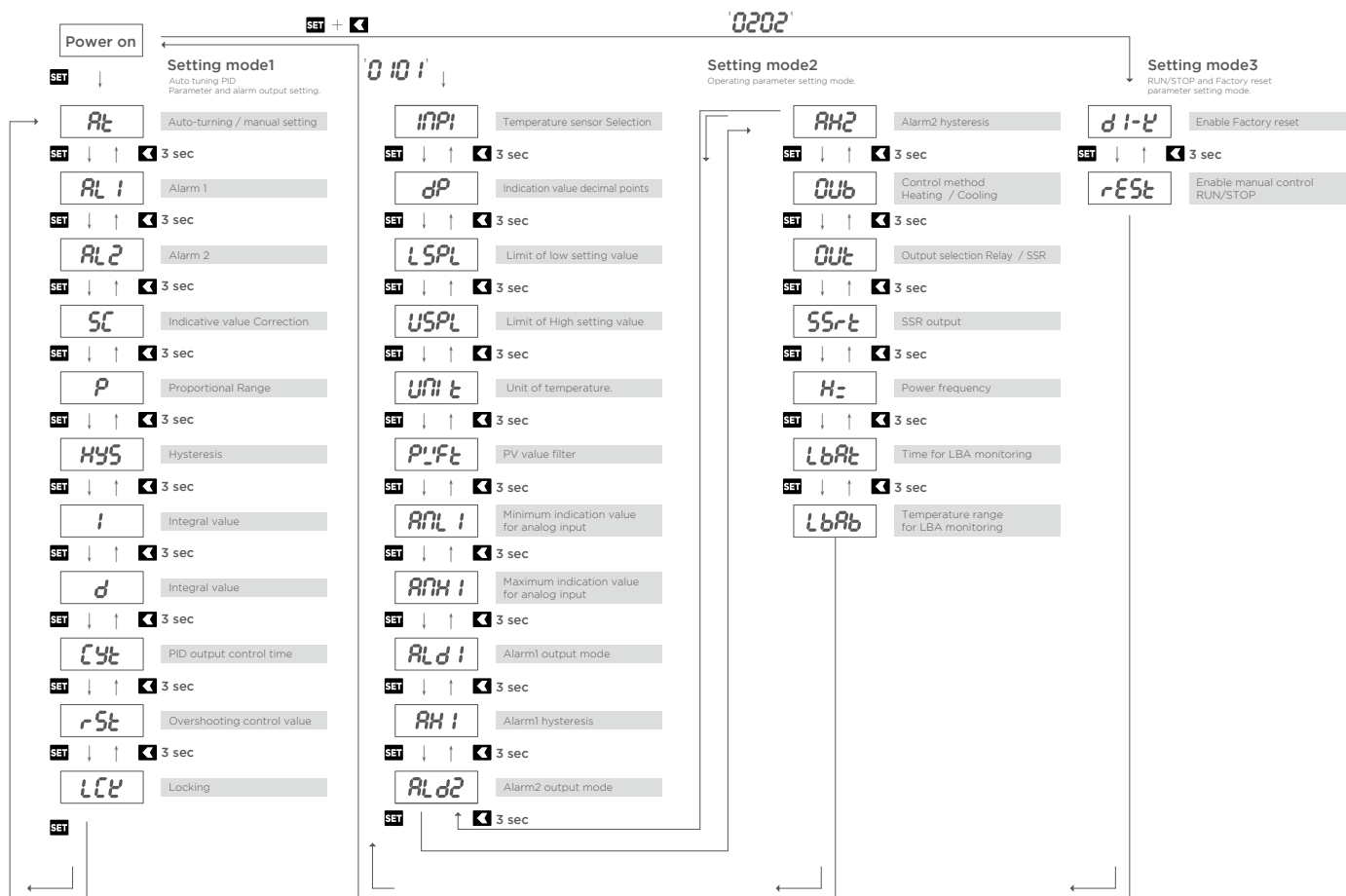


PV Display : Present value/function display (red)
SV Display : Set value (green)
OUT1 : On when out (green)
AT : flashes when PID auto-tuning (green)
AL1, AL2 : On when alarm (red)
°C, °F : Temperature unit LED (C: Celsius, F:Fahrenheit)
OUT(%) : Output ratio (10 ~ 100%)
SET : Move to parameter, set the parameter value
← : Displaying functions left-shifting the digit
→ : Up and run function
↵ : Down and stop function

Product Selection

Size	Part No.	OUTPUT
4896	KT270	Relay + SSR
4848	KT470	Relay + SSR
7272	KT770	Relay + SSR

Parameter Moving

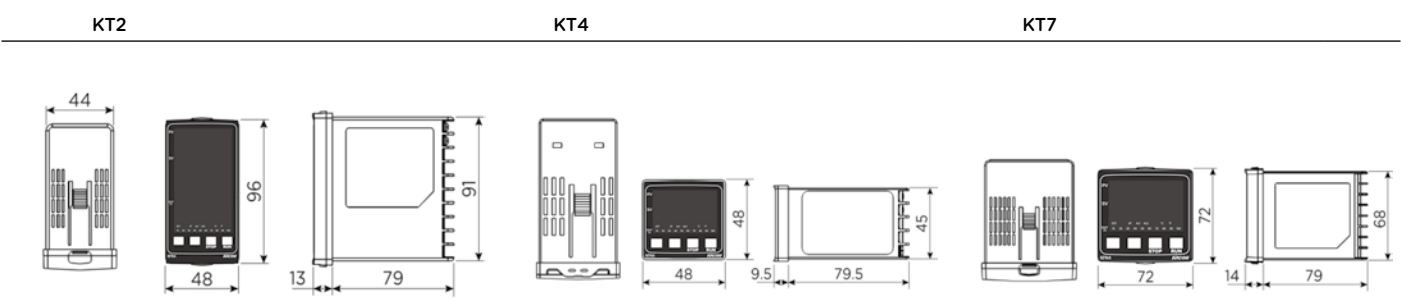


Temperature Controller

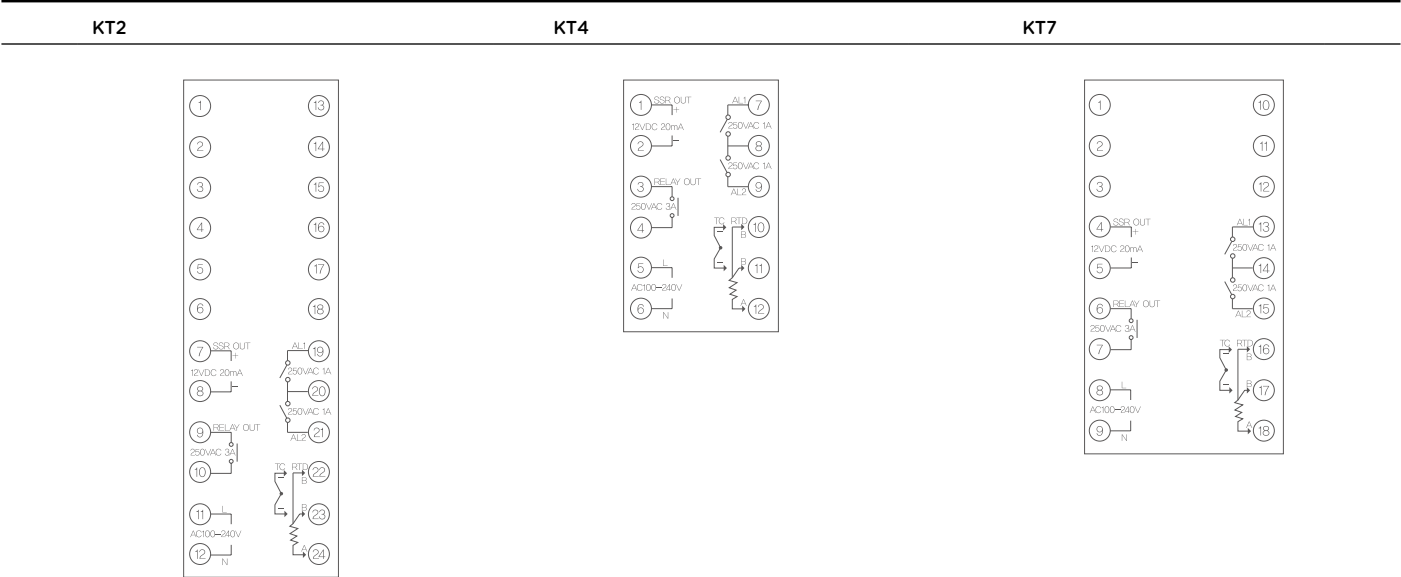
KT Series

Dimension

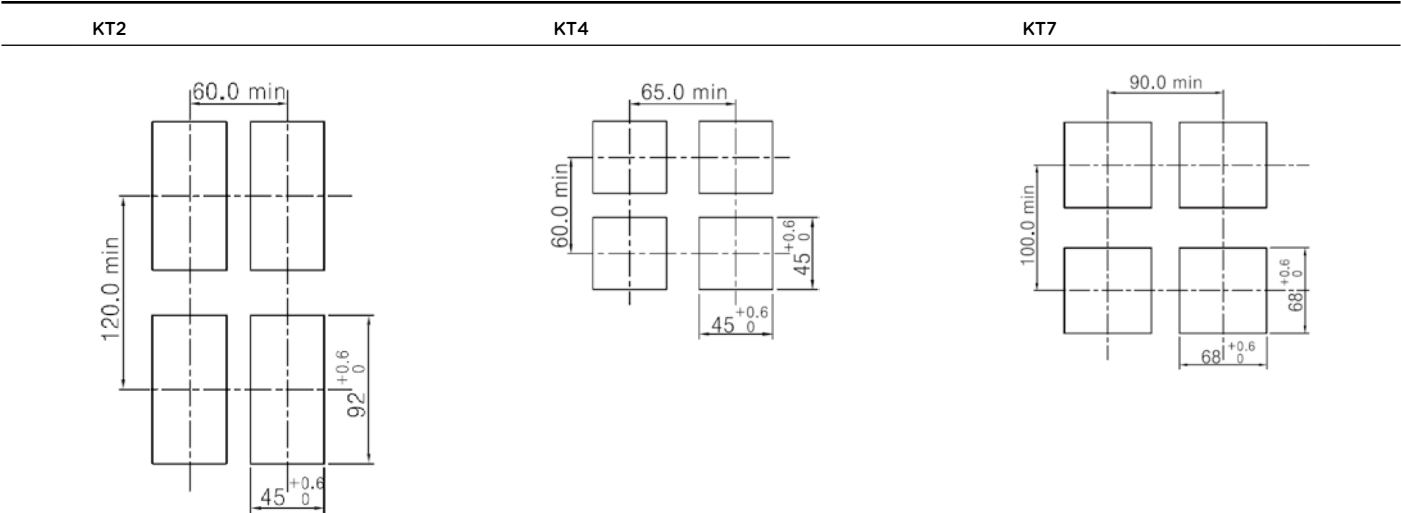
unit : mm



Diagram



Mounting



Thermostat

KTS & KTC Series



Part Number Description

KTS & KTC - 1

1 Temperature range	30 : -30°C ~ 30°C	50 : 0°C ~ 50°C	90 : 0°C ~ 90°C
	120 : 0°C ~ 120°C (KTS only)	320 : 50°C ~ 320°C (KTS only)	

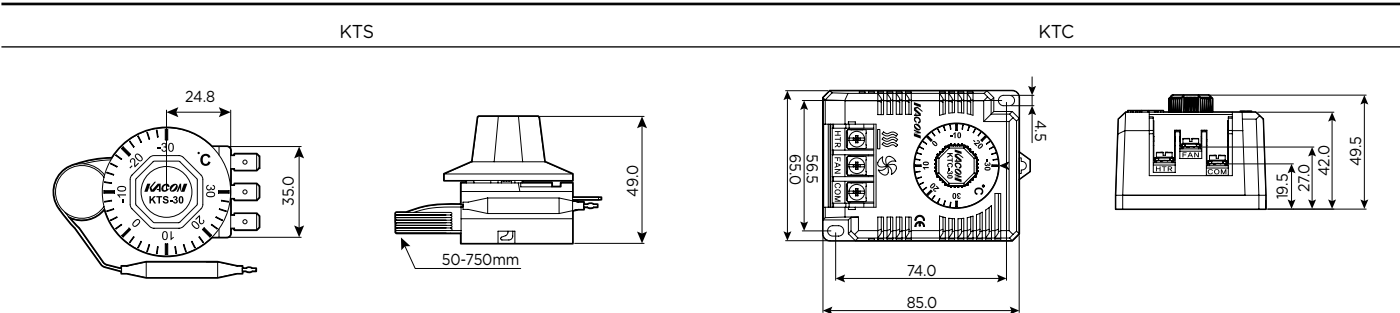
General Specification

Rated Current	16A 250VAC
Control Temperature Range	-30°C ~ +320°C
Life Cycle	Min. 100,000 hrs
Dielectric Strength	2,500V/1min.
Insulation Resistance	Min. 50MΩ
Contact Resistance	Max. 30mΩ

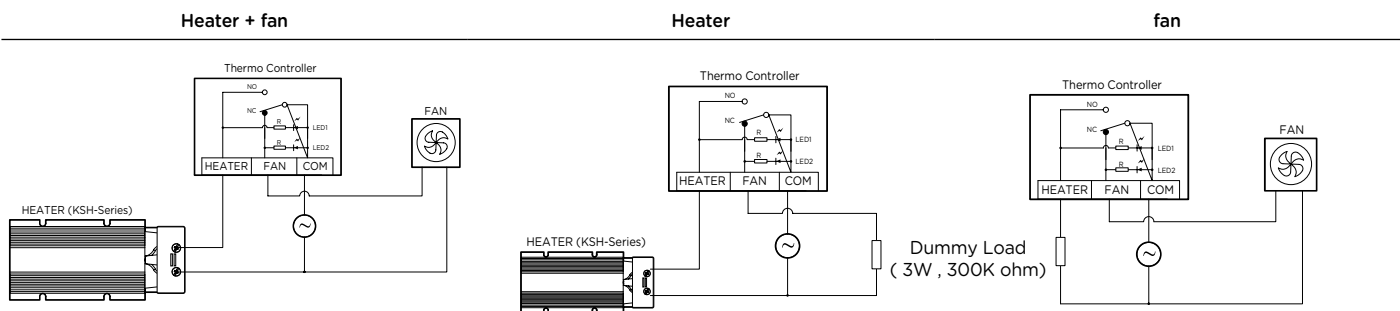
Model	Range	Tolerance	On/Off Difference	Application	
KTS-30	KTC-30	-30°C ~ 30°C	±2.5K	2°C ~ 7°C	Freezer, Fish Pond
KTS-50	KTC-50	0°C ~ 50°C	±3K	2°C ~ 9°C	Shower, Warm Air Blower, Etc
KTS-90	KTC-90	0°C ~ 90°C	±3K	2°C ~ 9°C	Tumbling-Box Washing Machine
KTS-120		0°C ~ 120°C	±4K	2°C ~ 10°C	Boiling Water Device Smudge Pot
KTS-320		50°C ~ 320°C	±10K	5°C ~ 30°C	Oven, Baking Out

Dimension

unit : mm



Diagram



* Heater or Fan Single operation caution : User shall have dummy load (more than 3W, 300K ohm) as above circuit diagram.
 * If the dummy load is not connected it is cause of wrong lamp operation.