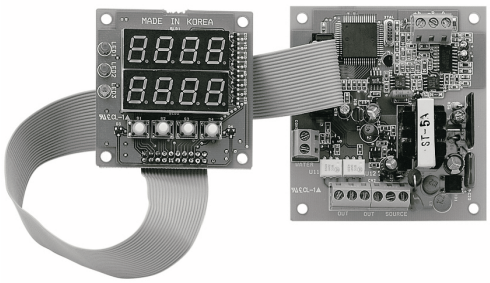
Board type Temperature controller

▣Features

- ●High quality and cost saving type
- ●Convenient panel for any places and purposes
- ●Able to change the dimension of display board

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



▣Ordering information

TB 4 2 – 1 4 R

Output mode	R	Relay output
	S	SSR output
	C	Current output(4–20mADC)
	N	PV Transmission output(4–20mADC)
Power supply	4	100–240VAC 50/60Hz
Sub output(Option)	1	EVENT1 output type
Display	2	2 Display type
Digit	4	4 Digit
Item	TB	Temperature Board

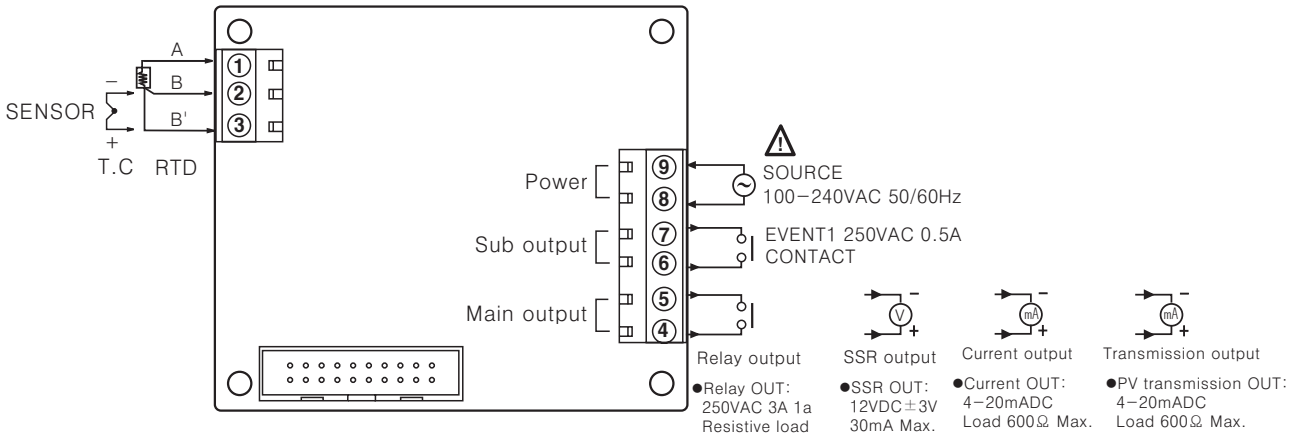
※Transmission output type does not have EVENT1 output.

▣Specifications

Model		TB42
Power supply		100–240VAC 50/60Hz(90 ~ 110% of rated voltage)
Power consumption		Approx. max. 5VA
Display method		7 Segment LED Display [Processing value(PV):Green, Setting value(SV):Red]
Character size		W8×H10mm
Input	Thermocouple	K(CA), J(IC) [Tolerance outer resistive is max. 100Ω]
	RTD	Pt100Ω, JIS Pt100Ω [Allowable line resistance is max. 5Ω per a wire]
Control output	Relay	250VAC 3A 1a
	SSR	12VDC ±3V 30mA Max.
	Current	4–20mADC(Load max. 600Ω)
Control method		ON/OFF control, P, PI, PD, PIDF, PIDS
Transmission output		4–20mADC, load Max. 600Ω for PV
Sub output		●Event1 output : Relay output(250VAC 0.5A 1a) ●Event2 output : OK monitering display by LED
Setting type		Front push buttons
Display accuracy		F.S ±0.5% rdg ±1 Digit based on SV or 3℃ Max.
Hysteresis		Adjustable 1 ~ 100℃(0.1 ~ 100.0℃) at ON / OFF control
Proportional band(P)		0.0 ~ 100.0%
Integral time(I)		0 ~ 3600sec
Derivative time(D)		0 ~ 3600sec
Control cycle(T)		1 ~ 120sec
Sampling time		0.5sec fixed
Dielectric strength		2000VAC 50/60Hz for 1 minute
Vibration		0.75mm amplitude at frequency of 10 ~ 55Hz in each of X, Y, Z directions for 2 hours
Relay life cycle	Main output	Mechanical : Min. 10,000,000, Electrical : Min. 100,000(250VAC 3A resistive load)
	Sub output	Mechanical : Min. 20,000,000, Electrical : Min. 200,000(250VAC 0.5A resistive load)
Insulation resistance		Min. 100MΩ(500VDC)
Noise strength		±2kV the square wave noise(pulse width:1㎲) by the noise simulator
Memory retention		10 years(When using non-volatile semiconductor memory type)
Ambient temperature		-10 ~ 50℃
Storage temperature		-20 ~ 60℃
Ambient humidity		35 ~ 85% RH
Weight		Approx. 113.5g

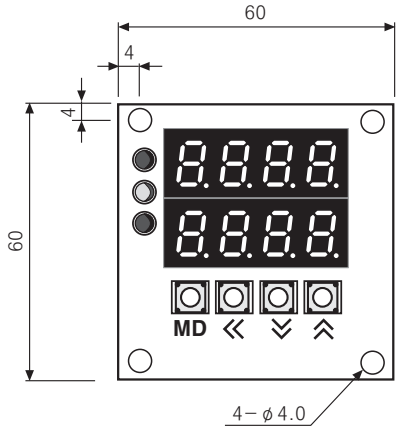
▣Connections

※RTD(Resistance Temperature Detector) : DIN Pt 100Ω , JIS Pt 100Ω(3-wire type)　※Thermocouple : K, J

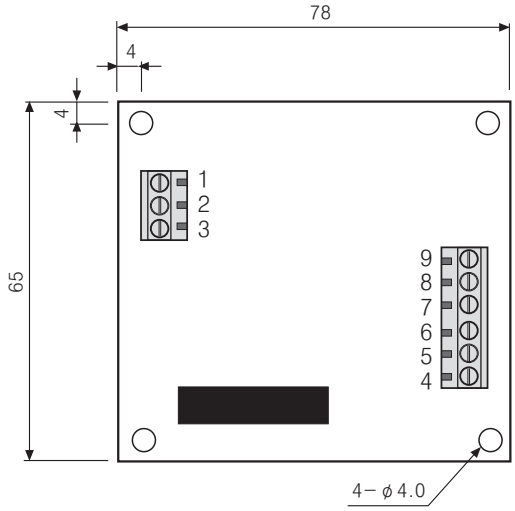


▣Dimensions

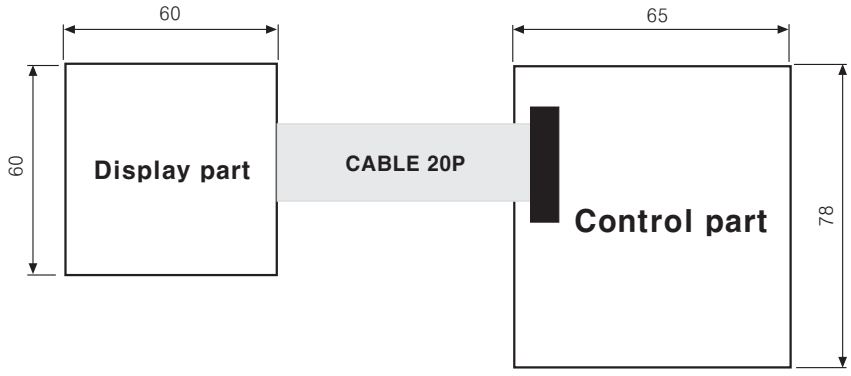
●Display part



●Control part



●Layout



※Cable length is 300mm.

※The size of board is based on user's application. (Optional)

Unit : mm