

8. TEP Series Intelligent Programmable Temperature Controller

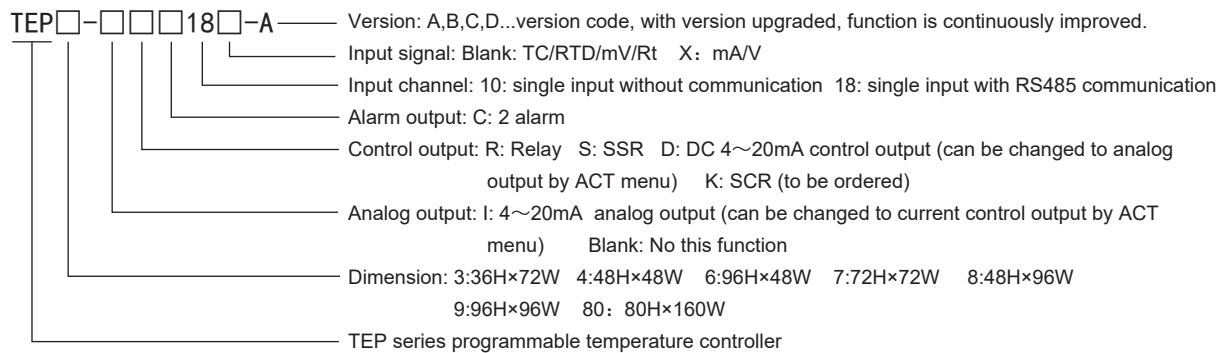
■ Photos and Features



Features:

- ★ Intelligent fuzzy PID algorithm with auto-tuning function, rapid performance, high efficiency.
- ★ Max 16 segments ramp/soak program, free setting curve number and length.
- ★ TC/RTD universal input. Linear signal input can be ordered.
- ★ RELAY/SSR/SCR control output for option.
- ★ Menu operation for manual output, pause, stop, repeat, PV activation, etc.
- ★ Optional 4-20mA control output or analog output.
- ★ Optional RS-485 communication to easy communicate with PLC, HMI.

■ Model Illustration



■ Ordering Information

Model	Program	Control output	Alarm	Analog output	Communication	Code
TEP□-R/SC10W	16 segments program	R: Relay S: SSR I: 4~20mA analog output D: 4~20mA control output	2	No	No	B0410TEP01
TEP□-R/SC18W			2	No	RS485	B0620TEP01
TEP□-DC10W			2	4~20mA(multiplex with control output)	No	B0570TEP01
TEP□-DC18W			2	4~20mA(multiplex with control output)	RS485	B0680TEP01
TEP6/8/9/80-IR/SC10W			2	No	No	B0570TEP01
TEP6/8/9/80-IR/SC18W			2	4~20mA	RS485	B0680TEP01

Note: Input signal 4~20mA, 0~10V and power supply DC24V need to be ordered, please indicate it before place an order.

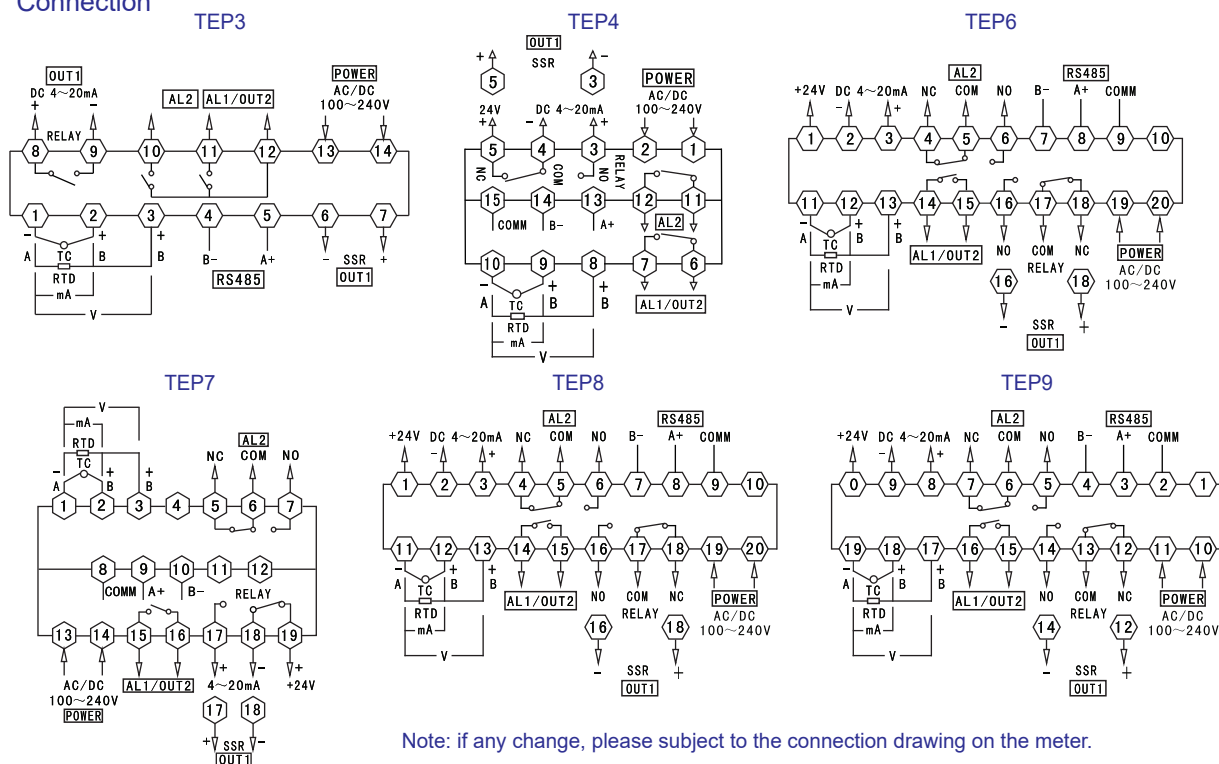
■ Technical Specifications

Sampling speed	2 times per second	Pulse tria anti-interference	IEC/EN61000-4-4 ±2KV perf.Criteria B
Relay capacity	AC 250V /3A Life of rated load>100000 times	Surge immunity	IEC/EN61000-4-5 ±2KV perf.Criteria B
Power supply	AC/DC 100 ~ 240V (85-265V)	Voltage drop & short interruption immunity	IEC/EN61000-4-29 0% ~ 70% perf.Criteria B
Total consumption	< 6VA	Dielectric strength	Signal input & output & power 1500VAC 1min, <60V Low voltage circuit between DC500V,1min
Ambient environment	Indoor use, temperature: 0 ~ 50°C, no condensation humidity:<85%RH, altitude<2000m	Weight	About 400g
Storage environment	-10 ~ 60°C, no condensation	Shell material	PC/ABS (flame class UL94V-0)
SSR output	DC 24V impulse level, load<30mA	Panel material	PET(F150/F200)
Current output	DC 4 ~ 20mA load<500Ω,temperature drift 250P	Power-off protection	10 years,times of writing:1 million times
Communication port	RS485 port Modbus-RTU protocol, maximum input: 30 units	Panel protection class	IP65(IEC60529)
Insulation impedance	Input, output, power to housing>20MΩ	Safe standard	IEC61010-1 Overvoltage category II, pollution level 2, level II(Enhanced insulation)
ESD	IEC/EN61000-4-2 Contact ±4KV /Air ±8KV perf.CriGTEria B		

Input parameters

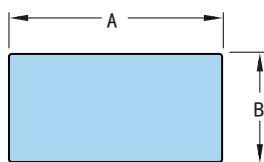
Symbol	Input type	Measuring range	Resolution	Accuracy	Input impedance	Symbol	Input type	Measuring range	Input impedance	Resolution
K	K	-50～1300℃	1℃	0.5%F.S	>100KΩ	0-50mV	0-50mV	-1999 ～9999	>500KΩ	12 bit
J	J	0～1200℃	1℃	0.5%F.S	>100KΩ	0-400Ω	0-400Ω		0.2mA	
E	E	0～850℃	1℃	0.5%F.S	>100KΩ	4-20mA	4-20mA		100Ω	
T	T	-50～400℃	1℃	0.5%F.S	>100KΩ	0-10V	0-10V		>1MΩ	
B	B	250～1800℃	2℃	1%F.S	>500kΩ	*: Note: 4～20mA、0～10V input need to be ordered				
R	R	-10～1700℃	1℃	1%F.S	>500kΩ					
S	S	-10～1600℃	1℃	1%F.S	>500kΩ					
N	N	-50～1200℃	1℃	0.5%F.S	>500kΩ					
PT100	PT100	-199.9～600.0℃	0.2℃	0.5%F.S	(0.2mA)					
CU50	CU50	-50.0～150.0℃	0.2℃	0.5%F.S	(0.2mA)					
CU100	CU100	-50.0～150.0℃	0.2℃	0.5%F.S	(0.2mA)					

Connection

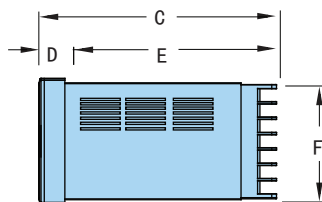


Dimensions (Units: mm)

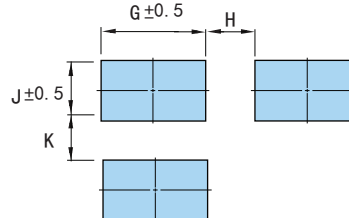
Panel size



Side size



Hole size



Model	A	B	C	D	E	F	G	H(Min)	J	K(Min)
3:(72*36)	72	36	70.5	6.5	64	32	68	25	33	25
4:(48*48)	48	48	97.5	6.5	91	45	45.5	25	45.5	25
6:(96*48)	48	96	97.5	9	88.5	89.5	45.5	25	92	25
7:(72*72)	72	72	97.5	9	88.5	67	67.5	25	67.5	25
8:(48*96)	96	48	97.5	9	88.5	44.5	92	25	45.5	25
9:(96*96)	96	96	97.5	9	88.5	91.5	92	25	92	25
80:(80*160)	160	80	96	13	83	75.5	155.5	30	76	30