BEM-[T][C][1][B]-[1][4][R]

① ② ③ ④ ⑤ ⑥ ⑦

① 系列 series

T	温度控制器 temperature controller

① 仪表尺寸：宽X高（单位:mm）
Instrument size: width X height (unit:mm)

型号 model	面板尺寸 Panel size	壳体尺寸 Shell size	开孔尺寸 Hole Size
TC1B	48X48	48X48X75	45X45
TC4B	48X96	48X96X75	45X92
TC7B	72X72	72X72X75	68X68
TC9B	96X96	96X96X75	92X92

⑥ 电源电压 Supply voltage

2	24VAC 50/60Hz 24-48VDC
4	100-240VAC 50/60Hz

② 设置方式 Setting mode

C	2段显示型，按钮设置型 2-segment display type,button setting type

④ 显示位数 Display number

B	999(3位)/999 (3digits)

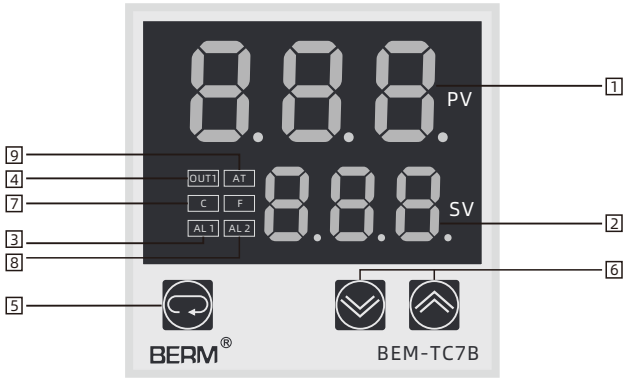
⑤ 辅助输出 Auxiliary output

1	一路Alarm输出 One way alarm output
2	二路Alarm输出 Two way alarm output

⑦ 控制输出 Control output

R	继电器输出(AC电源型) Relay output (AC power supply type)
V	固态输出(DC电源型) solid state output (DC power supply type)
MV	4-20MA输出 4-20MA output

面板各部位名称 Name of each part of the panel



1.当前值(PV)显示(红色)
运行模式下显示当前测定值(PV), 设置模式下显示内部参数名。

1.Present value (PV) display (red)
Displays the current process value (PV) in the operation mode, and displays the internal parameter name in the setting mode.

2.设定值(SV)显示(绿色)
运行模式下显示控制目标的设定值(SV), 设置模式下显示该参数的当前设定值.

2.Current value (SV) display (green)
The set value (SV) of the control target is displayed in the operation mode, and the current set value of the parameter is displayed in the setting mode.

3.控制报警输出指示灯
-AL 1: Alarm1报警输出ON时灯亮。

3.Control alarm output indicator
-AL 1: Lights up when Alarm1 alarm output is ON.

4.自整定指示灯: 执行自整定时, AT灯以1秒为周期闪烁。

4.Auto-tuning indicator: When performing auto-tuning, the AT indicator flashes in a 1-second cycle.

5. 键: 用于进入参数组设置, 返回运行模式, 切换参数组, 保存设定值。

5. Key: used to enter parameter group setting, return to running mode, switch parameter group, and save the set value.

6.功能键

6.function keys

7.温度单位(℃/℉)指示灯: 显示当前的温度单位。

7.Temperature unit (℃/℉) indicator: Displays the current temperature unit.

8.控制报警输出指示灯
-AL 2: Alarm2报警输出ON时灯亮。

8.Control alarm output indicator
-AL 2: Lights up when Alarm2 alarm output is ON.

9.OUT1: 加热或制冷控制输出(Main Control Output) ON时灯亮。

9.OUT1: Lights when the heating or cooling control output (Main Control Output) is ON.

报警模式 Alert mode

AL1T/AL2T的值 Value of AL1T/AL2T	意义 significance
0	无报警 no alarm
1	上偏差报警 Upper deviation alarm
2	上下偏差外报警 Upper and lower deviation external alarm
3	过程值上限报警 Process value high limit alarm
4	下偏差报警 Lower deviation alarm
5	上下偏差内报警 Alarm within the upper and lower deviation
6	过程值下限报警 Process value low limit alarm
7	待机功能上偏差报警 Deviation alarm on standby function
8	待机功能上下偏差外报警 Standby function upper and lower deviation external alarm
9	待机功能过程值上限报警 Standby function Process value upper limit alarm
10	待机功能下偏差报警 Deviation alarm in standby function
11	待机功能上下偏差内报警 Standby function within the upper and lower deviation of the alarm
12	待机功能过程值下限报警 Standby function Process value lower limit alarm

主要技术参数/The main technical parameters

系列 series		TC1B	TC4B	TC7B	TC9B
电源电压 power supply Voltage	AC 电源型 AC power supply type	100-240VAC 50/60Hz			
	AC/DC 电源型 AC/DC power supply type	24VAC 50/60Hz 24-48VDC			
允许电压范围 Allowable voltage range		额定电压的90%~110% 90%~110% of rated voltage			
消耗功率 Power consumption		5VA以下(100-240VAC 50/60Hz,24VAC 50/60Hz) Below 5VA (100-240VAC 50/60Hz, 24VAC 50/60Hz)			
		3W以下(24-48VDC) Below 3W (24-48VDC)			
显示方式 Display method		7段LED(PV:红色，SV:绿色) 7-segment LED (PV: red, SV: green)			
字符尺寸 character size	PV(W×H)	7.0X15.0mm	9.5X20.0mm	7.0X14.6mm	11.0X22.0mm
	SV(W×H)	5.0X9.5mm	7.5X15.0mm	6.0X12.0mm	7.0X14.0mm
输入类型 Input type	热电阻 Thermal resistance	Dpt100Ω, Cu50Ω (允许单根电线阻抗5Ω 以下) Dpt100Ω, Cu50Ω (allowing a single wire impedance below 5Ω)			
	热电偶 Thermocouple	K(CA)，J(IC)，L(IC)，T(CC)，R(PR)，S(PR)			
显示精度 display Precision	热电阻 Thermal resistance	常温(23℃±5℃)时:(PV±0.5%或±1℃较大者)±1位 Normal temperature (23℃±5℃): (PV±0.5% or ±1℃ whichever is greater) ±1 digit			
	热电偶 Thermocouple	常温以外:(PV±0.5%或±2℃较大者)±1位 Outside room temperature: (PV±0.5% or ±2℃ whichever is greater) ±1 digit			
控制输出 Control Output	继电器 Relay	250VAC 10A Ia			
	SSR	12VDC ±2V 20mA 以下 12VDC ±2V 20mA or less			
报警输出 Alarm Output		AL1,AL2继电器： 250VAC 3A Ia Al1, AL2 relay: 250VAC 3A Ia			
控制方式 way to control		ON/OFF,P,PI,PD,PID控制 ON/OFF, P, PI, PD, PID control			
控制精度 Control accuracy		1~100℃ / 0.1~50.0℃			

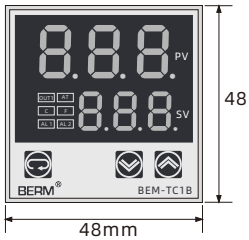
(※1): ◎常温（23℃±5℃）
·热电偶R,S在200℃以下时(PV±0.5%或±3℃中较大者)±1位
200℃以上时(PV±0.5%或±2℃中较大者)±1位
·热电偶L(IC), 热电阻Cu50Ω (PV±0.5%或±2℃中较大者)±1位
◎常温以外
·热电偶R, S在200℃以下时(PV±1.0%或±6℃中较大者)±1位
200℃以上时(PV±0.5%或±5℃中较大者)±1位
·热电阻Cu50Ω(PV±0.5%或±3℃中较大者)±1位

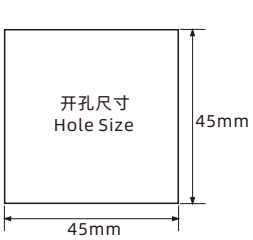
(※1): ◎Room temperature (23℃±5℃)
·When the thermocouple R, S is below 200℃ (PV±0.5% or ±3℃, whichever is greater) ±1 digit
Above 200℃ (PV±0.5% or ±2℃, whichever is greater) ±1 digit
·Thermocouple L(IC), thermal resistance Cu50Ω (PV±0.5% or ±2°C whichever is greater) ±1 digit
◎Other than normal temperature
·When the thermocouple R, S is below 200℃ (PV±1.0% or ±6℃, whichever is greater) ±1 digit
Above 200°C (PV±0.5% or ±5°C, whichever is greater) ±1 digit
·Thermal resistance Cu50Ω (PV±0.5% or ±3°C whichever is greater) ±1 digit

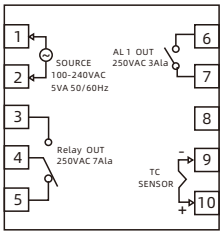
比例带(P) Proportional band		0.1~999℃
积分时间(I) Integration time(I)		0~999秒
微分时间(D) Differential time(D)		0~999秒
控制周期(T) Control cycle(T)		0.5~120秒
手动复位 Manual reset		0.0~100%
采样周期 Sampling period		100ms
耐电压 Withstand voltage	AC 电源型 AC power supply type	2000VAC 50/60Hz1分钟(输入端子与电源端子之间) 2000VAC 50/60Hz for 1 minute (between input terminal and power terminal)
	AC/DC 电源型 AC/DC power supply type	1000VAC 50/60Hz1分钟(输入端子与电源端子之间) 1000VAC 50/60Hz for 1 minute (between input terminal and power terminal)
耐振动 Vibration resistant		5~55Hz(周期1分钟)振幅0.75mm X,Y,Z各方向2小时 5~55Hz (period: 1 minute), amplitude of 0.75mm in X, Y, and Z directions for 2 hours each
继电器寿命 Relay Life span	机械 Machinery	OUT:500万次以上,AL1/2:500万次以上 OUT: more than 5 million times, AL1/2: more than 5 million times
	电气 Electrical	OUT:20万次以上(250VAC 3A 阻性负载),AL1/2:30万次以上(250VAC 1A 阻性负载) OUT: 200,000 times or more (250VAC 3A resistive load), AL1/2: 300,000 times or more (250VAC 1A resistive load)
绝缘阻抗 Insulation resistance		100mΩ以下(500VDC为基准) Below 100mΩ (500VDC as the benchmark)
抗干扰 Anti-interference		干扰模拟器方波干扰(脉冲宽度1μs)±2kV R相,S相 Interference simulator square wave interference (pulse width 1 μs) ± 2kV R phase, S phase
记忆保存 Memory preservation		约10年(使用非易失性半导体存储方式) About 10 years (using non-volatile semiconductor storage method)
环境温度 Ambient temperature		-10~50℃(未结冰状态) -10~50°C (non-icing state)
储存温度 Storage temperature		-20~60℃(未结冰状态) -20~60°C (non-icing state)
环境湿度 Environmental humidity		35~85%RH, 存储:35~85%RH 35~85%RH, storage: 35~85%RH
绝缘类型 Insulation type		双重绝缘或强化绝缘(标识:回，检测输入部分与电源部分之间的介电强度AC电源型:2kV,AC/DC 电源型:1kV) Double insulation or reinforced insulation (marking: return, detecting the dielectric strength between the input part and the power supply, AC power supply type: 2kV, AC/DC power supply type: 1kV)

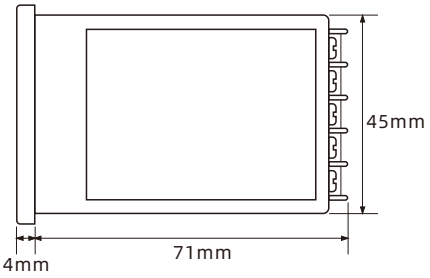
外形尺寸及接线示例图 Dimensions and Wiring Example Diagram

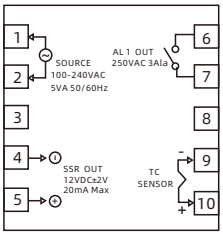












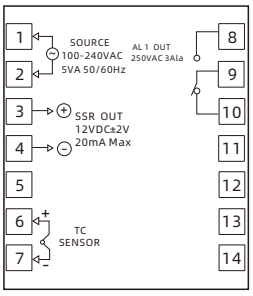
工作电压 Operating Voltage	100-240VAC 380VAC				产品尺寸 Product Size	48X48X75MM	开孔尺寸 Hole Size	45X45MM	
产品型号 Product model	主控输出 Main control output	报警输出 Alarm Output	最高温度 Maximum temperature	单价 unit price	产品型号 Product model	主控输出 Main control output	报警输出 Alarm Output	最高温度 Maximum temperature	单价 unit price
BEM-TC1B-14R	继电器/RELAY	一路报警 Alarm all the way	999℃		BEM-TC1B-14V	固态/SSR	一路报警 Alarm all the way	999℃	
					产品重量 product weight	1pcs/0.126KG 100pcs/1箱(box)			

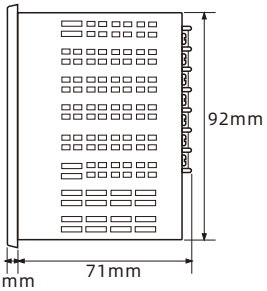
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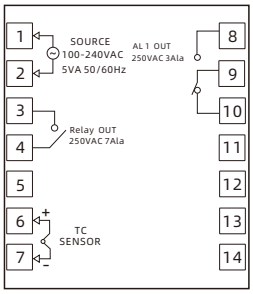












工作电压 Operating Voltage	100-240VAC 380VAC				产品尺寸 Product Size	48X96X75MM	开孔尺寸 Hole Size	45X92MM	
产品型号 Product model	主控输出 Main control output	报警输出 Alarm Output	最高温度 Maximum temperature	单价 unit price	产品型号 Product model	主控输出 Main control output	报警输出 Alarm Output	最高温度 Maximum temperature	单价 unit price
BEM-TC4B-14R	继电器/RELAY	一路报警 Alarm all the way	999℃		BEM-TC4B-14V	固态/SSR	一路报警 Alarm all the way	999℃	
					产品重量 product weight	1pcs/0.171KG 50pcs/1箱(box)			