

FEATURES特点

- Up to 50A or 60A contact seitching capability
高达 50A/60A 触点切换能力
- 4kV dielectris strength(between coil and contacts)
线圈与触点间介质耐压4kV
- Contact gap 2.3mm 、3.0mm optional
触点间隙 2.3mm 、3.0mm 可选
- Overall dimensions (30.5X27.4X19.8) mm.
外形尺寸 (30.5X27.4X19.8) mm。



CONTACT PARAMETERS触点参数

Contact Form触点形式	A-1组常开	
Rating Load (Resistive) 额定负载	NO: 50A/277VAC 40A/30VDC	NO: 60A/277VAC 闭合: 20A, 承载: 60A, 断开: 20A at 277VAC
Max. Switching Current最大切换电流	50A	60A
Max.Switching Voltage最大切换电压	277VAC/30VDC	277VAC
Max.Switching Power最大切换功率	13850VA/1500W	16620VA

CHARACTERISTICS性能参数

Contact Materials触点材料	Ag Alloy银合金	
Contact Resistance接触电阻	100mΩ Max	
Operate Time吸合时间	15ms. Max	
Release Time释放时间	10ms. Max	
Insulation Resistance绝缘电阻	100MΩ Min.(DC500V)	
Initial Dielectric Strength介质耐压	between open contacts: 触点与触点间:	AC2,500V,50/60Hz 1Min
	between contacts and coil: 触点与线圈间:	AC4,000V,50/60Hz 1Min
Vibration Resistance抗振动	Damage limits: 耐久:	10~55Hz Double Amplitude双振幅1.5mm
	Malfunction: 误动作:	10~55Hz Double Amplitude双振幅1.5mm
Shock Resistance抗冲击	Damage limits: 耐久:	100G Min
	Malfunction: 误动作:	10G Min
Life寿命	Mechanical Life (10800 per hour) 机械寿命 (每小时10800次)	1×10 ⁷
	Electrical Life (600 per hour) 电气寿命 (每小时600次)	5×10 ⁴
Ambient Temperature环境温度	-40℃~+85℃ (No condensation) (不冷凝)	
Unit Weight单位重量	约Approx.27.0g	

COIL RATINGS (at23℃) 线圈参数 (在23℃)

额定电压 Nominal Voltage (VDC)	动作电压 Action voltage (VDC)	释放电压 Drop-Out Voltage (Min)	最大电压 Maximum Voltage (Max)	线圈电阻 Coil Resistance (Ω±10%)	额定功率 Rated power (w)
5	≤4	≥0.35	6.5	16.6× (1±10%)	约:1.5W
6	≤4.8	≥0.42	7.8	24× (1±10%)	
12	≤9.6	≥0.84	15.6	96× (1±10%)	
24	≤19.2	≥1.68	31.2	384× (1±10%)	
48	≤38.4	≥3.36	62.4	1536× (1±10%)	
5	≤4	≥0.35	6.5	11.1× (1±10%)	约:2.25W
6	≤4.8	≥0.42	7.8	16× (1±10%)	
12	≤9.6	≥0.84	15.6	64× (1±10%)	
24	≤19.2	≥1.68	31.2	256× (1±10%)	
48	≤38.4	≥3.36	62.4	1024× (1±10%)	

备注：1. 上述值为初始值；2. 最大电压是指继电器线圈在短时间内能够承受的最大值。

ORDERING INFORMATION订货标记

BT90-SS-1 12 D M F 50 1 T (XXX) 1 2 3 4 5 6 7 8 9 10 11										
1.Model Number基本型号 BT90 2.Encapsulation form: SS - Plastic Sealed 封装形式: SS - 塑封型 3.Number or pole : 1 - 1 pole 触点组数: 1—1组触点 4.Coil Voltage线圈规格 (VDC): DC5V,DC6V,DC9V,DC12V,DC15V,DC24V,DC48V 5.Coil Power: D - 1.5W P - 2.25W 线圈功率: D - 1.5W P - 2.25W 6.Contact form: M - FormA 触点形式: M-常开型						7.Insulation level: F - Class F Nil - Standard 绝缘等级: F - Class F 无 - 标准品 8.load /负载: Nil(无) - 50A 60 - 60A 50 - 50A 60 - 60A 9.Terminal position: 1 - 18.75mm 11 - 17.8mm 负载脚间距: 1 - 18.75mm 11 - 17.8mm 10. Contact gap: Nil:standard T:≥2.3mm G:≥3.0mm 触点间隙: 无: 标准品 T:≥2.3mm G:≥3.0mm 11.Customer Special Code :XXX- Customer Special Requirements No - Standard Type 客户特性号: XXX-客户特殊要求, 无-标准型				

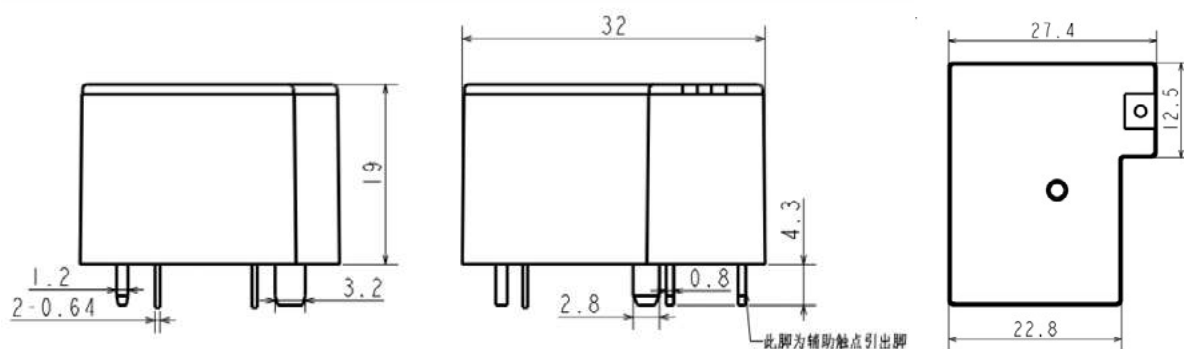
SAFETY STANDARD安规认证

AuthType Basic认证类别	CUL/UL	TUV	CQC
Authentication Load 认证负载 (50A)	50A/277VAC TV-15 277VAC	50A/277VAC 40A/30VDC	50A/277VAC 40A/30VDC
Authentication Load 认证负载 (60A)	60A/277VAC TV-15 277VAC	50A/277VAC Making 20A,Carrying 60A, Breaking 20A at 277VAC	50A/277VAC Making 20A,Carrying 60A, Breaking 20A at 277VAC

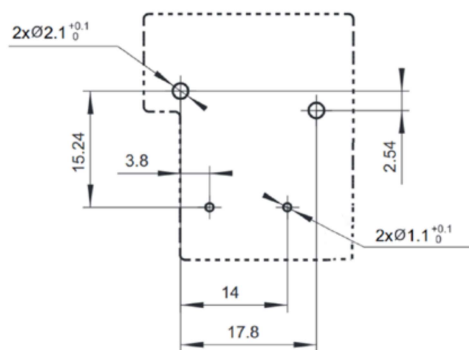
TYPICAL USE典型用途

- Thermostat. ● Air Condition ● Household appliances ● Energy storage system ● Charging station
- 温控器 ● 空调 ● 家用电器 ● 新能源储能系统 ● 新能源充电桩

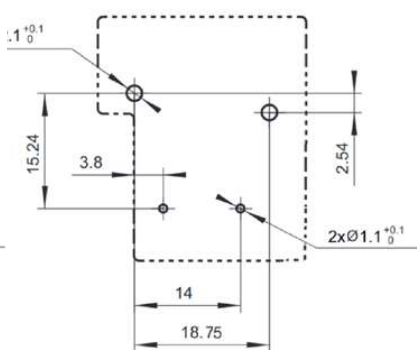
OUTLINE DIMENSIONS (UNIT:mm)外形尺寸（单位：mm）



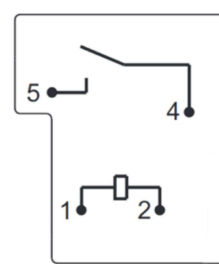
外形图
Outline Dimensions



17.8脚距
安装孔位图
PCB Layout (Bottom view)



18.75脚距
安装孔位图
PCB Layout (Bottom view)



接线图
Wiring Diagram (Bottom view)

备注:

- (1) 产品部分外形尺寸未注尺寸公差，当外形尺寸 $\leq 1\text{mm}$ ，公差为 $\pm 0.2\text{mm}$ ；当外形尺寸在 $1\sim 5\text{mm}$ 之间时，公差为 $\pm 0.3\text{mm}$ ；
当外形尺寸 $> 5\text{mm}$ 时，公差为 $\pm 0.4\text{mm}$ ；
- (2) 安装孔尺寸中未注尺寸公差的均为 $\pm 0.1\text{mm}$ 。

REMARK:

- (1) In case of no tolerance shown in outline dimension: outline dimension $\leq 1\text{mm}$, tolerance should be $\pm 0.2\text{mm}$;
outline dimension $> 1\text{mm}$ and $\leq 5\text{mm}$, tolerance should be $\pm 0.3\text{mm}$; outline dimension $> 5\text{mm}$, tolerance should be $\pm 0.4\text{mm}$;
- (2) The tolerance without indicating for PCB layout is always $\pm 0.1\text{mm}$.