

## ST-1系列设备用断路器（过载保护器）CBE

## ST-1 Series circuit-breaker for equipment (Overload protector) cbe

### ■ 适用范围 Application range

ST-1 系列设备用断路器（以下简称断路器）适用于交流50Hz（60Hz），额定工作电压是至250V，直流32V 额定电流至32A的电气设备内部的分支线路中，作过载附加保护。产品的关键件感温元件采用双金属材料，由于优异的设计，它既为热敏传感器，又作为操作机构，动作准确、可靠，被广泛用于各种机电器具中。例如：各类发电机、电动机（如：清洗机）、不间断电源（UPS）、电动工具、电热器具、电源插座等均有该产品与之配套。

ST-1 series circuit breaker for equipments (hereinafter refer to as breaker for short) is suitable for circuit of AC 50Hz (60Hz), rated working voltage up to 250V, DC up to 32A rated current up to 32A, applied as overload protection for branchline of electric equipments. We adopt double metal material for temperature sensing element which is the key element of products. Because of the advanced design it also can be applied as heat sensitive sensor and operating mechanism, it can work accurately and reliably, widely used in various electromechanical appliances such as: various electric generator, electromotor (like cleaning machine), UPS, electric tool, electric heating appliance power supply socket, etc.

### ■ 结构与工作原理 Structure and working principle

断路器因过流而脱扣，复位按钮向上跳起并断开电路，在排除故障后，用手按下复位按钮，断路器接通电路。  
The circuit breaker will trip if there is over-current the reset button will jump up and cut off the circuit after fault is eliminated push the reset button and reconnect the circuit again.

### ■ 基本技术参数 The basic technical parameters

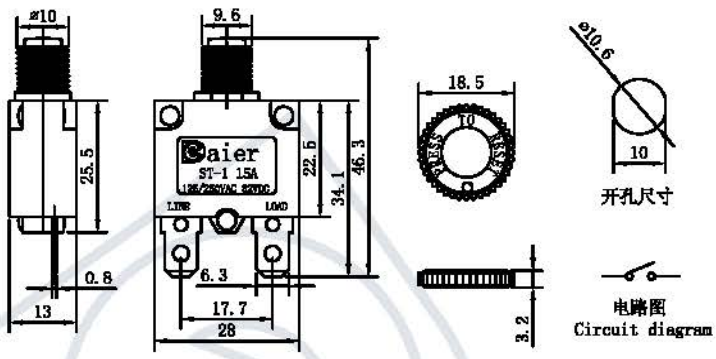

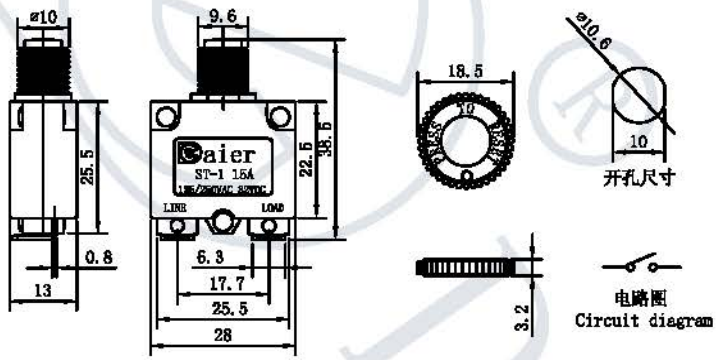

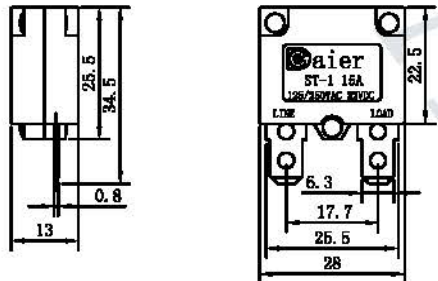

- 1) Working voltage: min. 12V, max. 250V
- 2) Double usage of DC and AC
- 3) Current: 3A, 5A, 7A, 8A, 10A, 13A, 15A, 20A, 25A
- 4) Insulated resistance:  $\geq 100M\Omega$
- 5) Dielectric strength:  $\geq 1500VAC/1min$
- 6) Electrical Life:  $\geq 10,000$  cycles

### ■ 主要技术参数 Main technical parameters

时间—电流特性见下表 Time-current character (see the following table)

试验电流 Experimental current	起始状态 Starting condition	试验时间 Experimental time	预期结果 Expected result
1I <sub>n</sub>	冷态开始 Cold start	1h	不脱扣 Not trip
1.5I <sub>n</sub>	紧接着试验 Followed the experiment	t ≤ 1h	脱扣 trip
2I <sub>n</sub>	冷态开始 Cold start	(t1) 2s ≤ t ≤ 60s (t2)	脱扣 trip
6I <sub>n</sub>	冷态开始 Cold start	(t3) 0.1s ≤ t ≤ 2s (t4)	脱扣 trip
10I <sub>n</sub>	冷态开始 Cold start	(t5) 0.02s ≤ t ≤ 0.5s (t6)	脱扣 trip

■ 安装与外形尺寸 Installation and outline size

<p>ST-1</p>	 <p>开孔尺寸 电路图 Circuit diagram</p>	
<p>ST-1B</p>	 <p>开孔尺寸 电路图 Circuit diagram</p>	
<p>ST-1C</p>	 <p>电路图 Circuit diagram</p>	
<p>防水帽 watertight cap</p>	