



产品描述 Description

赛尔特 17AM 系列为小型化、高性能成本比的电动机热保护器。主要用双金属片来感应电流、温度。当双金属片的温度达到预校准温度时，双金属片立即快速跳脱，断开电路。当外界设备的温度回复到额定工作温度后，17AM 将自动复位，恢复电路供电。

SETsafe | SETfuse 17AM is a miniature device with high performance cost ratio for thermal motor protector. The bimetal disc senses both heat and current from the equipment which 17AM is installed on. When the temperature of the bimetal disc reaches the pre-calibration temperature, the bimetal disc will snap off quickly and break the circuit. When the equipment returns to a normal operating temperature, 17AM will automatically resets allowing power to be restored to the circuit.

特征 Features

- 对电流和温度敏感
- 灵活的设计和广泛的应用
- 符合RoHS & REACH

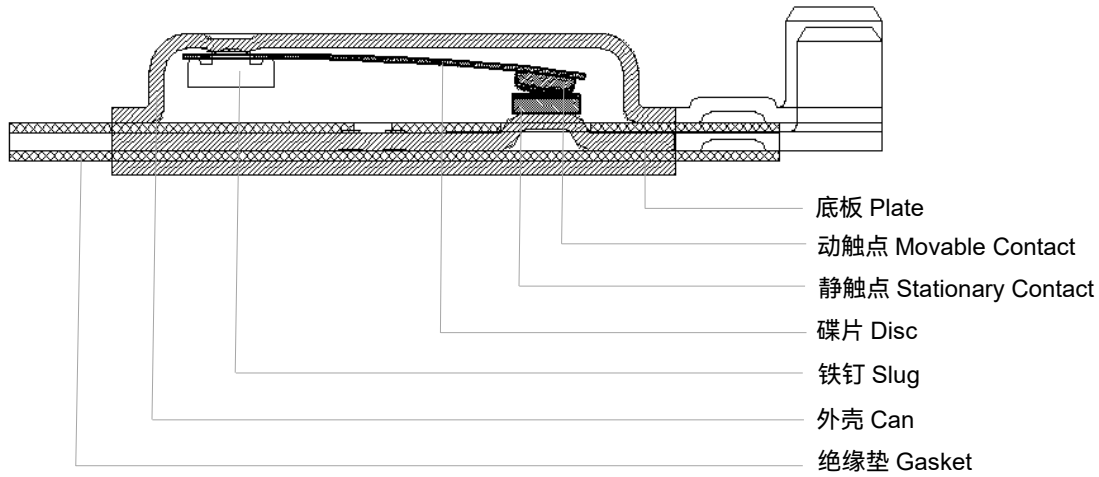
Current and Temperature Sensitivity
Flexible Design and Wide Application
RoHS & REACH Compliance

应用领域 Applications

- 罩极式电机
- 分体式电容电机
- 荧光灯镇流器
- HID 镇流器
- 变压器
- 嵌入式照明设备
- 电池组
- 吸尘器
- 汽车用品电机
- 螺线管
- PCB 板

Shaded Pole Motors
Permanent Split Capacitor Motors
Fluorescent Lighting Ballasts
HID Ballasts
Transformers
Recessed Lighting Fixtures
Battery Packs
Vacuum Cleaners
Automotive Accessory Motors
Solenoids
PCB Boards

结构图 Structure Diagrams



安规认证 Agency Approvals

认证标志 Agency Mark	标准 Standards	认证号 File No.
	UL60730-1 UL60730-2-22	E516554
	UL60730-1 UL60730-2-9	E516553
	UL60730-1 UL60730-2-3	E524531
	CSA E60730-1 CSA E60730-2-22	E516554
	CSA E60730-1 CSA E60730-2-9	E516553
	CSA E60730-1 CSA E60730-2-3	E524531
	EN 60730-1 EN 60730-2-22	R50532384
	EN 60730-1 EN 60730-2-9	R50532346
	EN 60730-1 EN 60730-2-3	R50547608
	GB/T14536.1-2008 GB/T14536.3-2008	CQC22002332056
	GB/T14536.1-2008 GB/T14536.10-2008	CQC22002332055
	GB/T14536.1-2008 GB 14536.4-2008	CQC22002332656

热保护器

Thermal Protector (TMS)

17AM 系列 Serise

产品型号 Part Numbering System

17AM AAA B C - DDDD

引线种类 Lead Wire Type

接引线信息的序列号 Numbers for lead wire information and configuration.

空白为不接引线 Blank means without lead wires.

温度公差 Temperature Tolerance

5: $\pm 5^{\circ}\text{C}$

8: $\pm 8^{\circ}\text{C}$

10: $\pm 10^{\circ}\text{C}$

端子类型 Terminal Type

见表-1 See Table-1

A: 同侧接线端子 Terminal on same side

B: 对侧接线端子 Terminal on opposite side

温度代号 Temperature Code

见表-2 See Table-2

系列 Series

17AM

术语 Glossary

项目 Item	说明 Description
动作温度 Operating Temperature	动作温度 Operating Temperature 热保护器触点闭合（常开型）或断开（常闭型）时所对应的实际温度值。 The actual temperature at which the thermal protector contacts are closed (normal open) or disconnected (normal close) .
复位温度 Recovery Temperature	复位温度 Recovery Temperature 热保护器触点闭合或断开后，其接点产生断开（常开型）或闭合（常闭型）时所对应的实际温度值。 After the thermal protector contact is closed or disconnected, the contact produces the actual temperature value corresponding to the open (normal open) or closed (normal close) contact .
额定电流 Rated Current (I_r)	额定电流 Rated Current (I_r) 允许用于电路并安全断开的最大电流。 The current used to classify a thermal protector, which is the maximum current that Thermal Protector allows to carry and is able to cut off the circuit safely .
额定电压 Rated Voltage (U_r)	额定电压 Rated Voltage (U_r) 允许用于电路并安全断开的最大电压。 The voltage used to classify a thermal protector, which is the maximum voltage that Thermal Protector allows to carry and is able to cut off the circuit safely .
循环寿命 Cycle Life	循环寿命 Cycle Life 双金属元件受温度影响，从原始状态跳转到断开状态（或闭合状态）的周期性变化次数。 The number of periodic changes in the temperature of a bimetal element from its original state to its open (or closed) state .
温度差 Delta Temperature	温度差 Delta Temperature 产品打开温度和保护器放置的环境温度之差。 Is the difference between the zero current calibrated opening temperature and ambient temperature at the protector location .

热保护器

Thermal Protector (TMS)

17AM 系列 Serise

技术参数 Specifications

触电容量 Contact Capacity	寿命 Cycle Life	电压 Rated Voltage (U_r)	电流 Rated Current (I_r)
	循环次数 Cycles	(V)	(A)
	$\geq 10,000$	AC 277	8
	$\geq 10,000$	AC 120	15
	$\geq 10,000$	DC 24	15
接触电阻 Contact Resistance	$\leq 50 \text{ m}\Omega$		
动作温度范围 Operating Temperature	50 ~ 180 °C (每 5 °C 一档) in increments of 5K		
长期工作温度 Long-term Service Temperature	-20 ~ 180 °C		
电气强度 Electric Strength	1700 V.r.m.s. 60 Hz, 1 minute, (端子与外壳间) Terminal to Case		
引线规格	UL3135 18 AWG 600 V, (其他规格可定制) other wire size is also available		

表-1端子类型 Table-1 Terminal Type

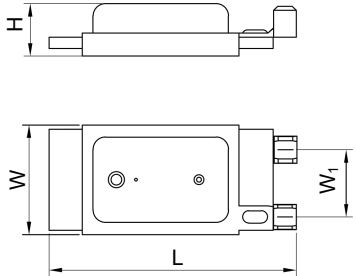
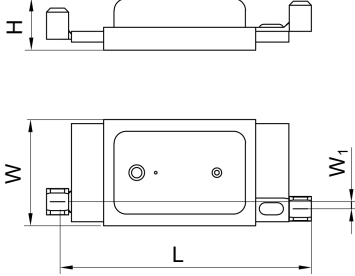
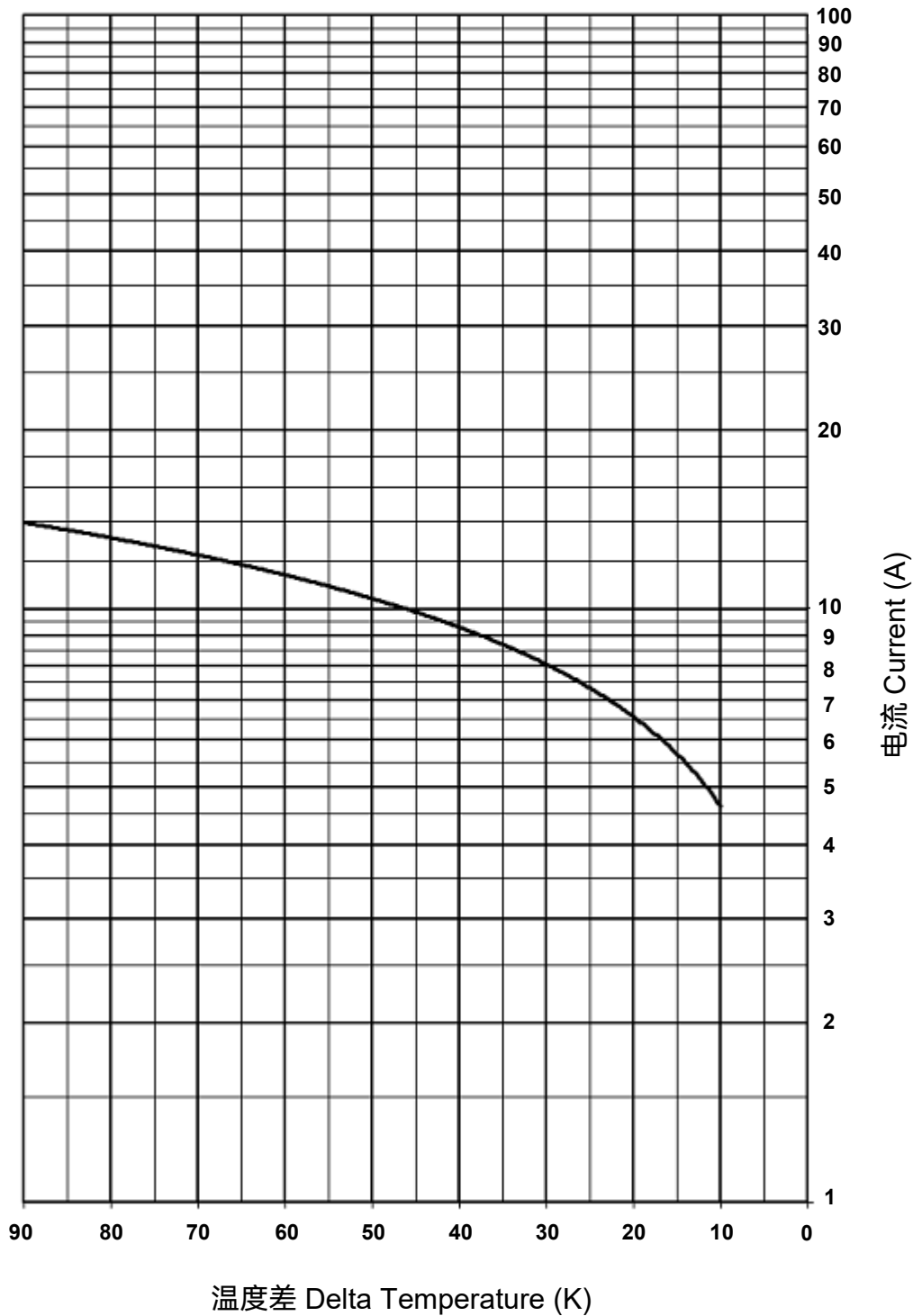
类型 Type	尺寸 Dimensions (mm)	类型 Type	尺寸 Dimensions (mm)																
A		B																	
	<table border="1"> <thead> <tr> <th>L (± 0.5)</th><th>H (± 0.5)</th><th>W (± 0.5)</th><th>W₁ (± 0.2)</th></tr> </thead> <tbody> <tr> <td>23.4</td><td>4.7</td><td>10.6</td><td>6.5</td></tr> </tbody> </table>	L (± 0.5)	H (± 0.5)	W (± 0.5)	W ₁ (± 0.2)	23.4	4.7	10.6	6.5		<table border="1"> <thead> <tr> <th>L (± 0.5)</th><th>H (± 0.5)</th><th>W (± 0.5)</th><th>W₁ (± 0.2)</th></tr> </thead> <tbody> <tr> <td>26.3</td><td>4.7</td><td>10.6</td><td>0.7</td></tr> </tbody> </table>	L (± 0.5)	H (± 0.5)	W (± 0.5)	W ₁ (± 0.2)	26.3	4.7	10.6	0.7
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表-2温度代码 Table-2 Temperature Code

双金属片类型 (Type of Bimetal Disc): 70 ohms / cmf

温度代号 Temperature Code	动作温度 Opening Temperature	温度代号 Temperature Code	动作温度 Opening Temperature
	± 5 (°C)		± 5 (°C)
017	50	031	120
018	55	032	125
019	60	033	130
020	65	034	135
021	70	035	140
022	75	036	145
023	80	037	150
024	85	038	155
025	90	039	160
026	95	040	165
027	100	041	170
028	105	042	175
029	110	043 ¹	180
030	115		
¹ : 此款温度没有认证 ¹ : There is no certification for this type of temperature			

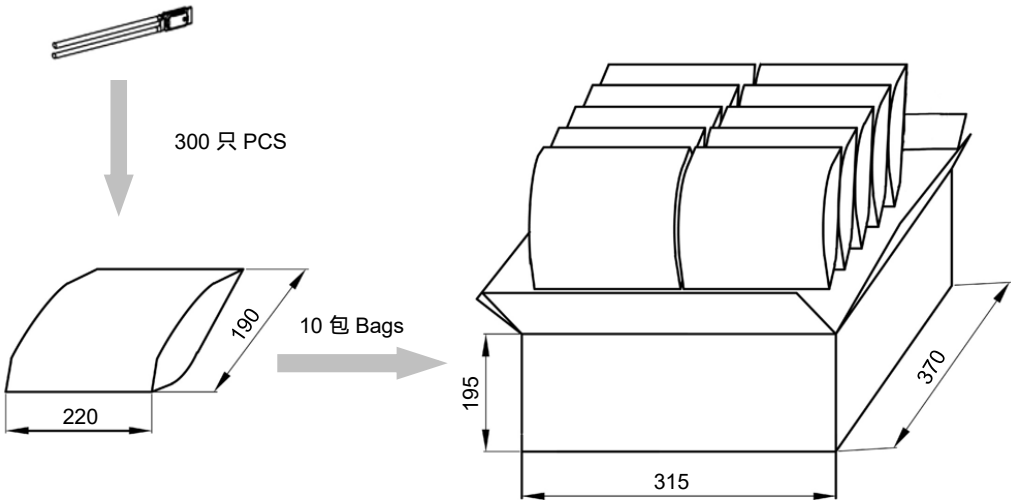
临界跳闸电流和温差曲线 Ultimate Trip Current & Delta Temperature



包装信息 Packaging Information

散装（以表-1 A 型，线长 70 mm 为例）
Bulk (Take Table-1 Type A, wire 70 mm as an example)

项目 Item	PE袋 PE Bag	纸箱 Carton
尺寸 Dimensions (mm)	220 × 190	370 × 315 × 195
数量 Quantity (PCS)	300	3000
备注：包装尺寸及数量仅供参考。 Remark: The dimensions and quantity of packaging is for reference only.		





注意

ATTENTION

TMS

TMS

使用 Usage

1. 这些器件不能作为服务或维修元件使用，应由原设备制造商严格使用。本产品不具有防爆等级，不应用于存在易燃蒸汽或粉尘的任何应用场合。该装置的寿命终止故障可能会导致开路或闭路状态，因此，原始设备制造商必须按照机构要求串联应用寿命终止保护。

These devices are not intended for use as service or repair components. It should be strictly used by Original Equipment Manufacturer. This product is not rated as explosion proof and should not be applied in any application where flammable vapors or dust is present. End of life failure of this device may result in either open or closed circuit condition, and as such, OEMs must apply end of life protection in series, per agency requirements.

2. 用户全权负责本产品在最终产品或系统中的正确设计、应用和功能。用户必须从温度设置、机械和电气寿命周期、电气负载和环境条件等方面评估这些设备在其应用中的适用性。

Users are solely responsible for proper design, application and function of this product in the end product or system. Users must evaluate the suitability of these devices in their application with respect to temperature settings, mechanical and electrical life cycles, electrical loads and environmental conditions.

3. 使用环境：大气压力范围80 kPa ~ 106 kPa，相应的海拔高度为2000米到-500米。

When atmosphere press is from 80 kPa to 106 kPa, the related altitude shall be from 2000 meter to -500 meter.

更换 Replacement

本产品是不可修复的产品。为安全起见，应更换为等效产品，并以相同方式安装。

The product is a non-repairable product. For safety sake, it shall be replaced by an equivalent part and mounted in the same way.

存储 Storage

不要在高温、高湿度或腐蚀性气体环境下储存本产品，以免影响导线的可焊性或接触电阻。本产品应在收到货物后一年内用完。

Do not store the product at high temperature, high humidity or corrosive gas environment, avoid influencing the solder-ability or contact resistance of the lead wires. The product shall be used up within 1 year after your receiving goods.

安装位置 Installation Position

1. 应使本产品尽可能贴近或接近被保护部件。如电机应嵌入定子线圈上端的线圈中，如有条件，应对电机作温度场测定，以确定温度最高点。
The product should be as close to the protected parts as possible. For example, in the motor, the product should be embedded in the upper end of the motor stator coil. If the test conditions allow, the field temperature of the motor should be measured to determine the highest temperature point.
2. 本产品在安装过程中，禁止用重力敲击，安装处不得挤压产品，以免使产品外壳变形，这将严重影响产品的保护性能。
During the installation of the product, it is forbidden to strike heavily, and the product shall not be extruded at the installation position to avoid deformation of the product shell, which will seriously affect the protection performance of the product.

警告 Warnings

材料损坏和外壳发热的危险 Risk of Material Damage and Hot Enclosure

1. 产品的侧面板可能很热，请等产品冷却后再触摸。
The product's side panels may be hot, do not touch till cool down.
2. 请严格按照安装说明进行安装，包括力值的设置。未遵守这些指示可能会导致严重的人身伤害或设备损坏，触电，爆炸或弧闪的危险。
Follow proper mounting instructions including force values. Options failure to follow these instructions can result in serious injury, or equipment damage. Hazard of electric shock, explosion or arch flash.
3. 在安装或使用此产品之前，请断开所有电源。
Disconnect all power before installing or using this product.
4. 在打开电源之前，确认所有连接及必要防护。未遵守这些指示将可能会导致死亡或重伤。
Make sure all the connections and protection measurements before turning on power. Failure to follow these instructions will result in death or serious injury.