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17AMH系列热保护器/马达保护器技术规格书

一、17AMH系列热保护器/马达保护器产品结构特点:

17AMH series thermal/motor protector construction:

1、17AMH系列产品是一种过流过热保护器，其特点是体积小，断开动作快，用于精确的控制(电机马达、 变压器...等电器)的限温、限流保护元件。

17AMH series are overcurrent and thermal protector products,small size and quick response,it has been widely used in precise controlling of temperature limited or current limited components in motor,transfomer etc.

2、17AMH热保护器工作原理：电流通过双金属片及两触点，当电器非正常工作发热高温达到热保护器设定OFF温度值或电流过大超过正常工作电流时，双金属片迅速跳开，切断电路。当电器温度冷却到热保护器复归温度时，双金属片又迅速闭合，电路接通。具有自动复位功能。

17AMH thermal protector products's principle:current following through the bimetal strip and two contacts,when an electric appliance under non normal work status,the temperature or current reach the max limitation for OFF,the bimetal strip will break off immediately and cut off the circuit.When the electric appliance back to normal temperature the bimetal will close immediately and connect the circuit.This thermal protector has automatic reset function.

3、17AMHPTC系列产品是在17AMH自动复位的基础上加载了PTC热敏电阻，使其具有断电保护和延时保护的作用。需要断电才能恢复工作，其保护功能更可靠，更安全。

17AMHPTC series products are added PTC based on 17AMH.The power-off protection and delay protection effect,this type requires cut off the circuit then reset to work status,with reliable and safe characteristic.

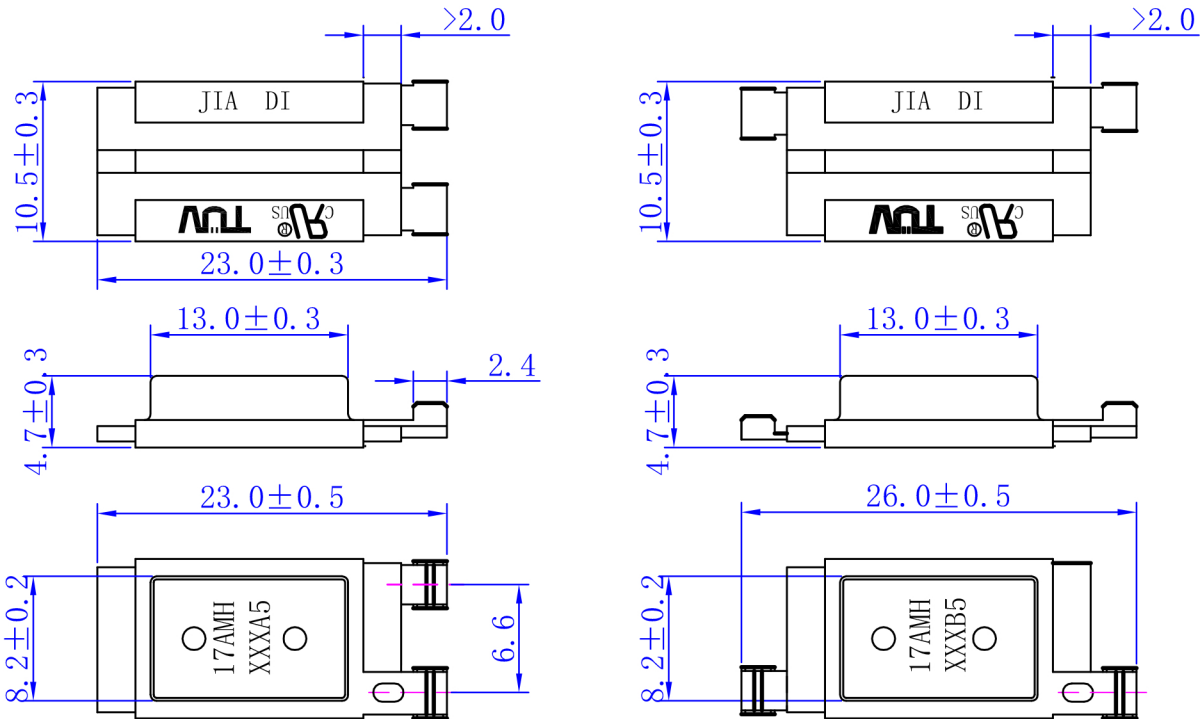
4、17AMHH系列产品是在17AMHPTC手动复位的基础上加载了热补偿电阻发热丝，使其具有更精准的过流断电保护功能，可依据客户的需要设置不同电流和时间的保护要求，同样要断电才能恢复工作，其保护功能更可靠，更安全。

17AMHH series products are added thermal compensation resistor based on 17AMHPTC which original type is manual reset,this provide a precise overcurrent protection.This type could be adjusted based on customer's different current or time requirements,this type also requires cut off the circuit then reset to work status,with reliable and safe characteristic.

二、17AMH系列产品热保护器/马达保护器尺寸规格图:

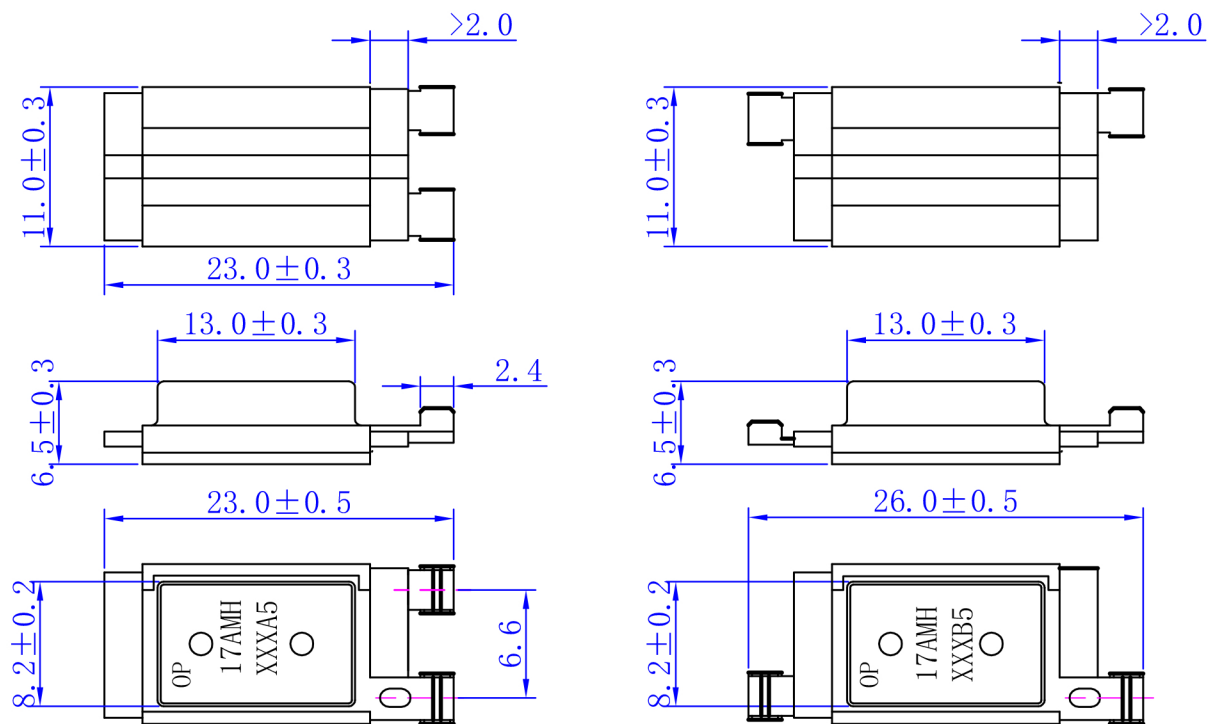
17AMH series thermal/motor protector dimension chart:

1、自动复位系列产品尺寸规格图如下:

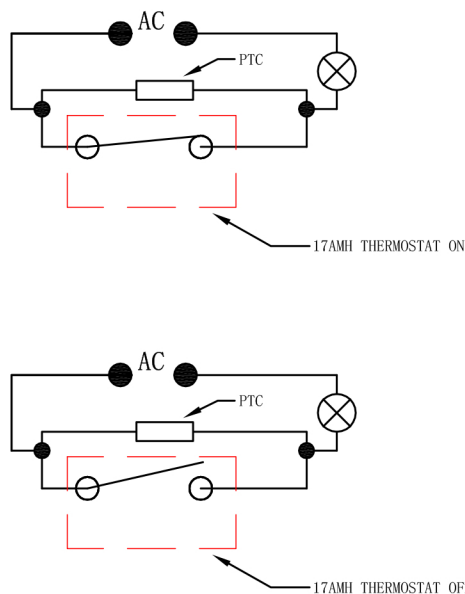


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2、17AMHPTC/H加PTC手动复位系列产品尺寸规格图如下：



三、17AMHPTC/17AMHH系列产品热保护器/马达保护器结构原理图：
17AMHPTC/17AMHH series thermal/motor protector structure chart:



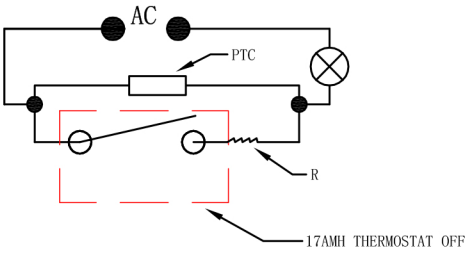
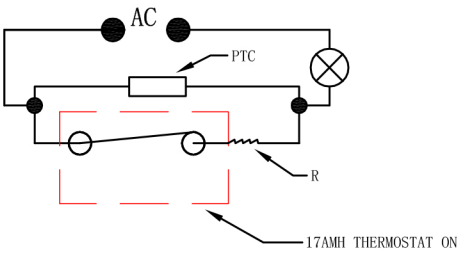
- 1、17AMH热保护器与PTC形成并联电路，当负载正常工作时，PTC不产生高温，17AMH热保护器保持常通。
- 2、当负载异常工作（电流加大或负载高温发热）时，17AMH保护器迅速断开，PTC发热产生高温，并在不断电状态下，持续保持17AMH热保护器常断电，以至保护负载不工作起到保护作用。
- 3、当切断电源后，PTC停止发热，17AMH热保护器回复接通状态后，负载继续正常工作。

1. 17AMH thermal protector and PTC develop into parallel circuit, the PTC temperature will be not increased under normal work load, 17AMH thermal protector under normal open status.

2. When work load unnormal (current or temperature increased), 17AMH thermal protector will open immediately, PTC generate heat and keep circuit closed, keep the 17AMH thermal protector under normal open, then the appliance will be not work and protected.

3. After cut off circuit, PTC stop generate heat, 17AMH thermal protector back to close status, the appliance could be work normally.

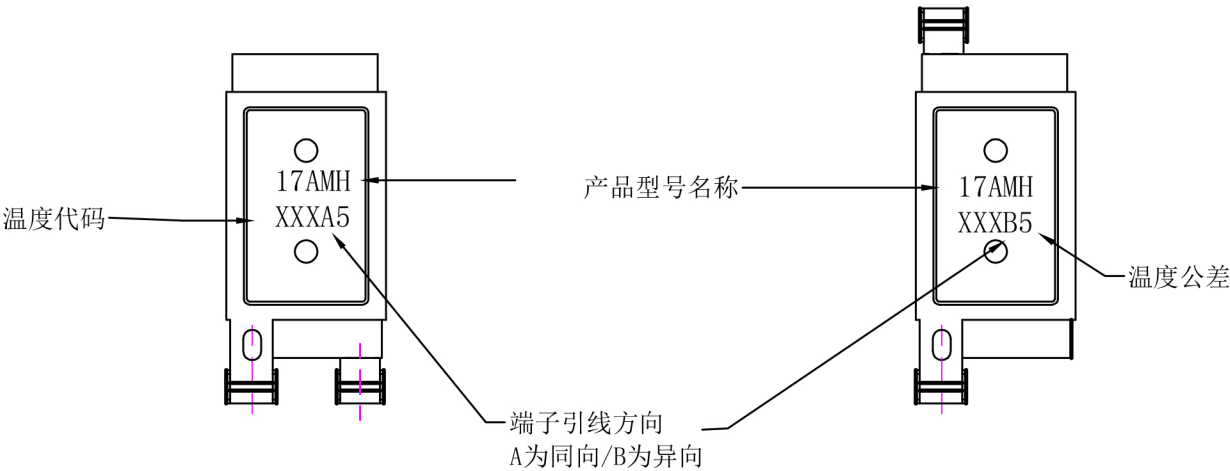
17AMH 系列热保护器/马达保护器技术规格书



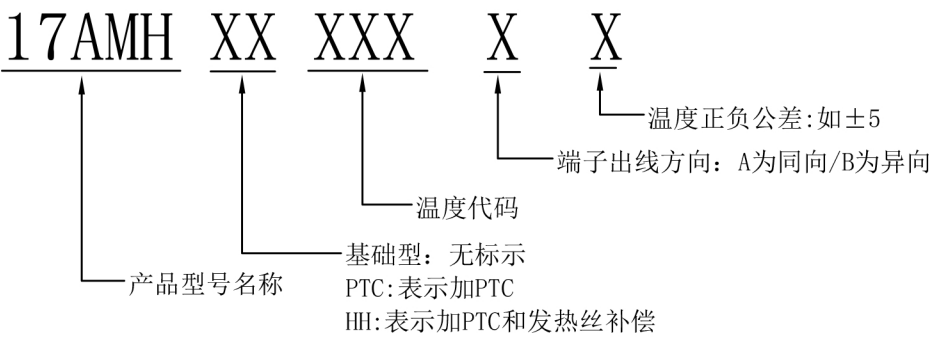
- 1、17AMH热保护器与PTC/电阻丝R形成并联电路，当负载正常工作时，PTC和R不产生高温，17AMH热保护器保持常通。
- 2、当负载异常工作电流增大时，发热丝R能迅速发热传导17AMH保护器迅速断开，PTC发热产生高温，并在不断电状态下，持续保持17AMH热保护器常断电，以至保护负载不工作起到保护作用。
- 3、当切断电源后，PTC停止发热，17AMH热保护器回复接通状态后，负载继续正常工作。
- 4、在17AMH热保护器基础上加发热丝R，能让负载通过电流过大时发热丝迅速产生高温发热，补偿到17AMH热保护器上，具有反应快，时间短的优点。

- 1.17AMH thermal protector and PTC/Resistor R develop into parallel circuit,the PTC/R temperature will be not increased under normal work load,17AMH thermal protector under normal open status.
- 2.When work load unnormal(current or temperature increased),resistor R will generate heat immediately and 17AMH thermal protector will open correspondly,PTC generate heat and keep circuit closed,keep the 17AMH thermal protector under normal open,then the appliance will be not work and protected.
- 3.After cut off circuit,PTC stop generate heat,17AMH thermal protector back to close status,the appliance could be work normally.
- 4.Based on 17AMH thermal protector the Resistor R is added and this provide the function of Resistor R generate heat immediately when current load is increased,this process will compensate the thermal protector and provide this type thermal protector with priority of quick response and short time .

四、17AMH系列热保护器/马达保护型号编码说明：
17AMH series thermal/motor protector model numbering system :



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五、17AMH系列产品热保护器/马达保护器OFF温度代码对照表：
17AMH series thermal/motor protector trip off temperature in code:

温度代码	对应温度值	温度代码	对应温度值
020A5/020B5	65°	032A5/032B5	125°
021A5/021B5	70°	033A5/033B5	130°
022A5/022B5	75°	034A5/034B5	135°
023A5/023B5	80°	035A5/035B5	140°
024A5/024B5	85°	036A5/036B5	145°
025A5/025B5	90°	037A5/037B5	150°
026A5/026B5	95°	038A5/038B5	155°
027A5/027B5	100°	039A5/039B5	160°
028A5/028B5	105°	040A5/040B5	165°
029A5/029B5	110°	041A5/041B5	170°
030A5/030B5	115°	042A5/042B5	175°
031A5/031B5	120°	043A5/043B5	180°

六、17AMH系列产品热保护器/马达保护器性能测试
17AMH series thermal/motor protector test:

- 机械性能要求：1、拉力试验（产品接线端子承受大于或等于50N拉力，铆线不松脱，无断裂或位移。
Terminals should endure more than 50N.and terminals should be no loose and leads have no rupture and slipping.
- 2、跌落试验（产品试样从200mm高度自由落地，温度变化±3°).
- 电气性能要求：1、耐压测试：热保护器在热分断后接线端子之间能承受AC500V, 历时1min无击穿闪烁现象，热保护器端子引线及与绝缘套管之间能承受AC1500V, 历时1min无击穿闪烁现象。
The outgoing lines or terminals of the thermal protuctor and insulated sleeves shall endure voltage of 1500V and duration of 1 min,without arc over.
- 2、接触电阻：常规产品（非高阻或内置附加电阻），接触电阻应不大于50毫欧
Contact resistance:contact resistance of thermal productor should be less than 50mΩ.
- 3、电器容量：125VAC 15A/250VAC 10A 50/60HZ
- 4、触点寿命：250VAC 10A 10,000cycle.
- 5、产品安规认证：UL/CUL : E335123 TUV :104459 0001
CQC:CQC19002223631
ROHS

使用说明要求：1、安装时不得用力挤压温控器变形，感温面为产品温度标示印字面。
2、手动复位系列产品不建议浸漆，以免PTC接触面浸漆绝缘不导电。
3、储存时，包装箱及部品在运输储存过程中均不能受到挤压与破坏，主要防湿防潮，空气相对湿度大于90%。严禁与腐蚀化学物品存放一起或接触。