

规格书 Specification

产品名称 Name: 设备用断路器 Circuit Breaker

型号 P/N: XH-A11

规格 Spec: (3~16) A 125V/250VAC

制作 Made	审核 Check	确认 Approval	送样日期 Sample Date
钟文滔	郑平	王建平	

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1. 适用范围 Applicable Scope:

本标准适用于电压 300V 以下交流电路；海拔 2000 米以下适用。

The standard is suitable for AC circuits below 300V; applicable to 2,000 meters above sea level.

2. 标准及认证 Standard and Certification

执行标准 Execution standard: IEC60934

认证标志 Certification mark: S

3. 产品参数 Parameters:

型号 P/N: XH-A11; 规格 Spec: (3~16)A 125V/250VAC;

过载极数 Pole: 单极 (1P); 脱扣模式 Trip Type: 热脱扣 Thermal trip

操作方式 Operate Type: R 型 R type; 额定限制短路能力 Rated limited short-circuit capacity: 1000A; 额定冲击耐受电压 Rated impulse withstand voltage: 2500V

4. 结构 Structure:

无需开启外壳即能操作复位，有良好的机械强度。You can operate reset without the need to turn on the shell, with good mechanical strength.

5. 绝缘材料应符合耐燃、耐漏电起痕、耐热要求 Insulation materials should meet the requirements of combustion resistance, leakage resistance, heat-resistant, heat-resistant requirements:

耐燃试验 flame resistance test: 960°C 30s 内熄灭; 960°C extinguished within 30s

耐漏电起痕 leakage resistance: 175V 51 滴不击穿; 175V 51 drops no breakdown

耐热试验 heat-resistant: 125°C 压痕直径 < Φ 2mm; 125°C indentation diameter < Φ 2mm

6. 载流零部件 Current-carrying Parts:

应具有良好的机械强度和载流量，载流部件应固定于其支撑表面以防止转动、移动。It should have good mechanical strength and current carrying capacity, and the current carrying parts should be fixed to its supporting surface to prevent rotation and movement.

7. 接线端子 Wiring Terminal:

含铜量至少是 58% 以上的合金, 具有良好的焊接性或连接性。Alloys with a copper content of at least 58% and good weld ability or connectivity.

8. 测试电源线 Test Power Wire:

电源线长度 Wire length: 1~1.2m;

截面积 Cross-sectional: 10A:1mm²; 13A/15A/16A:1.5mm²。

9. 介电强度 Dielectric Strength:

试验电压应采用正弦波形, 频率在 45Hz~65Hz 之间, 同极触点之间 1500V/min 不击穿或闪络;

The test voltage should be sinusoidal waveform, frequency between 45Hz~65Hz, 1500V/min between the same pole contact without breakdown or flashover;

10. 绝缘强度(用 500V 直流电压试验) Insulation Strength (tested with 500V DC voltage):

基本绝缘 $\geq 2M\Omega$; 加强绝缘 $\geq 5M\Omega$ 。

Basic insulation $\geq 2M\Omega$; enhanced insulation $\geq 5M\Omega$.

11. 电气操作能力试验 Electrical Operation Ability Test:

11.1 小过载试验 Small overload test

$U_e / 2 I_n / \cos \phi 0.55 - 0.65$ 、断开时间 20s-80s(根据实际复位时间)、循环操作 50 次。

$U_e / 2 I_n / \cos \phi 0.55 - 0.65$, disconnect 20s -80s (according to actual reset time),

50 times of cycle operation.

11.2 通断能力试验 On-off ability test

$1.05U_e / 6I_n / \cos \phi 0.55 - 0.65$; 断开时间 60s-80s、循环操作 40 次。

$1.05U_e / 6I_n / \cos \phi 0.55 - 0.65$; disconnecting time of 60s -80s, 40 cycle operations.

11.3 试验后 验证 Verification after testing

1) 介电强度试验电压下降至标准值 75% 应符合。

Dielectric strength test voltage drop to the standard value of 75% should meet.

2) 脱扣特性应符合通 $1.8I_n$ 电流, 在 t_1 时间内不应脱扣; 通 $2.2I_n$ 电流, 在 t_2 时间内脱扣。

The trip characteristics should conform to the current of $1.8I_n$, and should not trip within t_1 time; Through $2.2I_n$ current, trip within t_2 time.

12. 温升 Temperature Rise:

环境温度 $23\pm 2^{\circ}\text{C}$ ，试验时间至少 1 小时，达到稳定状态时：

The ambient temperature is $23\pm 2^{\circ}\text{C}$, the test time is at least 1 hour, and the stable state is reached:

接线端子：60K； 操作绝缘件：55K

Terminal: 60K; Operating insulation: 55K

13. 电流—时间特性 Current-Time Characteristics

In	28 天不脱扣 28 days without tripping	
1.1In	1 小时内不脱扣 Do not trip within 1 hour	
1.35In	1 小时内脱扣 Trip within 1 hour	热态 thermal state
3In	$0.9\text{s} \leq t \leq 120\text{s}$	
6In	$0.02\text{s} \leq t \leq 2\text{s}$	

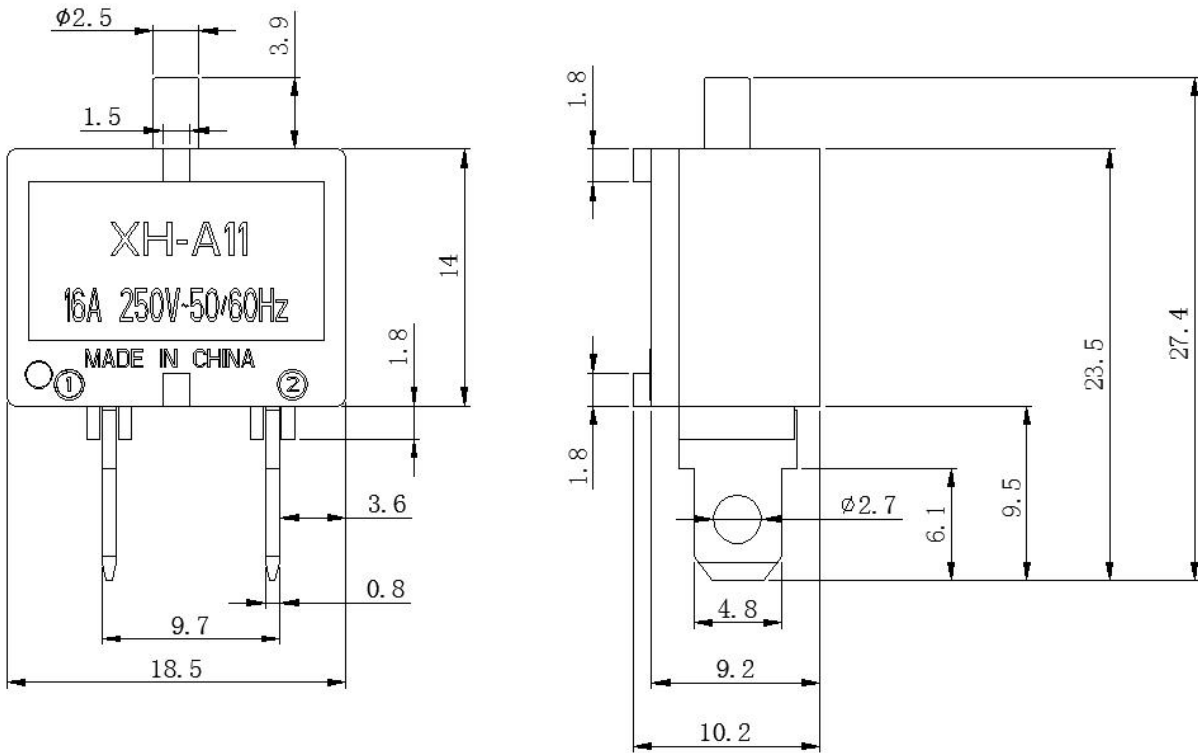
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15. 外观尺寸 Dimension



16. 标志、包装 Marking and Packing

1) 产品标志应清晰可见, 容易辨认。The product marking should be clearly visible and easily recognizable.

2) 包装 Packing

过载保护器应用塑料袋或其它类似的材料包装。

装有过载保护器的包装盒应用干燥的外包装纸箱中。

Overload protectors should be packed in plastic bags or other similar materials.

Packaging boxes with over load protectors should be stored in dry outer packaging cartons.

制作

确认

审核

钟文滔

王建平

郑平

14. 时间-电流特性曲线图 Time-Current Characteristic Diagram

