温控器系列 KSD9700 试验报告

Test report of thermostat KSD9700 series

客户名称 Customer	W.HQ	生产日期 Date:	/
产品型号 Product model	KSD9700	样品数量 Samples quantity:	/pcs
规格 specification	KSD9700-055/5JSB/080A	壳体材料 Shell material:	铁壳
动作温度 Switching temperature	55+/-5℃	导线： Tab:	线型：3135 20#黑色硅胶线 长度：80mm
复位温度 Reset temperature	≥30℃	特殊要求 Special reguest:	全剥 8mm 浸锡

技术说明

Technology of specification

接触电阻 contact Resistance	≤50mΩ
绝缘电阻 Isolation Resistance	DC 500V ≥100MΩ
绝缘耐压 Isolation Test voltage	>AC 1450V/1min
CQC 参数	AC250V 5A 6,000cycle
UL 参数	AC125V 5A 10,000cycle
TUV 参数	AC250V 5A 10,000cycle

测试数据

Test data

NO	动作温度（℃） Switching temperature	复位温度(℃) Reset temperature	接触电阻（mΩ） Resistance contact	耐压 Test voltage	结论 conclusion
1	50~60	≥30	≤50	合格（OK）	合格（OK）
2	50~60	≥30	≤50	合格（OK）	
3	50~60	≥30	≤50	合格（OK）	
4	50~60	≥30	≤50	合格（OK）	
5	50~60	≥30	≤50	合格（OK）	
6	50~60	≥30	≤50	合格（OK）	
7	50~60	≥30	≤50	合格（OK）	
8	50~60	≥30	≤50	合格（OK）	
9	50~60	≥30	≤50	合格（OK）	
10	50~60	≥30	≤50	合格（OK）	

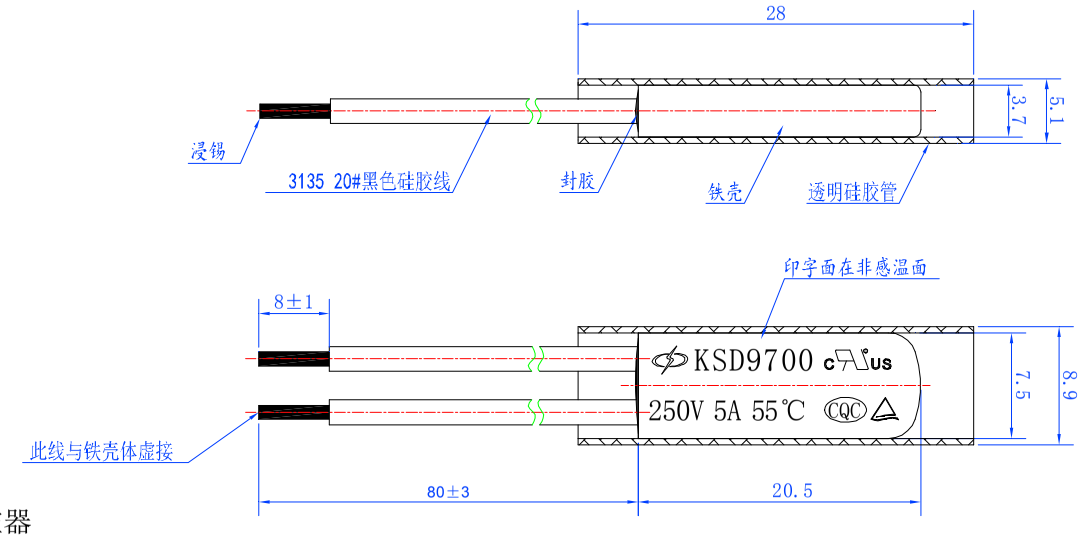
测试设备 Testing Device:

恒温测温桶：Thermostatic temperature measurement barrel;

温度异常时以我方测温为准：It is subject to our test temperature when the temperature anomalies

拟制(Prepared by)：莫艳玲 审核 (Checked by)：刘成斌 审批(Approved by)：涂耀清

产品应用	KSD9700系列



KSD系列技术参数
产品名称：温控器
产品型号：KSD9700系列
产品类型：双金属片突跳式自动复位温控器
电气性能：AC250V 50～60Hz.5A（阻性负载）
动作温度：55+/-5℃
复位温度：≥30℃
常态电气强度：AC1450V 50～60Hz，历时 1 min无击穿、无闪络现象。
常态绝缘电阻：大于100MΩ(DC500兆欧表)
接触电阻:≤50mΩ（引线X长度根据客户需要）
耐热性：安装表面温度不超过使用温度的120%
接点形式：单刀单掷
接点类型：常闭
结构方式：内置式
使用寿命：AC250V 5A （阻性负载）1万次
客户代码：

类 别	签 字	日 期	名称	KSD9700外观图	图 号	XC.WK-CP/K9.01-0382-35	
					数 量	重 量	投 影
设计/绘图	莫艳玲	2025.09.13	料号	KSD9700-055/5JSB/080A			
审 核	刘成斌	2025.09.13	材料	铁壳	比 例	版 本	共 1 页 第 1 页
					2:1	A	
批 准	涂耀清	2025.09.13			旭程电子(深圳)有限公司 XC ELECTRONICS (SHENZHEN)CO.,LTD.		

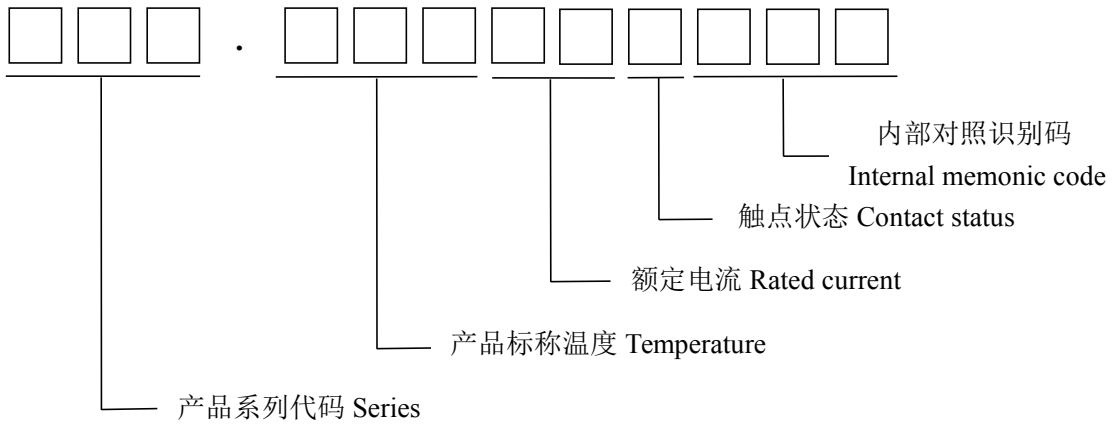
线性公差按GB/T1804-m级执行；
形位公差按GB/T1184-K级执行；

线性基本尺寸分段的极限公差数值	>0~3	>3~6	>6~30	>30~120	>120~400
	±0.1	±0.15	±0.2	±0.3	±0.5

KSD9700 系列产品·技术规格

KSD9700 series · Technology specification

1. 料号命名 Name of material



2. 适用标准 Relavant standard

UL873, CSA C22.2 NO 24-93

EN60730-1 2016

EN60730-2-9:2019

GB/T14536.1-2022

GB/T14536.10-2022

3.电气性能(Electric performance)：

额定电压(Rated Voltage): AC250V 50～60Hz

额定电流(Rated Current): 5A of Resistive Load

开关类型和单极断开（Switch Type and Number of poles）: 1 pole opener

IP-防护等级（Protection Degree）: IP00

动作类型（Action Type）: 2.C

寿命（Operation Cycles）: 10000 cycle

所用绝缘材料 PTI 值(Insulation material PTI value):175V

接触电阻（Resistance of Contact）: ≤50mΩ(初始状态 original state)

绝缘电阻（Resistance of Insulated）: ＞100MΩ（DC500V 常态 normality）

耐压(Test Voltage): ≥ 1450V/1min(常态 nomality)

4. 标志 Marking

在温控器壳体上标示有公司LOGO ,额定电压250V,电流5A,认证标志 ；UL 认证额定电压125V5A(未标识)；KSD9700 动作温度标示清晰、持久，耐用，应而在主体及不可拆部体上。

On the thermostat our company logo ,voltage rating 250V AC, current rating 5A ; approved symbol ; symbol voltage rating 125V AC, current rating 5A （un symbol）;and item no.KSD9700 should be stamped. Switching temperature should be on the main part of the thermostat. The mark should be clear and durable.

5. 环境试验(Ambient test)

5.1 环境应力(Ambient resistance stress)

温控器在-20℃+/-2℃ 24h,+60℃+/-5℃ 4h,塑料件不开裂、变形，温控器仍能正常工作.

Under the situation of -20℃+/-2℃ 24h, +60℃+/-5℃ 4h, the plastic parts should be no breaking and deformation, and the thermostat can work normally.

5.2 潮湿试验(Humidity resistance test)

温控器在相对湿度91～95%温度在20～30（+/-1℃）潮湿箱内处理48h能承受AC 1450V，率50Hz-60Hz 1min不产生闪络或击穿.

In the humid box of relative humidity 91-95%, temperature 20～30（+/-1℃） for 48 hours, the thermostat should endure voltage of 1450V AC. When the frequency is 50Hz-60Hz in one minute, flashover and bumping is not allowed.

6.拉力测试（tension test）

温控器承受20N径向拉力保持1分钟外壳不脱落。

The thermostat can bear 20N static radial tension with the shell maintain 1 minute

do not fall off.

7.最高环境温度(Maximum ambient temperature)

金属外壳温控器在180℃下不发生形变。

The metal thermostat shall not deform below 180℃

塑料外壳温控器在120℃下不发生形变。

The plastic thermostat shall not deform below 120℃

硅胶套管使用环境温度：-40℃~230℃

Silicone tube operating temperature：-40℃~230℃

CERTIFICATE OF COMPLIANCE

Certificate Number 20190711-E251340
Report Reference E251340-20190627
Issue Date 2019-JUNE-11

Issued to: XC ELECTRONICS (SHENZHEN) CORP LTD
BLDG 11
HEAO HENGGANG, JINYUAN INDUSTRY ZONE
SHENZHEN
GUANGDONG 518115 CHINA

This certificate confirms that representative samples of COMPONENT - TEMPERATURE-INDICATING AND - REGULATING EQUIPMENT
Operating Control, Automatic Reset Thermostat, Model KSD9700A, KSD9700.

Have been investigated by UL in accordance with the component requirements in the Standard(s) indicated on this Certificate. UL Recognized components are incomplete in certain constructional features or restricted in performance capabilities and are intended for installation in complete equipment submitted for investigation to UL LLC.

Standard(s) for Safety: See Addendum Page
Additional Information: See the UL Online Certifications Directory at https://iq.ulprospector.com for additional information.

This *Certificate of Compliance* does not provide authorization to apply the UL Recognized Component Mark. Only the UL Follow-Up Services Procedure provides authorization to apply the UL Mark.

Only those products bearing the UL Recognized Component Mark should be considered as being UL Certified and covered under UL's Follow-Up Services.

Look for the UL Recognized Component Mark on the product.

Bruce Mahrenholz, Director North American Certification Program

UL LLC

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CERTIFICATE OF COMPLIANCE

Certificate Number	20190711-E251340
Report Reference	E251340-20190627
Issue Date	2019-JUNE-11

This is to certify that representative samples of the product as specified on this certificate were tested according to the current UL requirements.

UL 60730-1 - Automatic Electrical Controls, Part 1: General Requirements

UL 60730-2-9 - Automatic Electrical Controls, Part 2-9: Particular Requirements for Temperature Sensing Controls

CSA-E60730-1 - Automatic Electrical Controls, Part 1: General Requirements

CSA-E60730-2-9 - Automatic Electrical Controls, Part 2-9: Particular Requirements for Temperature Sensing Controls

Bruce Mahrenholz, Director North American Certification Program

UL LLC

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产品认证证书

证书编号：CQC11002061259

发证日期：2023 年 12 月 28 日
有效期至：2028 年 12 月 27 日

委托人名称及注册地址	旭程电子（深圳）有限公司 深圳市龙岗区横岗镇荷坳金源工业区第 11 栋 1-2 楼
制造商名称及注册地址	旭程电子（深圳）有限公司 深圳市龙岗区横岗镇荷坳金源工业区第 11 栋 1-2 楼
生产企业名称及生产地址	旭程电子（深圳）有限公司 深圳市龙岗区横岗镇荷坳金源工业区第 11 栋 1-2 楼
产品名称和系列、规格、型号	温控器 KSD9700 系列 250VAC 8A /5A 动作温度范围：40℃-150℃ 2.C 型 6000 周期 金属外壳 PTI175 自动复位 污染等级 2 (本系列产品均使用 KSD9700 命名,只是标示的动作温度值不同予以区分)
产品标准和技术要求	GB/T 14536.1-2022;GB/T 14536.10-2022
认证模式	产品型式试验+初次工厂检查+获证后监督

上述产品符合 CQC11-448321-2016 认证规则的要求，特发此证。
本证书为变更证书，证书首次颁发日期：2011 年 08 月 08 日
证书有效期内本证书的有效性依据发证机构的定期监督获得保持。

可通过扫描下方二维码或登录国家认监委网站（www.cnca.gov.cn）查验证书信息

签发：谢肇煦

中国质量认证中心

CHINA QUALITY CERTIFICATION CENTRE 中国质量认证中心

C 0573557

Zertifikat *Certificate*

TÜVRheinland®

Zertifikat Nr. *Certificate No.*
R 50352062

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0001

Ihr Zeichen *Client Reference*	**Unser Zeichen** *Our Reference*	**Ausstellungsdatum** *Date of Issue*
	05-RW-16077125 001	05.08.2016 *(day/mo/yr)*

Genehmigungsinhaber *License Holder*
XC Electronics (Shenzhen)
Corp. Ltd,.
Building 11
Jinyuan Industrial Zone
He'ao Henggang Town
Shenzhen, Guangdong 518115
P.R. China

Fertigungsstätte *Manufacturing Plant*
XC Electronics (Shenzhen)
Corp. Ltd,.
Building 11
Jinyuan Industrial Zone
He'ao Henggang Town
Shenzhen, Guangdong 518115
P.R. China

Prüfzeichen *Test Mark*

TÜVRheinland CERTIFIED
Type Approved
Safety
Regular Production Surveillance
www.tuv.com
ID 1419037701

Geprüft nach *Tested acc. to*
EN 60730-1:2011
EN 60730-2-9:2010

Zertifiziertes Produkt (Geräteidentifikation) *Certified Product (Product Identification)*

Lizenzentgelte - Einheit *License Fee - Unit*

Temperature Control (Thermostat)

Type Designation	:	KSD9700
Trademark	:	XC (Logo)
Rated Voltage	:	AC 250V, 50Hz
Rated Current	:	5A
Operation Cycles	:	10,000(Automatic reset)
Operating Temperature	:	40°C to 120°C(Plastic shell) 40°C to 150°C(Metal shell)
Action Type	:	2.C
Manufacturing deviation	:	±6°C
Drift	:	±6°C
Glow Wire Temperature	:	850°C (only for plastic shell)
Resistance to Tacking	:	PTI175 (only for plastic shell)
Construction	:	Incorporated Control for Class I or II Equipment

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Remark : The labelling requirements acc. to EU Directive 2001/95 have to be observed for distribution within the EEA. The installation has to be carried out according to installation instruction accompanying the products.

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ANLAGE (Appendix): 1

Dem Zertifikat liegt unsere Prüf- und Zertifizierungsordnung zugrunde und es bestätigt die Konformität des Produktes mit den oben genannten Standards und Prüfgrundlagen. Zusätzliche Anforderungen in Ländern, in denen das Produkt in Verkehr gebracht werden soll, müssen zusätzlich betrachtet werden. Die Herstellung des zertifizierten Produktes wird überwacht.
This certificate is based on our Testing and Certification Regulation and states the conformity of the product with the standards and testing requirements as indicated above. Any additional requirements in countries where the product is going to be marketed have to be considered additionally. The manufacturing of the certified product is subject to surveillance.

Zertifizierungsstelle

TÜV Rheinland LGA Products GmbH

G. Yin

TÜV Rheinland LGA Products GmbH, Tillystraße 2, 90431 Nürnberg
Tel.: +49 221 806-1371 e-mail: cert-validity@dc.tuv.com
Fax: +49 221 806-3935 http://www.tuv.com/safety

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Zertifikat *Certificate*

TÜVRheinland®

Zertifikat Nr. *Certificate No.*
R 50352062

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0003

Ihr Zeichen *Client Reference*	**Unser Zeichen** *Our Reference*	**Ausstellungsdatum** *Date of Issue*
	05-xieb-16077125 003	19.10.2023 *(day/mo/yr)*

Genehmigungsinhaber *License Holder*
XC Electronics (Shenzhen)
Corp. Ltd.
Building 11
Jinyuan Industrial Zone
He'ao Henggang Town
518115 Shenzhen Guangdong
P.R. China

Fertigungsstätte *Manufacturing Plant*
XC Electronics (Shenzhen)
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Building 11
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He'ao Henggang Town
518115 Shenzhen Guangdong
P.R. China

Prüfzeichen *Test Mark*

TÜVRheinland® CERTIFIED
Type Approved
Safety
Regular Production
Surveillance
www.tuv.com
ID 1419037701

Geprüft nach *Tested acc. to*
EN 60730-1:2016+A1+A2
EN IEC 60730-2-9:2019+A1+A2

Zertifiziertes Produkt (Geräteidentifikation)
Certified Product (Product Identification)

Lizenzentgelte - Einheit
License Fee - Unit

Temperature Control (Thermostat)

as pages 0001-0002

Change

Test Requirement : see above

Remark : The labelling requirements acc. to EU Directive 2001/95 have to be observed for distribution within the EEA.

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TÜVRheinland LGA Products GmbH Zertifizierungsstelle

Zertifizierungsstelle

Audrey Wang

Audrey Wang

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