

说明书

型号: HRS4H-S-DC12V 继电器(转换型 C)

1. 线圈参数

1.1 额定电压	12VDC
1.2 线圈电阻	400 Ω \pm 10% at 23°C
1.3 额定电流	30mA \pm 10% at 23°C
1.4 吸合电压	8.4VDC Max at 23°C
1.5 释放电压	1.2VDC Min at 23°C
1.6 最大线圈电压	15.6VDC(130%额定电压)
1.7 额定功率	360mW

2. 触点参数

2.1 触点形式	1 Form C(SPDT)
2.2 触点材料	Tri-metal Contact(三复合)
2.3 触点负载	阻性: NO: 10A 250VAC/24VDC NC: 6A 250VAC/24VDC
2.4 最大切换电压	30VDC/277VAC
2.5 最大切换电流	15A
2.6 最大切换功率	2,500VA , 240W
2.7 最小切换电流电压	100mA 5VDC
2.8 接触电阻 (首次)	Max.100m Ω at 6VDC 1A
2.9 寿命	
(1) 电气寿命	额定负载下 50,000 次 (1800 次/小时)
(2) 机械寿命	空载下 10,000,000 次 (18,000 次/小时)

3. 性能

3.1 绝缘电阻	Min.1,000M Ω at 500VDC
3.2 介质耐压(漏电流: 1mA)	
(1) 触点间	750VAC, 1 min , 50/60Hz
(2) 线圈与触点间	1,500VAC, 1 min , 50/60Hz
3.3 吸合时间	Max. 10ms.
3.4 释放时间	Max. 5ms.
3.5 环境温度	-40 to +85°C
3.6 贮存温度	-40 to +85°C

- 3.7 温升
线圈 电阻法，触点施加额定电流10A/6A，110%额定电压激励线圈，温升不超过55k。
- 3.8 冲击
- 3.8.1 强度 1,000m/s², 6ms, 3 shock (X, Y, Z 每个方向)
继电器结构无损坏。
- 3.8.2 稳定性 100m/s², 11ms, 3 shock (X, Y, Z 每个方向)
继电器外观、性能无异常。
- 3.9 振动
- 3.9.1 强度 双振幅 1.5mm, 频率 10~55Hz, 2hs。
继电器结构无损坏。
- 3.9.2 稳定性 双振幅 1.5mm, 频率 10~55Hz, 5min。
继电器外观、性能无异常
- 3.10 端子强度 1kg 力推拉继电器引出端 10 秒。
- 3.11 寒冷 -40±2℃, 2 小时
继电器结构及性能无异常。
- 3.12 干热 85±2℃, 16 小时
继电器结构及性能无异常。
- 3.13 湿热 40±2℃, 90-95%, 48 小时
继电器结构及性能无异常。
绝缘电阻最小 100MΩ
- 3.14 可焊性 焊锡应在浸渍表面完成。
焊锡温度 260℃, 时间 5 秒
- 3.15 耐焊性 当继电器引出端沉浸在 260℃ (时间 10 秒)
或 350℃ (时间 3 秒) 的锡温中继电器结构
及性能无异常。

4 命名

HRS4 H - S - DC12V Ⓒ
a b c d

a: 继电器系列型号 HRS4

b: 额定功率

H 代表 360mW

c: 线圈电压 DC12V

d: 触点形式

Ⓒ 表示触点形式为转换型

5 印字

具体见附件 Y-HRS4-N39

5.1 外壳颜色

黑色

5.2 印字位置

外壳正上方

5.3 印字类型

注塑印字

6 外形尺寸

请见附件 HKE4.520.022

7 认证

UL NO.E164730

TUV NO.R50116136

CSA NO.1063016 (LR 109368)

CQC08002027614

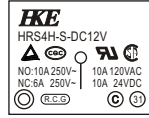


图1 1:1

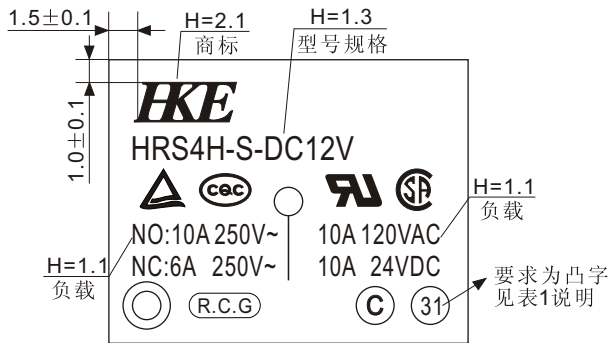


图2 2.5:1

表 1

3	1
3: 三复合触点	1: 生产一部, 2: 生产二部 3: 生产三部, 5: 生产五部 6: 生产六部, 7: 生产七部 8: 生产八部, 9: 生产九部

- 技术要求:
1. 此为HRS4H-S-DC12V-C AgCdO材质的三复合触点产品的注塑外壳印字;
 2. 代码“31”等为凸字;
 3. 线条、字迹应清晰、美观。

产品编号

HRS4

旧底图总号

标记	数量	更改单号	签名	日期
底图总号	设计			
	审核			
	工艺			
日期	签名			
	标准化			
	批准			

HRS4外壳标志图
HRS4 Marking

注塑印字

HKE

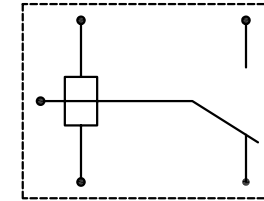
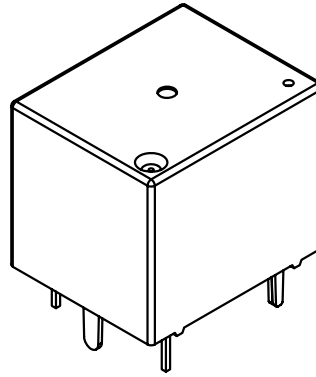
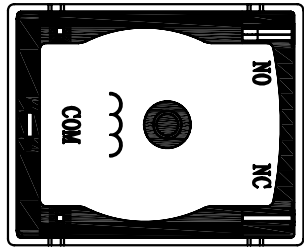
浙江汇港电器有限公司

阶段	标记	质量	比例

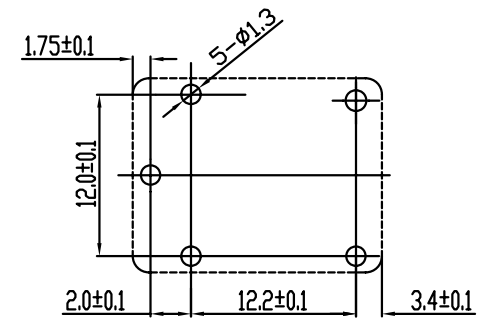
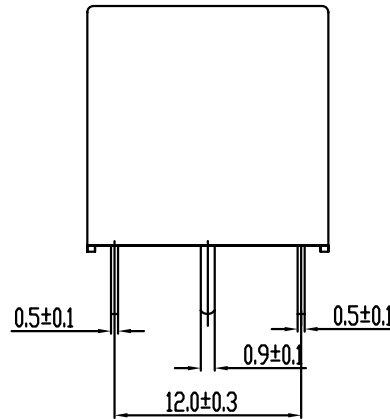
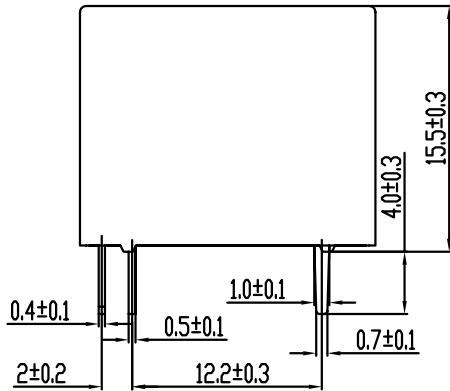
共 页 第 页

Y-HRS4-N39

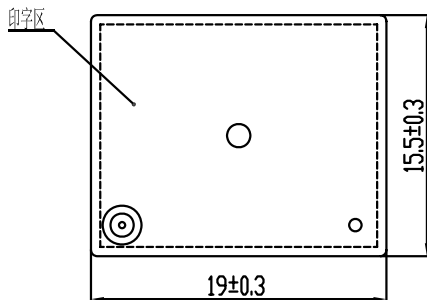
HKE4.520.022



底部接线图



线路板开孔图



产品编号	
HRS4-C	
旧底图总号	
底图总号	
日期	签名

标记	数量	更改单号	签名	日期
设计				
审核				
工艺				
标准化				
批准				

HRS4-C型 外形图 Outline for C Type		HKE		
		浙江汇港电器有限公司		
	阶段	标记	质量	比例
				5:1
共 1 页		第 1 页		
HKE4.520.022				



质量管理体系认证证书

证书编号: 00111Q26542R4M/3302

兹证明
浙江汇港电器有限公司

中国浙江省宁波市鄞州区云龙镇甲村(架山)162号

建立的质量管理体系符合标准:

ISO9001:2008

GB/T 19001-2008

通过认证范围如下:

电磁继电器的设计、组装生产和服务

首次发证日期: 2008年8月15日 本次发证日期: 2011年8月9日 有效期至: 2014年8月8日

在一个监督周期后, 本证书必须与CQC签发的监督审核合格通知书合并使用方可有效。查询证书有效状态请登陆www.cqc.com.cn。



Signed by: Wang Kejiao



中国质量认证中心

中国·北京·南四环西路188号9区 100070
<http://www.cqc.com.cn>

Q 0070390

2009年版

环境管理体系认证证书

证书编号：00109E21663R2M/3302

兹证明

浙江汇港电器有限公司

中国浙江省宁波市鄞州区云龙镇甲村（架山）162号

建立的环境管理体系符合标准：

ISO14001:2004

GB/T 24001-2004

通过认证范围如下：

继电器的开发设计和生产及相关管理活动

首次发证日期：2003年12月3日 本次发证日期：2009年8月25日 有效期至：2012年8月24日

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Signed by: Wang Kejiao



中国质量认证中心

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NRNT2.E164730 Switches, Industrial Control - Component

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Switches, Industrial Control - Component

[See General Information for Switches, Industrial Control - Component](#)

ZHEJIANG HKE RELAY CO LTD

E164730

28 JIA CUN INDUSTRY AREA

NINGBO, ZHEJIANG 315135 CHINA

Relays, Model(s) AC, followed by 3, followed by S, followed by DC, followed by 5V, 6V, 9V, 12V, 18V or 24V, followed by A

Relays, Model(s) CMP6-S or F6-S, followed by DC5V, 6V, 9V, 12V, or 24V, may be followed by P

Relays, Model(s) CMP7 or CMP8, followed by Nil or S, followed by DC5V, DC6V, DC24V, DC9V, DC12V, DC24V, DC48V, followed by A or C

Relays, Model(s) CMP8(AT)-S followed by DC5V, DC6V, DC9V, DC12V, DC24V or DC48V, followed by A

Relays, Model(s) HCP, followed by 1, 2 or 3, followed by blank or S, followed by DC, followed by 5V, 6V, 9V, 12V, 18V, 24V, 36V, 48V, followed by A or C, HRA, may be followed by H, may be followed by S, HRB1-S, followed by DC3V, DC5V, DC6V, DC9V, DC12V or DC24V, HRM, may be followed by 1 or 2, may be followed by H, may be followed by S

Relays, Model(s) HRM, may be followed by 3, may be followed by H or L, may be followed by S, may be followed by DC3-DC48, may be followed by T.

Relays, Model(s) HRM4, may be followed by H, may be followed by S, followed by DC3-DC24 incl

Relays, Model(s) HRM4, may be followed by H, may be followed by S, may be followed by DC3 - DC48, followed by SP, HRMF, followed by DC3V, DC5V, DC6V, DC9V, DC12V, DC18V, DC24V or DC48V

Relays, Model(s) HRS, may be followed by 3 or 4, may be followed by H, may be followed by A, may be followed by S, followed by DC3-D48 incl

Relays, Model(s) HRS1, may be followed by K, may be followed by B or H, may be followed by 3, may be followed by S, followed by DC, followed by XX, where XX is coil voltage, HRS2, may be followed by B or H, may be followed by S

Relays, Model(s) HRS2H, followed by S, followed by 3 VDC through 48 VDC, may be followed B, N or T

Relays, Model(s) HRS3, may be followed by N, may be followed by H, followed by S, followed by DC3V, DC5V, DC6V, DC9V, DC12V, or DC24V, may be followed by A or C

Relays, Model(s) HRS3-S, followed by DC3V, DC5V, DC6V, DC9V, DC12V or DC24V, followed by A or C

Relays, Model(s) HRS3T, may be followed by N, may be followed by H, followed by S, followed by DC, followed by 3V, 5V, 6V, 9V, 12V or 24V, followed by A or C

Relays, Model(s) HRS4, may be followed by T, may be followed by F, may be followed by H, followed by S, followed by DC, followed by 3V, through 60V may be followed by A

Relays, Model(s) HRS4E, followed by by Blank or H; followed by Blank or S; followed by DC3V, DC5V, DC6V, DC9V, DC12V, DC18V, DC24V or DC48V; followed by X or G

Relays, Model(s) L7, may be followed by S, followed by DC6V, DC12V, DC24V, DC48V, DC100V, DC110V, AC6V, AC12V, AC24V, AC48V, AC100V, AC120V, AC220V, AC240V, followed by 1A or 2A, followed by 2P or 2Q


Relays, Model(s) V6, may be followed by S, followed by DC3V, DC5V, DC6V, DC9V, DC12V, DC18V, DC24V or DC48V

Relays, open type, Model(s) AC5, may be followed by N, may be followed by S, followed by DC, followed by 5V, 6V, 9V, 12V, 18V or 24V

Relays, open type, Model(s) F5, may be followed by H, followed by DC, followed by 3V, 5V, 6V, 9V, 12V, 18V, 24V or 48V, followed by P1,P2 or P3

Relays, open type, Model(s) HCP4, may be followed by S, followed by DC, followed by 5V, 6V, 9V, 12V, 18V, 24V, 36V, or 48V, followed by A or C.

Relays, open type, for use in industrial application, Model(s) LH-DC12V-Q-2C

Marking: Company name or tradename "E164730" or trademark  and model designation.
Last Updated on 2010-01-10

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Zertifikat

Certificate



Zertifikat Nr. *Certificate No.*
R 50116136

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0001

Ihr Zeichen <i>Client Reference</i>	Unser Zeichen <i>Our Reference</i>	Ausstellungsdatum	<i>Date of Issue</i> (day/mo/yr)
L.Y.H.	01-ZJ- 15024682 001	15.10.2008	

Genehmigungsinhaber *License Holder*
Zhejiang HKE Relay Co., Ltd.
28 Jiacun Industry Area
Ningbo, Zhejiang 315135
P.R. China

Fertigungsstätte *Manufacturing Plant*
Zhejiang HKE Relay Co., Ltd.
28 Jiacun Industry Area
Ningbo, Zhejiang 315135
P.R. China

Prüfzeichen *Test Mark*

Geprüft nach *Tested acc. to*
EN 61810-1:2004



Zertifiziertes Produkt (Geräteidentifikation)
Certified Product (Product Identification)

Lizenzentgelte - Einheit
License Fee - Unit

Relais (Electromechanical Elementary Relays)

Type Designation	: HRS4x-S-y	5
	x,y = (See Appendix 1)	2
Rated Coil Voltage	: DC 3V; 5V; 6V; 9V; 12V; 24V or 48V	
Rated Coil Power	: 0,45W or 0,36W	
Ambient Temperature	: -30°C to +105°C	
Contact Loads	: Make contact 10A 250VAC Break contact 6A 250VAC	
Electrical Endurance	: 50 000	
Mechanical Endurance	: 500 000	
Type of Interruption	: Micro-Disconnection	
Insulation System	between Coil and Contact: Basic Insulation	

Continued on page 0002

ANLAGE (Appendix): 1

Dem Zertifikat liegt unsere Prüf- und Zertifizierungsordnung zugrunde.
Das Produkt entspricht den o.g. Anforderungen, die Herstellung wird überwacht.
This certificate is based on our Testing and Certification Regulation. The product fulfills above mentioned requirements, the production is subject to surveillance.



Zertifizierungsstelle

Dipl.-Ing. G. Reimann

TÜV Rheinland Product Safety GmbH, Am Grauen Stein, D-51105 Köln
Tel.: (+49/221)8 06 - 13 71 e-mail: cert-validity@de.tuv.com
Fax: (+49/221)8 06 - 39 35 http://www.tuv.com/safety

Zertifikat

Certificate



Zertifikat Nr. *Certificate No.*
R 50116136

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0002

Ihr Zeichen *Client Reference*
L.Y.H.

Unser Zeichen *Our Reference*
01-ZJ- 15024682 001

Ausstellungsdatum
15.10.2008

Date of Issue
(day/mo/yr)

Genehmigungsinhaber *License Holder*
Zhejiang HKE Relay Co., Ltd.
28 Jiacun Industry Area
Ningbo, Zhejiang 315135
P.R. China

Fertigungsstätte *Manufacturing Plant*
Zhejiang HKE Relay Co., Ltd.
28 Jiacun Industry Area
Ningbo, Zhejiang 315135
P.R. China

Prüfzeichen *Test Mark*



Geprüft nach *Tested acc. to*
EN 61810-1:2004

Zertifiziertes Produkt (Geräteidentifikation)
Certified Product (Product Identification)

Lizenzentgelte - Einheit
License Fee - Unit

Relais (Electromechanical Elementary Relays)

Continuation from page 0001

Endurance test in accordance with clause 17 of IEC 60730-1:

Contact Form	: Make contact	Break contact
Rated Voltage	: 250VAC	250VAC
Rated Current	: 10 (2)A	6 (1)A
Number of Automatic Cycles:	50 000	50 000

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

ANLAGE (Appendix): 1

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fulfills above mentioned requirements, the production is subject to surveillance.



Zertifizierungsstelle

Dipl.-Ing. G. Reimann

TÜV Rheinland Product Safety GmbH, Am Grauen Stein, D-51105 Köln
Tel.: (+49/221)8 06 - 13 71 e-mail: cert-validity@de.tuv.com
Fax: (+49/221)8 06 - 39 35 http://www.tuv.com/safety

Zertifikat

Certificate



Zertifikat Nr. *Certificate No.*
R 50116136

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0004

Ihr Zeichen *Client Reference*
L.Y.H.

Unser Zeichen *Our Reference*
01-MN- 15024682 004

Ausstellungsdatum
15.07.2011

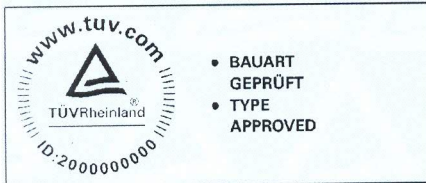
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(day/mo/yr)

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Fertigungsstätte *Manufacturing Plant*
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28 Jiacun Industry Area
Ningbo, Zhejiang 315135
P.R. China

Prüfzeichen *Test Mark*

Geprüft nach *Tested acc. to*
EN 61810-1:2008



Zertifiziertes Produkt (Geräteidentifikation)
Certified Product (Product Identification)

Lizenzentgelte - Einheit
License Fee - Unit

Relais (Electromechanical Elementary Relays)

as page 0001

Change

Test Requirement: See above

Remark:

Appendices 1 and 1.1 issued on 24.04.2009 is replaced by
appendices 1 and 1.1 issued on 14.07.2011 respectively.



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 - Tillystraße 2 - 90431 Nürnberg
Tel.: (+49/221)8 06 - 13 71 e-mail: cert-validity@de.tuv.com
Fax: (+49/221)8 06 - 39 35 http://www.tuv.com/safety

Dipl.-Ing. F. He

Certificate of Compliance

Certificate: 1063016 (LR 109368)

Master Contract: 187233

Project: 1446788

Date Issued: July 10, 2003

Issued to: Zhejiang HKE Relay Co., Ltd.
Jia Cun Industry Area 28
Ningbo, Zhejiang 315135
CHINA

*The products listed below are eligible to bear the CSA Mark shown
with adjacent indicators 'C' and 'US'*



Issued by: Sebastian George, P. Eng.

Signature:

A handwritten signature in black ink, appearing to read 'Sebastian George', is written over a horizontal line.

PRODUCTS

CLASS 3211 07 - INDUSTRIAL CONTROL EQUIPMENT - Miscellaneous Apparatus

CLASS 3211 87 - INDUSTRIAL CONTROL EQUIPMENT - Miscellaneous Apparatus

- Certified to U.S. Standards

1. Relays, Model HRM, with suffixes, open-type with dust cover, 1-pole, single throw with N.O. contacts, rated 10A, 250V ac, Gen; coils 3 - 48V dc.
2. Relays, Model HRM3, with suffixes, open-type with dust cover, 1-pole, single throw with N.O. contacts, rated 10A, 250V ac, Gen; 10A, 30V dc, Res. coils 3 - 48V dc.
3. Relays, Model HRM4, with suffixes, open-type with dust cover, 2-pole, double throw with N.O. and N.C. contacts, rated 5A, 250V ac, Gen; 5A, 30V dc, Res. coils 3 - 48V dc.
4. Relays, Model HRS3, with suffixes, open-type with dust cover, 1-pole, single throw with N.O. contacts, rated 10A, 28V dc, Res. coils 3 - 24V dc.
5. Relays, Model HRS4, with suffixes, open-type with dust cover, 1-pole, single throw with N.O. contacts, rated 10A, 120V ac, Gen; 10A, 24V dc, Res. coils 3 - 48V dc.

APPLICABLE REQUIREMENTS

CAN/CSA-C22.2 No. 14	-	Industrial Control Equipment
UL Std No. 508	-	Industrial Control Panels

The 'C' and 'US' indicators adjacent to the CSA Mark signify that the product has been evaluated to the applicable CSA and ANSI/UL Standards, for use in Canada and the U.S., respectively. This 'US' indicator includes products eligible to bear the 'NRTL' indicator. NRTL, i.e. National Recognized Testing Laboratory, is a designation granted by the U.S. Occupational Safety and Health Administration (OSHA) to laboratories which have been recognized to perform certification to U.S. Standards.



产品认证证书

证书编号: CQC08002027614

申请人名称及地址

浙江汇港电器有限公司
浙江省宁波市鄞州区云龙镇甲村工业区28号

制造商名称及地址

浙江汇港电器有限公司
浙江省宁波市鄞州区云龙镇甲村工业区28号

生产厂名称及地址

浙江汇港电器有限公司 (V002493)
浙江省宁波市鄞州区云龙镇甲村工业区28号

产品名称和系列、规格、型号

继电器

HRS4系列 触点负载: NO/NC 10A/6A 250VAC (HRS4, HRS4T) 10A 250VAC (HRS4F); 线圈: DC3V, DC5V, DC6V, DC9V, DC12V, DC24V, DC48V 0.36W/0.45W; 电气寿命: 2E4周期; 机械寿命: 5E4周期; 环境温度: -40℃~85℃ RT II 系列描述见附件

产品标准和技术要求

GB/T21711.1-2008

认证模式

产品型式试验+初次工厂检查+获证后的监督

上述产品符合CQC标志认证实施规则的要求, 特发此证。

本证书的有效性依据发证机构的定期监督获得保持。

(本证书为变更证书, 证书首次颁发日期: 2008年12月12日)

主任: _____



中国质量认证中心

中国·北京·南四环西路188号9区100070

<http://www.cqc.com.cn>

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产品认证证书

附录:

证书编号: CQC08002027614

共 1 页, 第 1 页

纸号: 10223

型号命名方法:

HRS4 X X - S - X
1 2 3 4 5

1	产品主型号: HRS4
2	外壳类型: 缺省 - 低外壳; T - 高外壳; F - 高耐压
3	线圈功率: 缺省 - 0.45W; H - 0.36W
4	封装形式: S - 密封型
5	线圈电压: DC3V, DC5V, DC6V, DC9V, DC12V, DC24V, DC48V

注: 此附录与证书同时使用时有效。

主任: _____



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