

SPECIFICATION

Type: HRS5H-S-DC12V-C Relay

1. 线圈参数

1.1 额定电压

线圈电阻 1.2

1.3 额定电流

1.4 吸合电压

1.5 释放电压

1.6 最大线圈电压

1.7 额定功耗

2.触点参数

2.1 触点形式

2.2 触点材质

2.3 触点负载

2.4 最大切换电压

2.5 最大切换电流

2.6 最大切换功率

最小切换电流电压 2.7

2.8 接触电阻 (初始值)

电气耐久性 2.9

2.10 机械耐久性

3.其他性能

3.1 绝缘电阻

3.2 介质耐压(漏电流: 1mA)

(1) 触点间

(2) 触点与线圈间

吸合时间 3.3

3.4 释放时间

3.5 工作温度

3.6 储存条件

(1) 储存温度

(2) 环境

12VDC.

 $400Ω \pm 10\%$ at 23°C.

30mA +10% at 23℃.

8.4VDC Max.

1.2VDC Min.

15.6VDC(130%额定电压)

360mW

1 Form C - 转换型

Ag Alloy

阻性: NO: 10A 250VAC

NC: 6A 250VAC

30VDC / 250VAC

10A

2500VA, 280W

100mA 5VDC

Max.100m Ω at 6VDC 1A

常温下阻性负载 100,000 次 (1800 次/小时) 试验后,介质耐压值应不小于初始值的75%。

空载条件下 10,000,000 次(18,000 次/小时)

Min.1000M Ω at 500VDC

1,000VAC, 1 min, 50/60Hz

1,500VAC, 1 min, 50/60Hz

Max. 10 ms.

Max. 10 ms.

-40 to +105℃

-40 to +85℃

贮存于无腐蚀性气体的场所,如硫化氢气体或有盐份的空

贮存于产品不受阳光直射的场所,不受雨淋的场所。



(2) 稳定性

(激励)

3.7	温升 线圈	在 105℃环境温度下,触点施加 10A 负载,线圈用 110%额 定电压进行激励,用电阻法测线圈温升应不超过 50K。		
3.8	端子强度 拉力	继电器结构和性能应无任何异常当用10N的拉力拉继电器焊 锡端子各10s。		
	推力	继电器结构和性能应无任何异常当用2N的力推继电器焊锡端子各10s。		
3.9	可焊性	在锡温为 260±5℃的锡炉中浸渍 5±1s, 端子应有 95%区域被锡覆盖。		
3.10	耐焊接热	在锡温为 260±5℃的锡炉中浸渍 10±1s 后将继电器在常温常湿下恢复 1.5 小时,继电器结构和性能应无任何异常。如果是手工焊锡,必须在 350±10℃的锡温下浸渍 3.5±0.5s。		
3.11	寒冷	继电器在-40±3℃温度下放置 2 小时后将其在常温常湿下恢 复 1.5 小时,继电器结构和性能应无任何异常。		
3.12	干热	继电器在 105±2℃温度下放置 16 小时后将其在常温常湿下恢复 1.5 小时,继电器结构和性能应无任何异常。		
3.13	耐湿热	继电器在 90-95% RH 湿度, 40±2℃温度下放置 48 小时后将 其在常温常湿下恢复 1.5 小时,继电器结构和性能应无任何 异常。 绝缘电阻应不小于 100 M ohms。		
3.14	振动			
2	(1) 强度	继电器在 1.5 mm 双振幅, 10~55~10Hz 的频率下每个方向(X、Y、Z)振动 2h, 共 6h,继电器结构和性能应无任何异常。		
	(2) 稳定性 (激励)	触点打开时间不超过 1ms 或更长时间当继电器在 1.5 mm 双振幅, 10~55~10Hz 的频率下每个方向(X、Y、Z)经受5分钟的振动, 共30分钟。		
3.15	冲击			
	(1) 强度	继电器在 1,000m/s ² 加速度,时间为 6ms 的条件下每个方向 (X、Y、Z) 经受 3 次冲击,共 18 次冲击,继电器结构和性能应无任何异常。		
	(=) (*A.) (1d)	41 1.1 1 3 1 3 - 1 1 1 1 1 1 1 1 1		

次冲击, 共18次冲击。

触点打开时间不超过 1ms 或更长时间当继电器在 100m/s² 加

速度,时间为 11ms 的条件下每个方向(X、Y、Z)经受 3



4 命名:

> HRS5 H - S - DC12V - C a b d С

a: 继电器系列号

b: 线圈功率

H表示线圈功率为 360mW

c: 封胶型式

S: 塑封型

d: 线圈电压 DC12V

e: 触点形式

C表示转换型

印字 5

> 印字图号 Y-HRS5-N2

外壳颜色 黑色 印字类型 激光印字

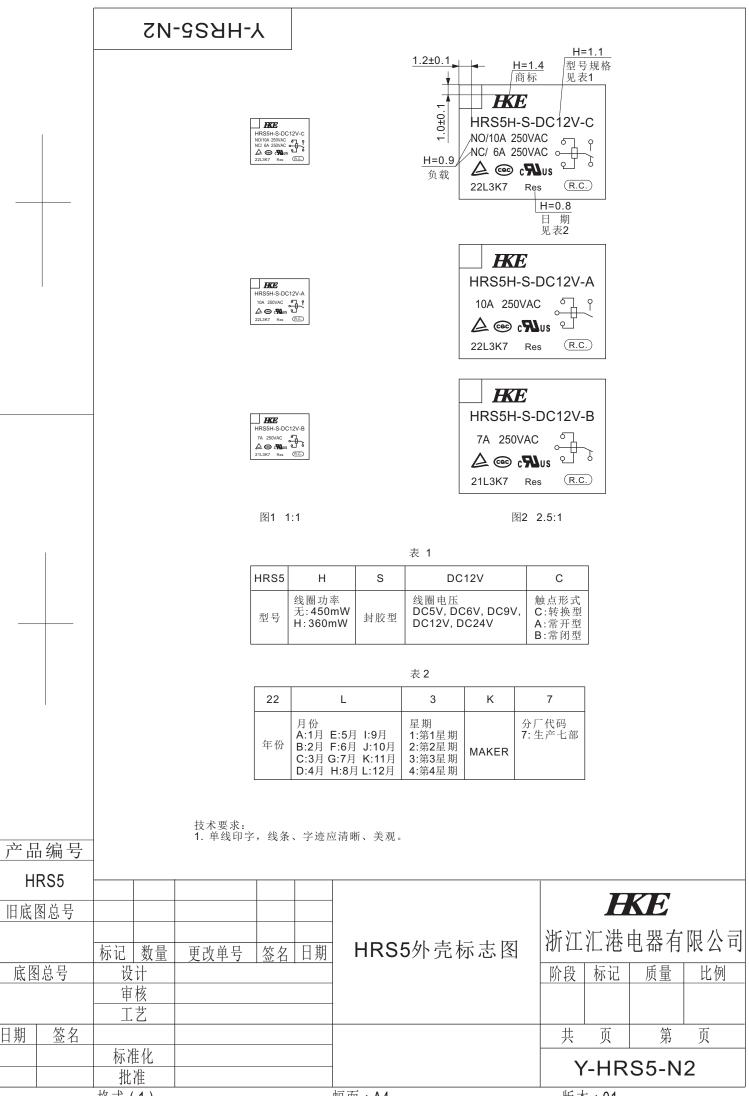
6 外形尺寸, 安装脚位, 接线图 图号. HKE4.520.376F

7 安全认证 UL NO.E164730

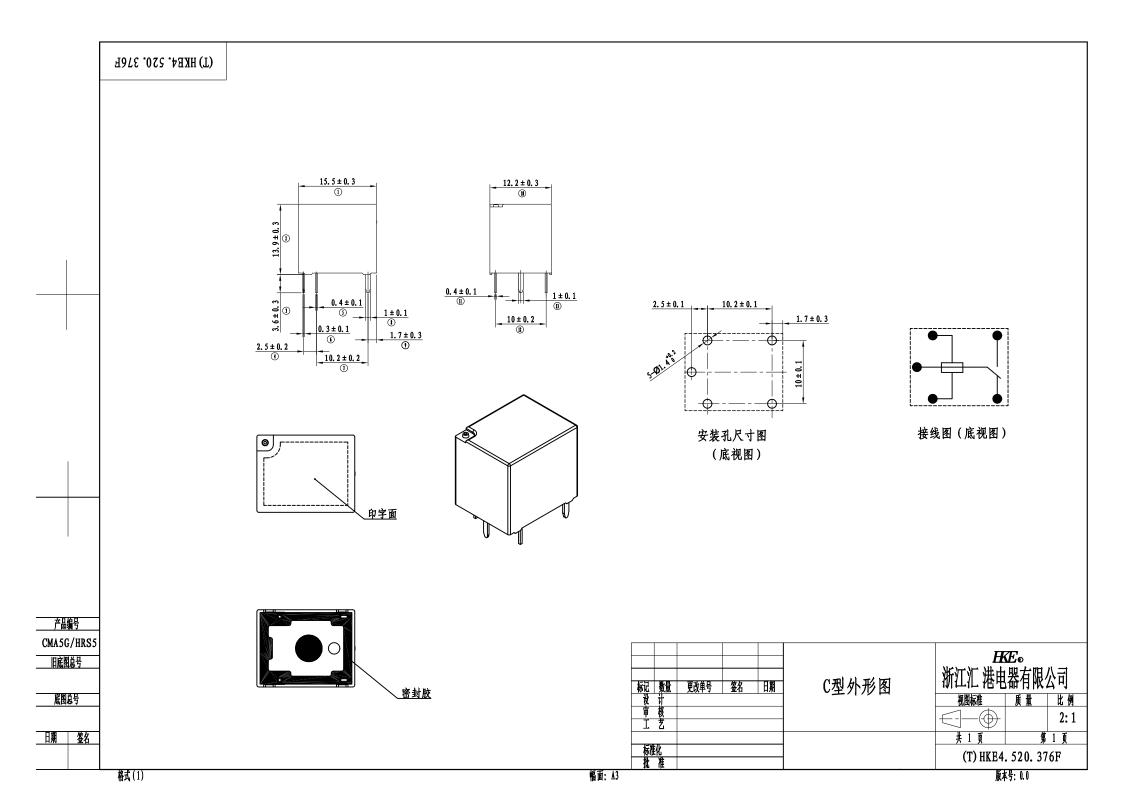
> CQC 21002319677 TUV NO. R 50526745

8 注意事项 请注意不要使继电器掉落或受到强冲击,建议掉落后的继电

器报废,以免影响性能。



格式(1) 幅面:A4 版本:01





质量管理体系认证证书

证书编号: 00123Q33931R8M/3302

兹证明 浙江汇港电器有限公司

统一信用代码:913302127369759197

中国浙江省宁波市鄞州区云龙镇甲村(架山)162号

质量管理体系符合标准: GB/T 19001-2016 / ISO 9001:2015 通过认证范围如下:

电磁继电器的设计, 生产

首次发证日期: 2008年8月15日 本次发证日期: 2023年6月2日 有效期至: 2026年7月2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。 本证书信息可在国家认证认可监督管理委员会公示的网站(www.cnca.gov.cn)上查询











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



环境管理体系认证证书

证书编号: 00123E31939R7M/3302

兹证明

浙江汇港电器有限公司

统一信用代码:913302127369759197

中国浙江省宁波市鄞州区云龙镇甲村(架山)162号

环境管理体系符合标准:

GB/T 24001-2016 / ISO 14001:2015

通过认证范围如下:

电磁继电器的设计、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: 2023年5月30日 有效期至: 2026年6月9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。 本证书信息可在国家认证认可监督管理委员会公示的网站(www.cnca.gov.cn)上查询











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

A 0035415

2022年版



产品认证证书

证书编号: CQC21002319677

发证日期: 2021年11月19日

有效期至: 长期有效

委托人名称

浙江汇港电器有限公司

及注册地址

浙江省宁波市鄞州区云龙镇

制造商名称

浙江汇港电器有限公司

及注册地址

浙江省宁波市鄞州区云龙镇

生产企业名称

浙江汇港电器有限公司

及生产地址

浙江省宁波市鄞州区云龙镇甲村(架山) 162号

产品名称和系列、

继电器

规格、型号

HRS5 系列:触点负载 NO/NC:7A/7A 250VAC, NO/NC:10A/6A 250VAC; 450mW、360mW 线圈电压:DC5V、DC6V、DC9V、DC12V、DC24V, 800mW、640mW 线圈电压:DC5V、DC12V、DC24V; 线圈功率:450mW、360mW、800mW、640mW; 电气寿命:NO 侧、NC 侧分开单独测试,1E5 周期(NO 侧 7A)、5E4 周期(NO 侧 10A)、3E4 周期(NC 侧 7A 或 6A);机械寿命:1E5; 环境温度:-40℃~105℃,RTII 系列命名方式见附件

产品标准和技术要求 GB/T 21711.1-2008

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 CQC11-462155-2010 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: 2021年11月12日 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





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cac)产品认证证书

证书编号: CQC21002319677

第1页 共1页

本证书及附件应同时使用,信息查验说明见证书页

纸号: 515910

命名规则

 $\frac{HRS5GH}{123} - \frac{S}{4} - \frac{x}{5} - \frac{y}{6}$

1. 产品主型号: HRS5

2. 防火要求: 无 - GWFI=850℃防火要求, G - 符合 IEC 60335-1 防火要求

3. 线圈功耗: 无 - 450mW, H-360mW, F-800mW, L-640mW

4. 封装形式: S- 封胶型

5. 线圈电压: DC5V, DC6V, DC9V, DC12V, DC24V(450mW, 360mW) DC5V, DC12V, DC24V(800mW, 640mW)

6. 触点形式: A表示常开型, B表示常闭型, C表示转换型



中国质量认证中心



Zertifikat

Certificate



Zertifikat Nr. Certificate No. R 50526745

Blatt Sheet 0001

Ihr Zeichen Client Reference

Unser Zeichen Our Reference

Ausstellungsdatum

Date of Issue

L.Y.H.

01-LHF-CN21LW9C 001

09.12.2021

(day/mo/yr)

Genehmigungsinhaber License Holder

Zhejiang HKE Relay Co., Ltd.

28 Jiacun Industry Area

Ningbo

315135 Zhejiang

P.R. China

Fertigungsstätte Manufacturing Plant

Zhejiang HKE Relay Co., Ltd.

28 Jiacun Industry Area

Ningbo

315135 Zhejiang

P.R. China

Prüfzeichen Test Mark



Type Approved Safety Regular Production Surveillance

ID 1111247933

Geprüft nach Tested acc. to

EN 61810-1:2015+A1 IEC 61810-1:2015+A1

Zertifiziertes Produkt (Geräteidentifikation) (Product Identification) Certified Product

Lizenzentgelte - Einheit License Fee - Unit

Relay (Electromechanical Elementary Relays)

Type Designation

: HRS5xy-S-DC**V-z

x,y,**,z = (See Appendix 1): 1) DC 5V; 6V; 9V; 12V; 24V

2)DC 5V; 12V; 24V

Rated Coil Power

Rated Coil Voltage

: 1)450mW(y=Blank) or 360mW(y=H)

2)800mW(y=F) or 640mW(y=L)

Ambient Temperature Rated Contact Voltage

: 250VAC

Contact Loads

: NO: 10A 50000cycles;

NO: 7A 100000cycles;

: -40°C to +105°C

NC: 7A 30000cycles; NC: 6A 30000cycles;

Duty factor

: 1s on/9s off

Mechanical Endurance

: 500 000

Type of Interruption

: Micro-Disconnection

Continued on page 0002

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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.

TÜV Rheinland LGA Products GmbH, Tillystraße 2, 90431 Nürnberg

http://www.tuv.com/safety E-mail: markcheck@tuv.com

Fax: +49 221 806-3935



Zertifikat

Certificate



Zertifikat Nr. Certificate No. R 50526745

Blatt Sheet 0002

Ihr Zeichen Client Reference

Unser Zeichen Our Reference

Ausstellungsdatum

Date of Issue

L.Y.H.

01-LHF-CN21LW9C 001

09.12.2021

(day/mo/yr)

Genehmigungsinhaber License Holder

Zhejiang HKE Relay Co., Ltd. 28 Jiacun Industry Area

Ningbo

315135 Zhejiang

P.R. China

Fertigungsstätte Manufacturing Plant

Zhejiang HKE Relay Co., Ltd.

28 Jiacun Industry Area

Ningbo

315135 Zhejiang

P.R. China

Prüfzeichen Test Mark



Regular Production Surveillance

www.tuv.com ID 1111247933

Geprüft nach Tested acc. to

EN 61810-1:2015+A1 IEC 61810-1:2015+A1

Zertifiziertes Produkt (Geräteidentifikation) Certified Product (Product Identification) Lizenzentgelte - Einheit License Fee - Unit

Relay (Electromechanical Elementary Relays)

Continuation from page 0001

Insulation System

between Coil and Contact: Basic Insulation

Remark:

1) NO NC Contact is tested separately

2) Endurance test in accordance with clause 17 of

EN/IEC 60730-1:

Rated Voltage

: 250VAC

Rated Current

: Normal open: 10(1,5)A

Normal closed: 7(1)A

Number of Automatic Cycles: 30 000 Cycles

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.

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TÜV Rheinland LGA Products GmbH, Tillystraße 2, 90431 Nürnberg

http://www.tuv.com/safety E-mail: markcheck@tuv.com

Fax: +49 221 806-3935

Zertifizierung Kenny Shi

Certificate Number UL-CA-2203535-0
Report Reference E164730-20220120

Date 27-Jan-2022

Issued to: ZHEJIANG HKE RELAY CO LTD

28 JIA CUN INDUSTRY AREA NINGBO, ZHEJIANG

315135 China

This is to certify that representative samples of

NRNT8 - Switches, Industrial Control Certified for Canada -

Component

See Addendum Page for Product Designation(s).

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: CSA C22.2 NO. 14-18, 13th Ed., Issue Date: 2018-03-01

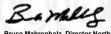
Additional Information: See the UL Online Certifications Directory at

https://ig.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.





Certificate Number UL-CA-2203535-0
Report Reference E164730-20220120

Date 27-Jan-2022

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

Model	Category Description
HRS5, maybe followed by G, maybe followed by H or F or L, followed by S, followed by DC5V thru DC24V,	Industrial Control Switches
followed by A or B or C	



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Certificate Number Report Reference

UL-US-2203464-0 E164730-20220120

Date

27-Jan-2022

Issued to:

ZHEJIANG HKE RELAY CO LTD

28 JIA CUN INDUSTRY AREA NINGBO, ZHEJIANG

315135 China

This is to certify that representative samples of

NRNT2 - Switches, Industrial Control - Component See Addendum Page for Product Designation(s).

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:

UL 508, 18th Ed., Issue Date: 2018-03-30, Revision Date:

2021-07-08

Additional Information:

See the UL Online Certifications Directory at

https://ig.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.

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Look for the UL Recognized Component Mark on the product.



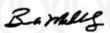


Certificate Number UL-US-2203464-0
Report Reference E164730-20220120

Date 27-Jan-2022

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

Model	Category Description
HRS5, maybe followed by G, maybe followed by H or F or L, followed by S, followed by DC5V thru DC24V, followed by A or B or C	Industrial Control Switches





Bruce Mahrenholz, Director North American Certification Program

File E164730 Project 4790220450.2.1

January 20, 2022

REPORT

On

COMPONENT - SWITCHES, INDUSTRIAL CONTROL

ZHEJIANG HKE RELAY CO LTD Zhejiang 315135, China

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File E164730 Vol. 1 Sec. 26 Page 1 Issued: 2022-01-20 and Report

DESCRIPTION

PRODUCT COVERED:

USR, CNR - Switches, Industrial control, Relays, Cat. No. HRS5, maybe followed by G, maybe_followed by H or F or L, followed by S, followed by DC5V thru DC24V, followed by A or B or C.

GENERAL:

The devices are open type magnetically operated relays for use in non-industrial control applications. The devices are single pole Double throw configuration with normally open contacts& normally closed contacts.

ELECTRICAL RATINGS:

Coil: 5-24 Vdc

Contact rating:

Contact Arrangem ent	Rated Voltage	Rated Current	Load Type	Electrica 1 Operating Cycles	Surrounding Air Temperature (SAT) (°C)
No	250/240Vac	10A	Resistive	50,000	105
		7A	Resistive	100,000	105
NC	250/240Vac	7A/6A	Resistive	30,000	105

File E164730 Vol. 1 Sec. 26 Page 2 Issued: 2022-01-20 and Report

NOMENCLATURE:

HRS5	G	Н	-S	-	DC6V	_	С
I	II	III	IV		V		VI

I. Model name: HRS5

II. Fire resistance:
 Blank - Standard
 G - Inclusion of GWIT Request

III. Coil Power:
Blank:450mW
H:360mW
F:800mW
L:640mW

IV. Enclosure:
 S: sealed Type

V. Coil Voltage: 5 to 24 Vdc

VI. Contact Form:
A:Normal Open
B:Normal Closed
C:Change-Over

TECHNICAL CONSIDERATIONS (NOT FOR FIELD REPRESENTATIVE'S USE):

Use - The devices are intended for use in non-industrial control applications where the suitability of the combination has been determined by UL LLC.

USR indicates these products were investigated under the Standard for UL 508, 18th edition, issued 2018-03-30.

CNR indicates these products were investigated under the Standard for CSA C22.2 No. 14, 13th edition, issued 2018-03.

CONDITIONS OF ACCEPTABILITY -

For use only in complete equipment where the acceptability of the combination is determined by UL LLC. The following items should be evaluated to determine the acceptability for use in the end product.

- 1. The relay terminals are not suitable for field wiring. The relay terminals are to be factory wired only and the suitability of the connection (including spacings between factory connectors) shall be determined for end use application.
- 2. Spacings can not meet industrial requirement, the acceptance should be determined by end use application.
- The devices should be used within its recognized rating as specified above.
- 4. The Cover of the devices have not been evaluated as electrical barrier, the suitability should be determined by the end use application.

CONSTRUCTION DETAILS:

The product shall be constructed in accordance with the following description and as described in this Report.

Spacing - The minimum creepage clearance distance from coil to contact are both $2.7~\mathrm{mm}$ inside, the minimum creepage clearance distance from coil to contact are both $4.8~\mathrm{mm}$ outside.

 $\hbox{\tt Tolerances-Unless specified otherwise, all indicated dimensions are nominal.}$

Corrosion Protection - All parts are of corrosion resistant material or are plated or painted as corrosion protection.

Markings - Molded, die-stamped, paint-stenciled, stamped or etched metal, ink-stamped on cover adhesive backed label (PGDQ2 or PGJI2) secured to the device with recognized Company name and/or file number or trademark and model or catalog number, Electrical ratings(representative).

Markings - Electrical ratings, surrounding air temperature shall be described in the installation manual or catalogue.