



PS No.	PS-011-030
Version	00
Date	2015-8-25

# 继电器规格书

## RELAY SPECIFICATION

品名/Product Description RE-112DM1

零件编号/Part Number

客户名/Customer

### 客户批准/Customer Approval

盖章处/STAMPING AREA

发行批准 / Issued by		
PD	SM	R&D
许忠	余明亮	冯旭强



继电器规格书 Relay Specification	型号 Type	RE-112DM1	产品编号 Part Number	
1 <u>零件清单/PARTS LIST</u>				
No.	零件名 Part	材质 MATERIAL	型号/处理方式 TYPE/TREATMENT	UL FILE No. FLAME CLASS
1	骨架 Bobbin	PBT	5010GN6-30M8X 5010GN6-30M8	E53664 E53664
2	外壳 Case	PBT	RG301 5010GN6-30M8	E171666 E53664
3	基座 Base	PBT	RG301 5010GN6-30M8	E171666 E53664
4	铁芯 Core	铁 Steel	镀镍 Nickel Plated	
5	轭铁 Yoke	铁 Steel	镀镍 Nickel Plated	
6	衔铁 Armature	铁 Steel	镀镍 Nickel Plated	
7	挂钩 Hinge	不锈钢 Stainless Steel		
8	M触点 M Contact	银合金 Ag Alloy		
9	可动触点 C Contact	银合金 Ag Alloy		
10	M端子 M Terminal	铜合金 Cu Alloy		
11	C端子 C Terminal	铜合金 Cu Alloy		
12	可动弹片 S.C.C	铜合金 Cu Alloy		
13	线圈端子 Coil Terminal	铜包钢 Cu covered Steel	镀锡 Solder Coated	
14	线材 Wire	聚氨脂漆包圆铜线 Polyurethane copper wire	3UEW 155(F Class)	E164502 E234867
15	胶水 Sealing Resin	环氧树脂 Epoxy		

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<p>2. <u>性能/SPECIFICATIONS</u></p> <p>2.1 <u>驱动部分/COIL SPECIFICATIONS</u></p> <table border="0"> <tr> <td>2.1.1 额定电压</td> <td>12</td> <td>VDC (在20°C时)</td> <td></td> <td rowspan="17">PS-011-030</td> </tr> <tr> <td>Rated Coil Voltage</td> <td>12</td> <td>VDC at 20°C</td> <td></td> </tr> <tr> <td>2.1.2 额定功率</td> <td>0.2</td> <td>W (在20°C时)</td> <td></td> </tr> <tr> <td>Nominal Power</td> <td>0.2</td> <td>W at 20°C</td> <td></td> </tr> <tr> <td>2.1.3 线圈电阻</td> <td>720</td> <td><math>\Omega \pm 10\%</math> (在20°C时)</td> <td></td> </tr> <tr> <td>Coil Resistance</td> <td>720</td> <td><math>\Omega \pm 10\%</math> (at 20°C)</td> <td></td> </tr> <tr> <td>2.1.4 额定电流</td> <td>16.7</td> <td>mA<math>\pm 10\%</math> (在20°C时)</td> <td></td> </tr> <tr> <td>Nominal Current</td> <td>16.7</td> <td>mA<math>\pm 10\%</math> (at 20°C)</td> <td></td> </tr> <tr> <td>2.1.5 吸合电压</td> <td>9</td> <td>VDC以下 (在20°C时)</td> <td></td> </tr> <tr> <td>Operate Voltage</td> <td>9</td> <td>VDC Max. at 20°C</td> <td></td> </tr> <tr> <td>2.1.6 释放电压</td> <td>0.6</td> <td>VDC以上 (在20°C时)</td> <td></td> </tr> <tr> <td>Release Voltage</td> <td>0.6</td> <td>VDC Min. at 20°C</td> <td></td> </tr> <tr> <td>2.1.7 最大连续施加电压</td> <td>18.6</td> <td>VDC Max. 155%额定电压</td> <td></td> </tr> <tr> <td>Max Power</td> <td>18.6</td> <td>VDC Max. 155% of Nominal</td> <td></td> </tr> </table> <p>2.2 <u>开关部/CONTACT SPECIFICATION</u></p> <table border="0"> <tr> <td>2.2.1 开关类型</td> <td colspan="3">单刀常开型</td> <td rowspan="17">Ver 00</td> </tr> <tr> <td>Contact Configuration</td> <td colspan="3">1 Form A</td> </tr> <tr> <td>2.2.2 接点规格</td> <td>15</td> <td colspan="2">A 250VAC (阻性负载)</td> </tr> <tr> <td>Contact Rating</td> <td>15</td> <td colspan="2">A @250VAC (Resistive)</td> </tr> <tr> <td>2.2.3 接触电阻</td> <td>100</td> <td colspan="2">m<math>\Omega</math> 以下, (初期值, DC 6V/1A条件下)</td> </tr> <tr> <td>Contact Resistance</td> <td>100</td> <td colspan="2">m<math>\Omega</math> Max. @ Initiate, DC 6V/1A</td> </tr> <tr> <td></td> <td>500</td> <td colspan="2">m<math>\Omega</math> 以下, (寿命试验后, DC 6V/1A条件下)</td> </tr> <tr> <td></td> <td>500</td> <td colspan="2">m<math>\Omega</math> Max. @ After Life, DC 6V/1A</td> </tr> <tr> <td>2.2.4 吸合时间</td> <td>20</td> <td colspan="2">ms 以下 (额定电压下)</td> </tr> <tr> <td>Operate Time</td> <td>20</td> <td colspan="2">ms Max. @ Rated Voltage</td> </tr> <tr> <td>2.2.5 释放时间</td> <td>10</td> <td colspan="2">ms 以下 (施加额定电压后断开时)</td> </tr> <tr> <td>Release Time</td> <td>10</td> <td colspan="2">ms Max. @ Rated Voltage</td> </tr> <tr> <td>2.2.6 最大动作频率</td> <td>300</td> <td colspan="2">次/分 (无负载)</td> </tr> <tr> <td>Max. Switching Rate</td> <td>300</td> <td colspan="2">ops./min. (no load).</td> </tr> <tr> <td></td> <td>6</td> <td colspan="2">次/分 (额定负载)</td> </tr> <tr> <td></td> <td>6</td> <td colspan="2">ops./min. (Rated load)</td> </tr> </table>				2.1.1 额定电压	12	VDC (在20°C时)		PS-011-030	Rated Coil Voltage	12	VDC at 20°C		2.1.2 额定功率	0.2	W (在20°C时)		Nominal Power	0.2	W at 20°C		2.1.3 线圈电阻	720	$\Omega \pm 10\%$ (在20°C时)		Coil Resistance	720	$\Omega \pm 10\%$ (at 20°C)		2.1.4 额定电流	16.7	mA $\pm 10\%$ (在20°C时)		Nominal Current	16.7	mA $\pm 10\%$ (at 20°C)		2.1.5 吸合电压	9	VDC以下 (在20°C时)		Operate Voltage	9	VDC Max. at 20°C		2.1.6 释放电压	0.6	VDC以上 (在20°C时)		Release Voltage	0.6	VDC Min. at 20°C		2.1.7 最大连续施加电压	18.6	VDC Max. 155%额定电压		Max Power	18.6	VDC Max. 155% of Nominal		2.2.1 开关类型	单刀常开型			Ver 00	Contact Configuration	1 Form A			2.2.2 接点规格	15	A 250VAC (阻性负载)		Contact Rating	15	A @250VAC (Resistive)		2.2.3 接触电阻	100	m $\Omega$ 以下, (初期值, DC 6V/1A条件下)		Contact Resistance	100	m $\Omega$ Max. @ Initiate, DC 6V/1A			500	m $\Omega$ 以下, (寿命试验后, DC 6V/1A条件下)			500	m $\Omega$ Max. @ After Life, DC 6V/1A		2.2.4 吸合时间	20	ms 以下 (额定电压下)		Operate Time	20	ms Max. @ Rated Voltage		2.2.5 释放时间	10	ms 以下 (施加额定电压后断开时)		Release Time	10	ms Max. @ Rated Voltage		2.2.6 最大动作频率	300	次/分 (无负载)		Max. Switching Rate	300	ops./min. (no load).			6	次/分 (额定负载)			6	ops./min. (Rated load)	
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<b>2.3 特性/GENERAL SPECIFICATION</b>						PS-011-030
2.3.1 绝缘电阻 Insulation Resistance		1000 MΩ以上 (500VDC)	1000 MΩ Min@500VDC			Ver 00
2.3.2 介质耐压 Dielectric Strength		1000 VAC/分钟(接点间)	2000 VAC/分钟(线圈/接点间)			
		1000 VAC@50/60Hz 1 min.(Between Open Contacts)	2000 VAC@50/60Hz 1 min.(Between Coil and Contacts)			
2.3.3 电气寿命 Electrical Life		1X10 <sup>5</sup> 次以上 (15A AC250V额定阻性负载条件下)	1X10 <sup>5</sup> Cycle Min. @15A AC250V Rate Load			
2.3.4 机械寿命 Mechanical Life		1X10 <sup>6</sup> 次以上 (无负载)	1X10 <sup>6</sup> Cycle Min. @no load			
2.3.5 使用环境温度 Temperature		-40~105 °C (无凝结时)	-40~105 °C @no condensation			
2.3.6 使用环境湿度 Humidity		20~85% RH (无凝结时)	20~85% RH @no condensation			
2.3.7 抗振动 Vibration	耐久	10~55 Hz, 双振幅 1.5mm	Mechanical 10 to 55 Hz, 1.5mm double amplitude			
	误动作	10~55 Hz, 双振幅1.5mm	Operational 10 to 55 Hz, 1.5mm double amplitude			
2.3.8 抗冲击 Shock	耐久	980 m/s <sup>2</sup> Min (约100G)	Mechanical 980 m/s <sup>2</sup> Min (100G approximately)			
	误动作	98 m/s <sup>2</sup> Min (约10G)	Operational 98 m/s <sup>2</sup> Min (10G approximately)			
2.3.9 重量 Weight		9 克	9 g			
2.3.10 焊锡条件 Solder ability		5s @ 260°C (波峰焊)	5s @ 260°C (wave soldering)			
<b>2.4 端子性能/TERMINAL CHARACTERISTICS</b>						
2.4.1 端子强度 Terminals strength		5牛/10秒, 任意方向静态压力, 无异常, 但端子弯曲可以	5N 10s, There shall be no abnormalities.			
		(The curving of the terminal shall be acceptable)				
2.4.2 可焊性 Terminal solderbility		260±5°C 5s, 端子头部3mm部分90%以上的面积有锡覆盖	260±5°C 5s, In Case of lead lead free solder,			
		(无铅焊锡)	90% of the dipped portion shall be solderd.			
2.4.3 耐热性 Soldering Heat Resistance		10s 260°C或3s 350°C,端子头部3mm浸入锡中, 无异常发生	10s @ 260°C or 3s @ 350°C ,There shall be no abnormalities.			
		(wave soldering)				

继电器规格书 Relay Specification	型号 TYPE	RE-112DM1	产品编号 Part Number	PS No.:
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2.5 安全规格/SAFETY REQUIREMENTS

2.5.1 UL规格认定 (UL & C-UL)  
UL (UL & C-UL)

档案号: E345228  
File No.:



2.5.2 CQC标志认证  
CQC

证书编号: CQC12002086474  
Certificate No.:

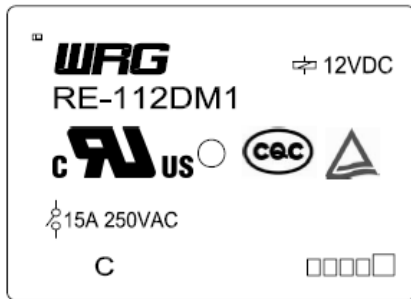


2.5.3 TUV规格认定  
TUV

证书号 R 50250866  
Certificate No.:



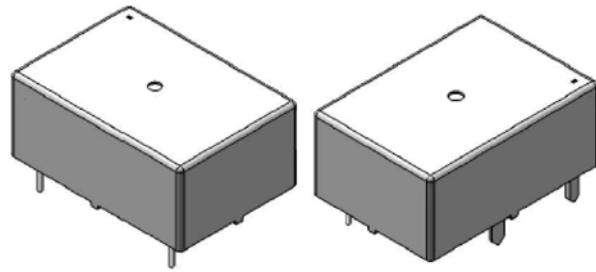
3. 捺印图/Mark Layout



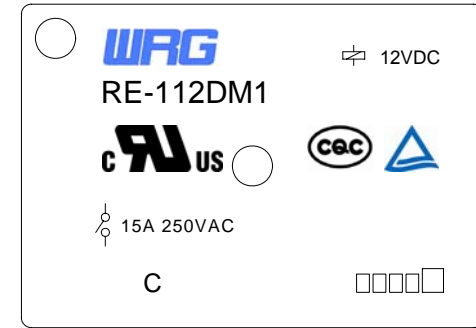
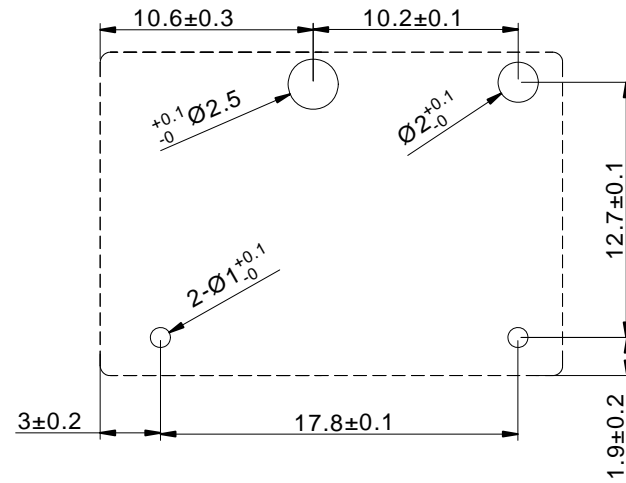
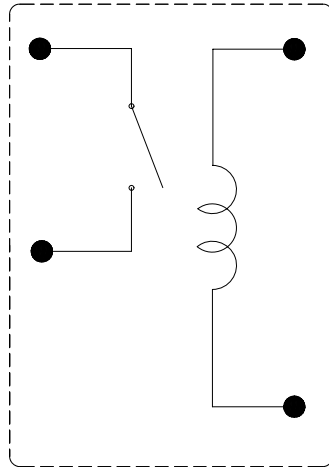
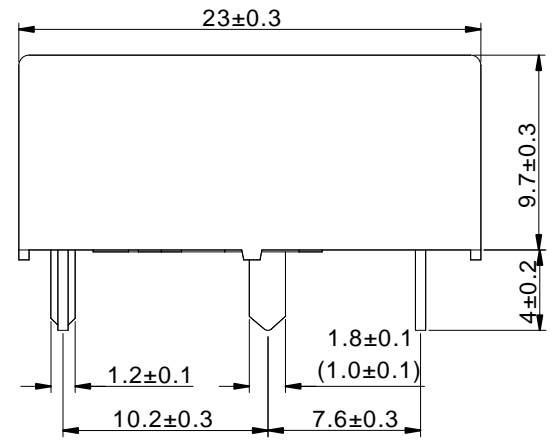
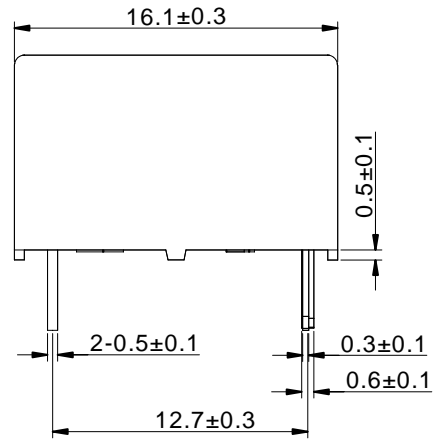
注:  
仅供参考.  
For reference only.

结束/<END>

PS-011-030  
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首版制图日期	承认	检图	制图
2015.08.28			刘勇强
作图日期			
2015.08.28			
型号	版本	名称	
RE	V1.0	RE 外观图	
比例	页数	图号	
4:1	1/1	U-011-04	

外观图尺寸公差 (mm)		外观图端子脚公差 (mm) (端子脚预焊前尺寸)	PCB板孔距/孔径公差 (mm)	
<1	±0.1		孔距	孔径
1-5	±0.2	±0.1	±0.1	+0.1
>5	±0.3			

