



陕西电子信息集团

Shaanxi Electronic Information Group

陕西群力电工有限责任公司

Shaanxi Qunli Electric Co., Ltd.

产品规格确认书

Specification for Approval

客户名称 Customer:			
产品名称 Product Name: <u>功率继电器 Power Relay</u>			
产品型号 Product Model: <u>JQC-3FB-S/005-1H11</u>			
发行日期 Date: <u>2025 年 1 月 20 日</u>			
有效期 Period of Validity: <u>二年 Two Years</u>			
版本 Version: <u>1</u>			
群力电工审批签字 Signature by Qunli			客户签字或盖章 Stamp or signature by customer
批准 Approved	审核 Check	拟制 Make	负责人 By:
赵俊恺	刘新刚	侯京琼	日期 Date:

地址: 陕西省宝鸡市陈仓区群力路 1 号

电话 Tel: (0917) -6293729 6293993

传真 Fax: (0917) -6293729



产品规格书

客户 Customer:

1. 品名:

Type Model:

- 1.1 种类:

Kinds:

功率继电器

Power relay
- 1.2 型号:

Type:

JQC-3FB-S/005-1H11
- 1.3 外形尺寸:

Outline:

19mm×15.3mm×15.3mm
- 1.4 触点形式

Contact Arrangement:

1 组常开

1 FormA
- 1.5 触点材料

Contact Material:

银合金

Silver Alloy

2. 线圈参数:

Coil Rating:

- 2.1 额定电压

Rated Voltage:

5Vd.c.
- 2.2 线圈电阻

Coil Resistance:

70×(1±10%)Ω
- 2.3 额定功耗

Normal Operating Power:

0.36W

Coil: 0.36W
- 2.4 最大允许线圈电压

Max. Allowable Coil Voltage:

5.5Vd.c.

表 1 规格参数 Table 1: Coil date

规格 序号 Type No.	额定电压 (Vd.c.) Rated Voltage (Vd.c)	动作电压 Vd.c.(max) Operate Voltage (Vd.c)	释放电压 Vd.c.(min) Release Voltage (Vd.c)
005	5	3.5	0.5

3. 触点参数

Contact Specification

3.1 触点额定负载: 10A 277Va.c
Contact Rating

3.2 最大切换电流: 10A
Max. Contact Current:

3.3 最大切换电压: 277Va.c
Max. Contact Voltage:

3.4 接触电阻:
Contact Resistance: 100mΩ Max.

4. 性能

Performance

4.1 动作时间: $\leq 10\text{ms}$
Operate Time
释放时间: $\leq 5\text{ms}$
Release Time

4.2 寿命
Life

4.2.1 电耐久性: 5×10^4 次, 动作频率为 30 次/分钟
Electrical Endurance: Operating frequency 30 ops/min

4.2.2 机械耐久性: 1×10^6 次, 无负载, 动作频率为 300 次/分钟
Mechanical Endurance: No load at operating frequency of 300 ops/min

4.3 介质耐压
Dielectric Strength

4.3.1 断开触点间: 750VAC (50Hz 1min)
Between open contacts:

4.3.2 触点与线圈间: 1500VAC (50Hz 1min)
Between coil to open contacts:

4.4 绝缘电阻
Insulation Resistance

4.4.1 断开触点间: 100MΩ (500Vd.c.)
Between open contacts:

4.4.2 触点与线圈间: Between coil to open contacts:	100M Ω (500Vd.c.)
4.5 振动 Vibration:	10~55Hz, 双振幅 1.5mm, 继电器外观、结构和性能不应有异常。 10Hz to 55Hz, Double amplitude 1.5mm, It shall be no abnormalities in appearance, construction and performance.
4.6 冲击 Shock	
稳定性: Malfunction:	98m/s ² (10g), 三个相互垂直轴线的每一个方向 6 次, 闭合回路的断开或断开回路的闭合时间应不超过 1ms。 98m/s ² (10g), 6 shocks (each direction of X, Y, Z), No opening of any closed contact circuit or no closing of any opened contact circuit shall exceed 1ms.
4.7 引出脚强度: Terminal Strength:	在垂直于引出脚方向上施加 2.5N 的拉力 10S, 继电器应无异常 (引出脚微弯可以接受)。 At push in direction the terminal can endure 2.5N force for 10s, It shall be no Abnormalities. (a little curving of the terminals shall be acceptable)
4.8 耐焊接热: Soldering Heat Resistance:	(260 $\pm$ 5) $^{\circ}$ C, (5 $\pm$ 1) s, 继电器应无异常。 There shall be no Abnormalities.
4.9 焊接性能: Soldering Ability:	(250 $\pm$ 5) $^{\circ}$ C, (3 $\pm$ 0.5) s, 引出端被浸锡部分应有 80%以上连续覆盖一层锡层。 80% of the dipped portion shall be soldered.
4.10 耐温性 Temperature Resistance	
4.10.1 耐热: Heat Resistance:	85 $^{\circ}$ C温度中放置 2h, 恢复常温后, 继电器的结构及性能应无异常。 Must be free from any abnormality in both the construction and characteristics after the relay is lift in a temperature of 85 $^{\circ}$ C for 2 hours and then in room temperature
4.10.2 耐寒 Cold Resistance:	Must be free from any abnormality in both the construction
-40 $^{\circ}$ C温度中放置 2h, 恢复常温后, 继电器的结构及性能应无异常。	and characteristics after the relay is lift in a temperature of

-40°C for 2 hours and then in
room temperature

5. 产品标识

Marking

5.1 外壳颜色: 黑色
Case Color: Black

5.2 印字位置: 顶面
Marking Position: Top

6. 使用条件

Operating Condition

6.1 温度: -40°C~85°C
Temperature:

6.2 湿度: 35%~85%RH
Humidity:

7. 储存条件

Storage Condition

7.1 温度: 0°C~40°C
Temperature:

7.2 湿度: 20%~80%RH
Humidity:

7.3 环境: Environment:

7.3.1 产品储存场地不能有腐蚀性气体。
Store in locations where the product is not exposed to
corrosive gas

7.3.2 储存中应避免阳光直照产品。
Keep product is not exposed to the direct ray of the sun.

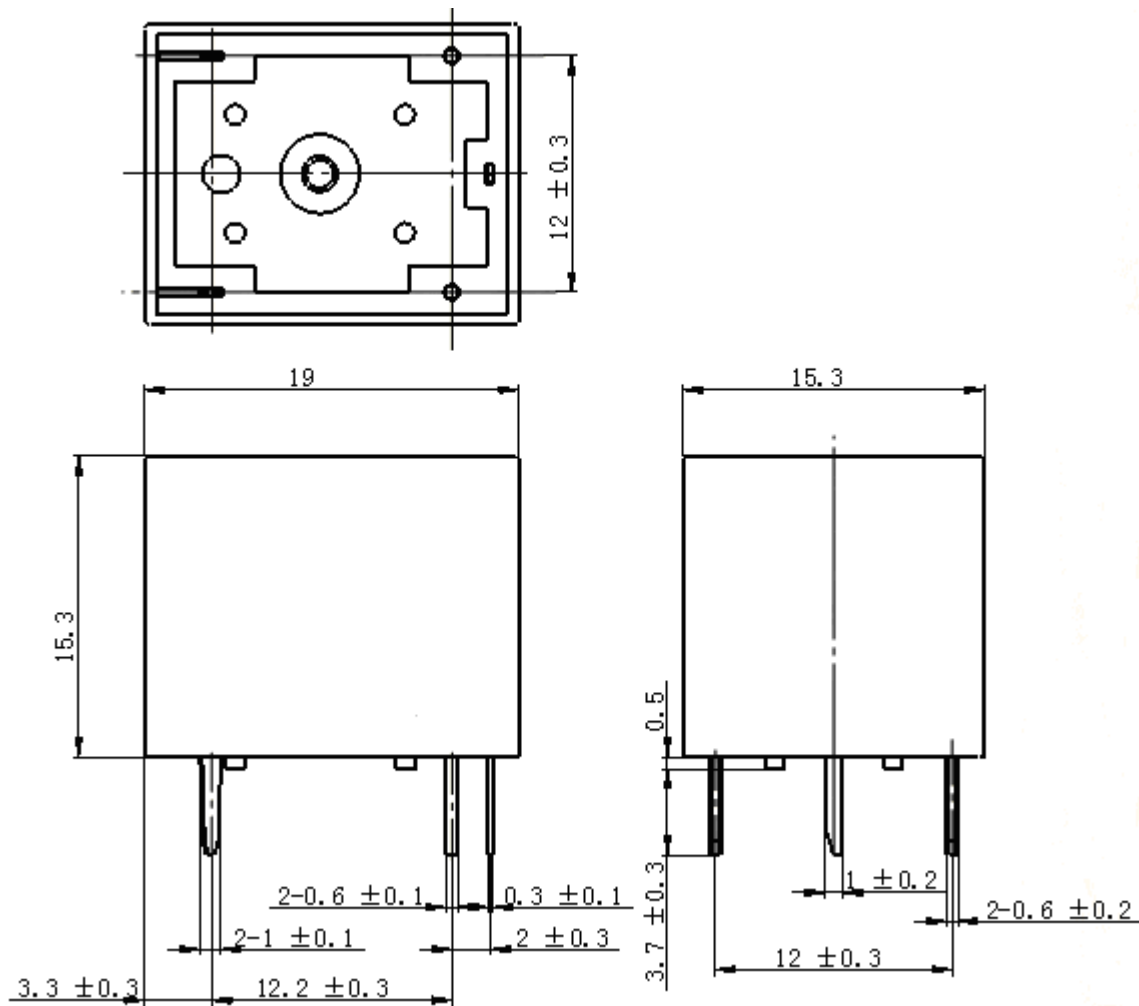
8. 产品结构

Configuration

8.1 外形图:

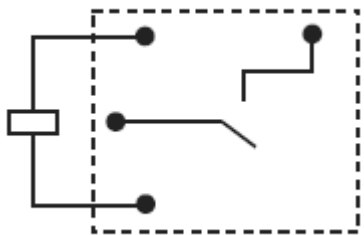


Outline Schematic:



8.2 接线图:

Wiring Diagram:



8.3 外形尺寸及公差:

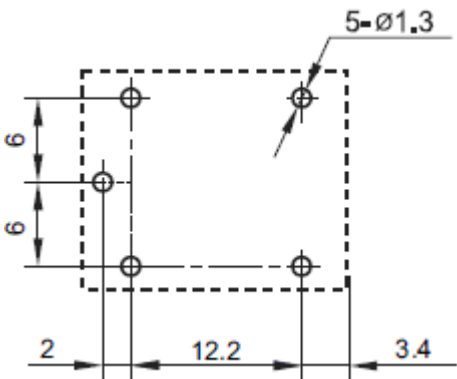
Outline Dimensions and Tolerance:

Outline dimensions hadn't specified tolerance:

8.3.1 产品外形尺寸未注明尺寸公差:

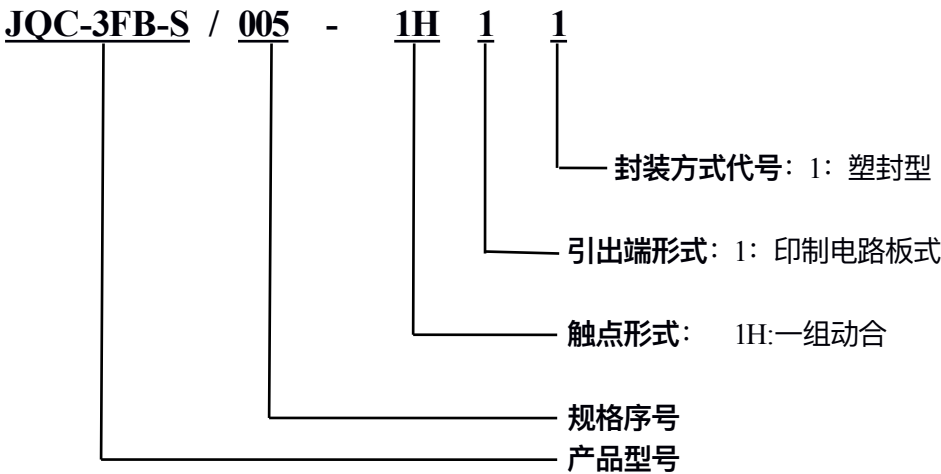


外形尺寸 $\leq 1\text{mm}$, 公差为 $\pm 0.2\text{mm}$	外形尺寸 $\geq 5\text{mm}$, 公差为 $\pm 0.5\text{mm}$; Outline Dimensions $\leq 1\text{mm}$, Tolerance $\pm 0.2\text{mm}$ Outline Dimensions $1\sim 5\text{mm}$, Tolerance $\pm 0.3\text{mm}$ Outline Dimensions $\geq 5\text{mm}$, Tolerance $\pm 0.5\text{mm}$
外形尺寸在 $1\sim 5\text{mm}$ 之间时, 公差为 $\pm 0.3\text{mm}$	
8.3.2 PC 板未注尺寸公差:	$\pm 0.1\text{mm}$
PC board dimensions hadn't specified tolerance:	



9. 订货标记示例

Ordering Information



10. 其它

Others

- 10.1 环保措施: 产品符合 RoHS REACH 要求。
Environmental Protection: Products are all RoHS REACH compliant.
- 10.2 产品符合 IEC61810-1:2003 附录 D 灼热丝试验要求 (通过条件: 1、火焰或灼热丝在移开灼热丝之后的 2s 内熄灭 2、滴落物没有引起绢纸起燃)。
Products are IEC61810-1:2003 appendix D GWEPT compliant.
- 10.3 避免在强磁场条件下使用继电器, 外界强磁场会造成继电器动作和释放等参数发生变化。
To avoid using relays under strong magnetic field because it will change the parameters of relay such as pull-in and drop-out voltage.

10.4 为了保持继电器的性能，请注意不要使继电器掉落或受到强冲击。掉落后的继电器建议不再使用。

To maintain the performances of relays , please do not make the relay drop or be shocked strongly。Suggest that the relays dropped not be used.