



规格书

SPECIFICATION

CUSTOMER NAME	客户名称:	
CUSTOMER NO.	客户编号:	
SERIES	系 列:	电源开关
MODEL NO.	型 号:	XB-KCD5 series
DRAWING NO.	图 形 号:	Rocker switch

If specification of this product meets your request, please confirm all the items of it and return to us with signature and stamp, it will be basis of our production and record. Thanks your cooperation in advance!

若此产品规格符合贵司要求，敬请确认此规格书内所有项目
并签名和盖章后回传给我司，以作我司产品制作之
依据和存档之用，多谢合作！

EXAMINE & APPROVAL 审批

APPROVE 接受	NOT APPROVE 不接受
SIGNATURE 签署 STAMP盖章 DATE日期	

PREPARED BY.制表人	CHECKED BY.校对	APPROVED BY.审核	APPROVAL BY.批准
研发部 戴海明 2022. 06. 08	品质部 黄自清 2022. 06. 08	工程部 庞军 2022. 06. 08	总经办 吴量 2022. 06. 08

东莞市溪榜电子有限公司

Dong guan Xi Bang Electronics Co., Ltd
地址: 广东省东莞市黄江镇合路工业区
Address:He Lu Industrial Zone, Huangjiang Town
,Dongguan City, Guangdong Province
Tel: (0769)82055138/82056828
Fax:(0769)83663452

邮箱: admin@alspr.com switch@alspr.com
<http://www.alspr.cn/> <http://www.alspr.com/>

Dong Guan XB ElectronicsCo., Ltd

AccountNumber: 705540238
BankName: CitibankN.A.,HongKongBranch
Country/Region:Hong Kong
BankCode:006
BankAddress: 3GardenRoad,Central,Hong Kong
SWIFT/BIC: CITIHKHX (CITIHKHXXXX*If11charactersare
required)
MAIL: HK@ALPSR.CN XB@ALPSR.CN XB@ALPSR.COM
Quality core! Afterburner for Made in China!

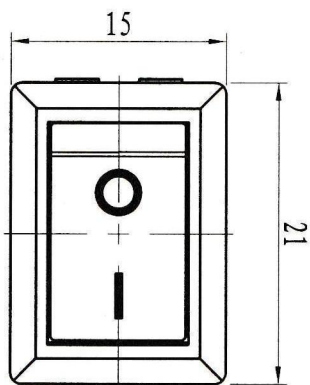
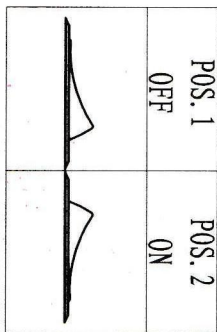
A

B

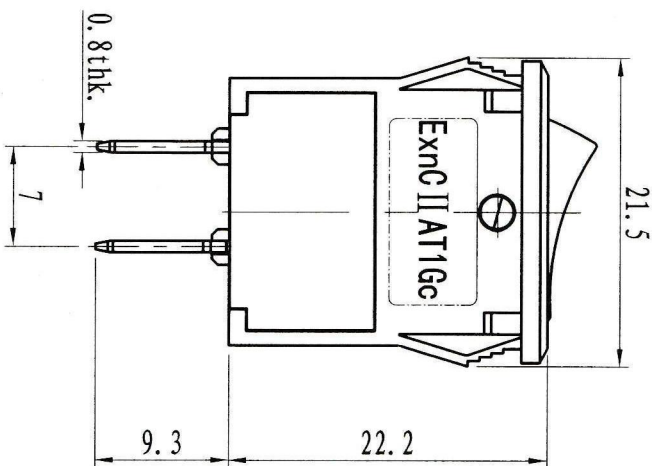
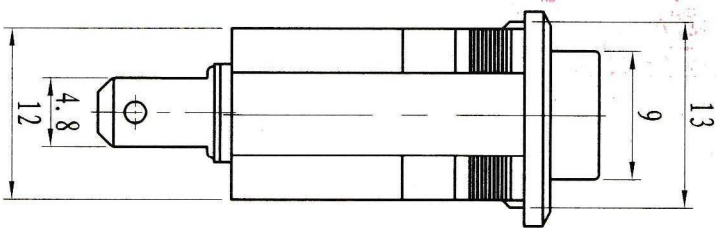
C

D

电气原理图:



XB-KCD5
6A 250VAC



技术要求:

1. 电参数: 6A 250VAC 10000cycles;
2. 接触电阻: $\leq 50m\Omega$;
3. 绝缘电阻: $\geq 100M\Omega$;
4. 介电强度: 端子-端子1500VAC/10mA/5S;
端子-按钮3000VAC/10mA/5S;

5. 操作力: 4-7N;
6. 工作温度: $-25^{\circ}\text{C} \sim 85^{\circ}\text{C}$;
7. 未标注公差按以下执行:
 $x. \pm 0.30$ $x. \pm 0.20$ $.xx \pm 0.10$ $\angle \pm 2^{\circ}$ 。

东莞市溪榜电子有限公司

标记	处数	说明或更改文件号	签名	日期	单位	比例	图幅	产品类型	防爆开关
设计	Rev	版本	01		mm	2:1	A4	产品类型	
Design	Rev	版本	01		mm	2:1	A4	Product Type	
审核	Mark	阶段标记			图幅	Scale	Product Model	产品型号	XB-KCD5
Verify	Mark	阶段标记			Size	Scale	Product Model	产品型号	XB-KCD5
批准	Date	日期	2021.4.29		页码	1/1	图号	DWG No	
Approve	Date	日期	2021.4.29		Sheet	1/1	DWG No		

A

B

C

D

Products model 产品型号: XB-KCD5	TITLE 标题: PRODUCT SPECIFICATIONS 产品规格书	Page 页数 1/4
-------------------------------------	---	--------------------

1. General 总则

1.1 Scope 范围 This specification is applied to Switches used for electronic equipment.

这规格适应于使用在电器设备的 防爆开关.

1.2 Operating temperature range 操作环境温度 -25~+85℃

1.3 Test conditions 测试条件 Unless otherwise specified, the atmospheric conditions for making measurements and tests are as follows. 除另有规定外, 测量和测试的大气条件如下:

1.3.1 Ambient temperature 环境温度: 15-35℃;

1.3.2 Relative humidity 相对湿度: 45-85%

1.3.3 Air pressure 气压: 86-106 kPa (860-1060 mbar)

1.4 Should any doubt arise in judgement, tests shall be conducted at the following conditions. 在判断时出现争议, 就照下列条件测试

1.4.1 Ambient temperature 环境温度: 20±2℃

1.4.2 Relative humidity 相对湿度: 60-70%

1.4.3 Air pressure 气压: 86-106 kPa (860-1060 mbar)

2. Appearance, construction and dimensions 外观、结构和尺寸

1.1 Appearance 外观: Switch shall have no rust, crack and plating failures. 开关表面无锈斑、开裂和电镀不良

2.2 Construction and dimensions 结构和尺寸 Refer to individual product drawing. 参照产品图

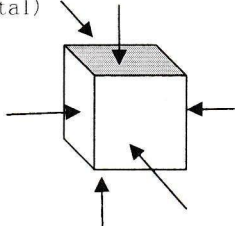
3. Ratings 额定值 6A 250VAC

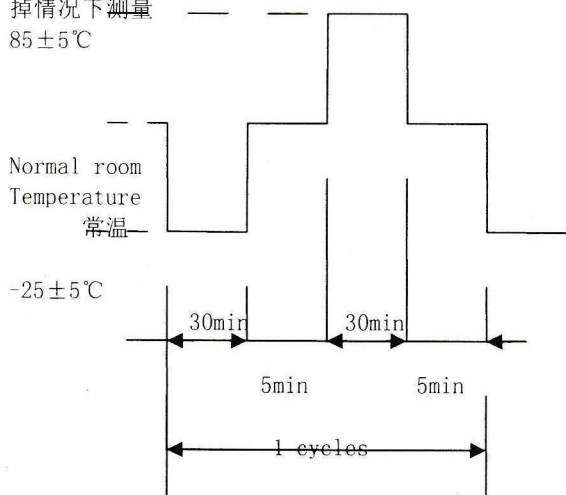
4. Electrical specification 电性能

	Items 项目	Test conditions 测试条件	Criteria 标准
4.1	Contact resistance 接触电阻	after some operations without load. Use DC Resistance Tester test Switch Contact resistance 无负载操作几次后, 用直流电阻测试仪测试开关的接触电阻。 Applied position 适应位置: Between terminal and terminal (Between contact terminal) 端子之间 (连接端子之间)	50 mΩ MAX
4.2	Insulation resistance 绝缘电阻	Test voltage 测试电压: 500 V DC, measured after 1min±5s 测量时间 1min±5s Applied position 适应位置: Between terminal and terminal (Between no contact terminal) 端子之间 (不接端子之间)	100 MΩ MIN
4.3	Voltage proof 耐压	Following test voltages shall be applied for 1min. 如下电压, 加压时间 1 分钟 (Cut-off current 漏电流: 10mA) 1. Between terminal and terminal 端子与端子之间: 1500V AC (50~60Hz) 2. Between terminal and shell 端子与外壳之间: 3000VAC	No dielectric breakdown shall occur. 不击穿

5. Mechanical specification 机械性能

No. 序号	Item 项目	Test condition 测试条件	Criteria 标准
5.1 Operating features 操作特性	5.1.1 Operating force 操作力	A static load shall be applied to the tip of button in positive operating direction. 在按钮头部施加一个力使之在一个方向动作.	4~7N
5.2	Vibration 振动	Switch shall be mount to a testing machine test. Parameters of test as follows 开关必须安装在测试设备上做测试, 测试参数如下: (1) Vibration frequency range: 10-55 Hz 振动频率范围: 10-55 Hz (2) Total amplitude 振幅: 1.5mm (3) Sweep cycle 扫频循环: 10-55-10 Hz (4) Method of changing the sweep vibration frequency 振动频率扫频方法: Logarithmic or linear. 对数或线性 (5) Direction of vibration: Three perpendicular directions including actuator. 振动方向: 3 轴方向包括操作件。 (6) Duration 周期: 2 h each (6 h in total) 每个方向 2 个小时 (共 6 个小时)	Contact resistance (Item 4.1): 接触电阻 50 mΩ MAX Insulation resistance (Item 4.2): 绝缘电阻 100 MΩ MIN Voltage proof: (Item 4.3): 端子与端子之间耐压 1125VAC/10mA/5s 端子与外壳之间耐压: 2250VAC/10mA/5s No dielectric breakdown shall occur. 电气不击穿 Operating force (Item 5.1): Within specified value. 操作力在规定值内 Shall be free from mechanical Abnormalities 无机械异常

Products model 产品型号: XB-KCD5		TITLE 标题 PRODUCT SPECIFICATIONS 产品规格书	Page 页数 2/4
	Item 项目	Test condition 测试条件	Criteria 标准
5.3	Shocks 冲击	Switch shall be measured after following test at the condition of releasing self-lock. 开关在断开状态测试后做测量。 (1) Mounting method : Normal mounting method 安装方法: 一般安装 (2) Acceleration 加速度 : 30g (3) Duration 周期 : 11ms (4) Test direction 测试方向 : 6 directions (5) Number of shocks : 3 times per direction (18 times in total) 冲击次数: 每个方向 3 次 (共 18 次) 	Contact resistance (Item 4.1): 接触电阻 50 mΩ MAX Insulation resistance (Item 4.2): 绝缘电阻 100 MΩ MIN Voltage proof: (Item 4.3): 端子与端子之间耐压 1125VAC/10mA/5s 端子与外壳之间耐压: 2250VAC/10mA/5s No dielectric breakdown shall occur. 电气不击穿 Operating force (Item 5.1): Within specified value. 操作力在规定的值内 Shall be free from mechanical Abnormalities 无机械异常
5.4	Mechanical life 机械寿命	Switch shall be mount to a testing machine test. Parameters of test as follows 开关必须安装在测试设备上做测试, 测试参数如下: Operation Rate 操作速度: 15 cycles/min Total number of Operation 总操作次数: 100,00 cycles/次	Voltage proof: (Item 4.3): 端子与端子之间耐压 1125VAC/10mA/5s 端子与外壳之间耐压: 2250VAC/10mA/5s No dielectric breakdown shall occur. 电气不击穿 Operating force (Item 5.1): Within +10, -30% specified value. 操作力在初始值的 ±30%。 Temperature rise 温升: ≤55℃ No abnormalities shall be recognized in appearance and construction. 在结构和外观上无异常
6. Environmental test 环境实验			
	Item 项目	Test conditions 测试条件	Criteria 标准
6.1	Low temperature 低温	After testing at -25±5℃ for 48 h, the switch shall be allowed to stand under normal room temperature and humidity condition for 1h, and then measurement shall be made within 1 h. Water drops shall be removed. 开关在 -25±5℃ 停留 48 小时测试后, 在常温和常湿的条件下放 1 个小时, 让表面水滴干掉情况下测量。	Voltage proof: (Item 4.3): 端子与端子之间耐压 1125VAC/10mA/5s 端子与外壳之间耐压: 2250VAC/10mA/5s No dielectric breakdown shall occur. 电气不击穿 Operating force (Item 5.1): Within specified value. 操作力在规定的值内 No abnormalities shall be recognized in appearance and construction. 在结构和外观上无异常
6.2	High temperature 高温	After testing at 85±5℃ for 48 h, the switch shall be allowed to stand under normal room temperature and humidity condition for 1 h, and then measurement shall be made within 1 h. Water drop shall be removed. 开关在 85±5℃ 停留 48 小时测试后, 在常温和常湿的条件下放 1 个小时, 让表面水滴干掉情况下测量。	
6.3	Damp heat, steady state 恒定湿热	After testing at 40±2℃ and 90-95%RH for 96h, the switch shall be allowed to stand under normal room temperature and humidity condition for 1h, and then measurement shall be made within 1h. Water drops shall be removed. 开关在 40±2℃ 湿度 90-95%RH 停留 48 小时测试后, 在常温和常湿的条件下放 1 个小时, 让表面水滴干掉情况下测量。	

Products model 产品型号: XB-KCD5		TITLE 标题 PRODUCT SPECIFICATIONS 产品规格书	Page 页数 3/4
	Item 项目	Test condition 测试条件	Criteria 标准
6.4	Welding property 焊接耐热性能	Handing soldering 手工焊接 Temperature 温度: $360\pm5^{\circ}\text{C}$ 0.3S Dip-soldering 波峰焊 Temperature 温度: $260\pm5^{\circ}\text{C}$ 3S	Good Weld, no false weld, full weld 焊接良好, 无虚焊点, 焊点饱满
6.5	Flammability 阻燃	The Flammability classification of house is V-0 外壳阻燃等级为 V-0 级	After-burning time is less than 30 seconds 离开火焰后续燃时间小于 30 秒
6.6	Salt mist 盐雾	Switch shall be checked after following test. 测试后开关必须检查 (1)Temperature 温度: (2)Salt proportion 盐份比例: $5\pm1\%$ (solids by mass 固体) (3)Duration 周期: After test, salt deposit shall be removed in running water. 测试后, 盐分必须用流动水冲洗。	24 hour coating without bubble, rust, off, pitting, cracks and other phenomena 24 小时镀层无气泡、生锈、脱落、点蚀、裂纹等现象
6.7	Change of temperature 高低温变化	After 5 cycles of following conditions the switch shall be allowed to stand under normal room temperature and humidity condition for 1h, and then measurement shall be made within 1h after that. Water drops shall be removed. 开关按下列条件做 5 个循环测试后, 在常温常湿下停留 1 个小时使表面水滴干掉情况下测量 $85\pm5^{\circ}\text{C}$  Normal room Temperature 常温 $-25\pm5^{\circ}\text{C}$ 30min 30min 5min 5min 1 cycles	Voltage proof:(Item 4.3): 端子与端子之间耐压 1125VAC/10mA/5s 端子与外壳之间耐压 2250VAC/10mA/5s No dielectric breakdown shall occur. 电气不击穿 Operating force(Item5.1): Within specified value. 操作力在规定值内 No abnormalities shall be recognized in appearance and construction. 在结构和外观上无异常
7. Electrical performance 电气性能			
	Item 项目	Rating 参数	Criteria 标准
7.1	Endurance 耐久性	6A 250VAC 25T85 1E4	According to GB15092.1 参照 GB15092.1 IEC60079-15