



规格书

SPECIFICATION

CUSTOMER NAME	客户名称:	
CUSTOMER NO.	客户编号:	
SERIES	系 列:	按钮开关
MODEL NO.	型 号:	XB-PS-25-16-4
DRAWING NO.	图 形 号:	PUHS BUTTON 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

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Dong Guan XB ElectronicsCo., Ltd

AccountNumber: 705540238

BankName: CitibankN.A.,HongKongBranch

Country/Region: Hong Kong

BankCode:006

BankAddress: 3GardenRoad, Central, Hong Kong

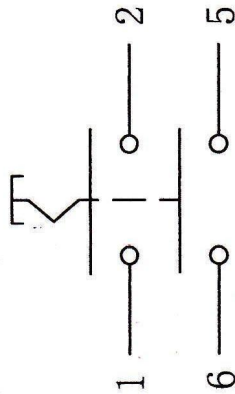
SWIFT/BIC: CITIHKHX (CITIHKHXXXX*If 11 characters are required)

MAiL: HK@ALPSR.CN XB@ALPSR.CN XB@ALPSR.COM

Quality core! Afterburner for Made in China!

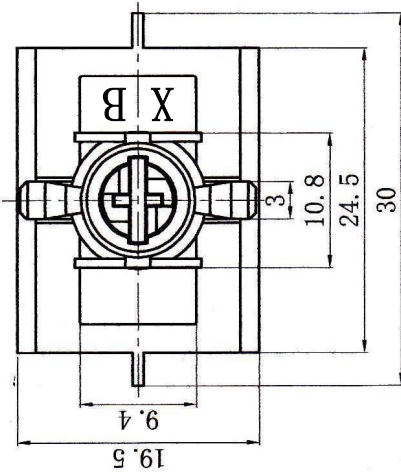
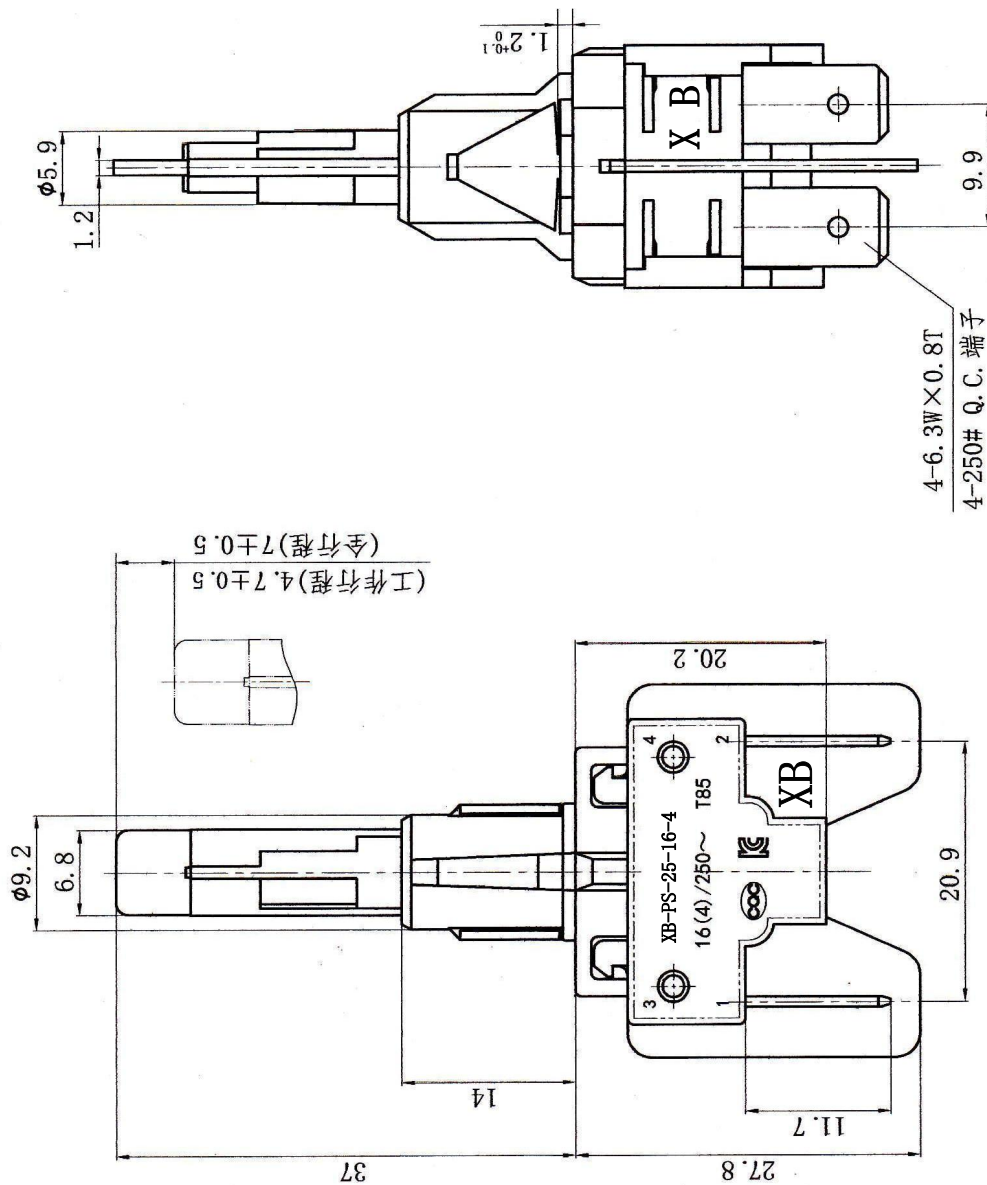
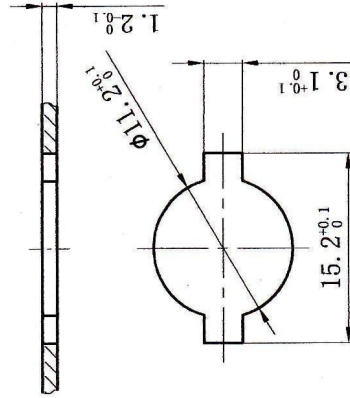
电原理图

CIRCUIT DIAGRAM



安装开孔尺寸

MOUNTING HOLE DIMENTION



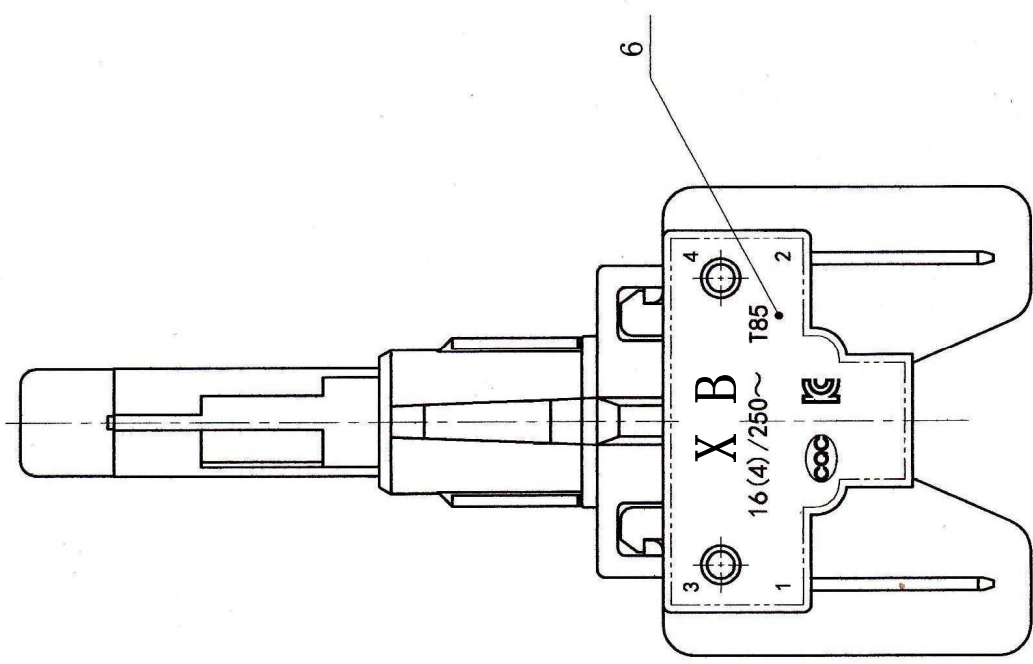
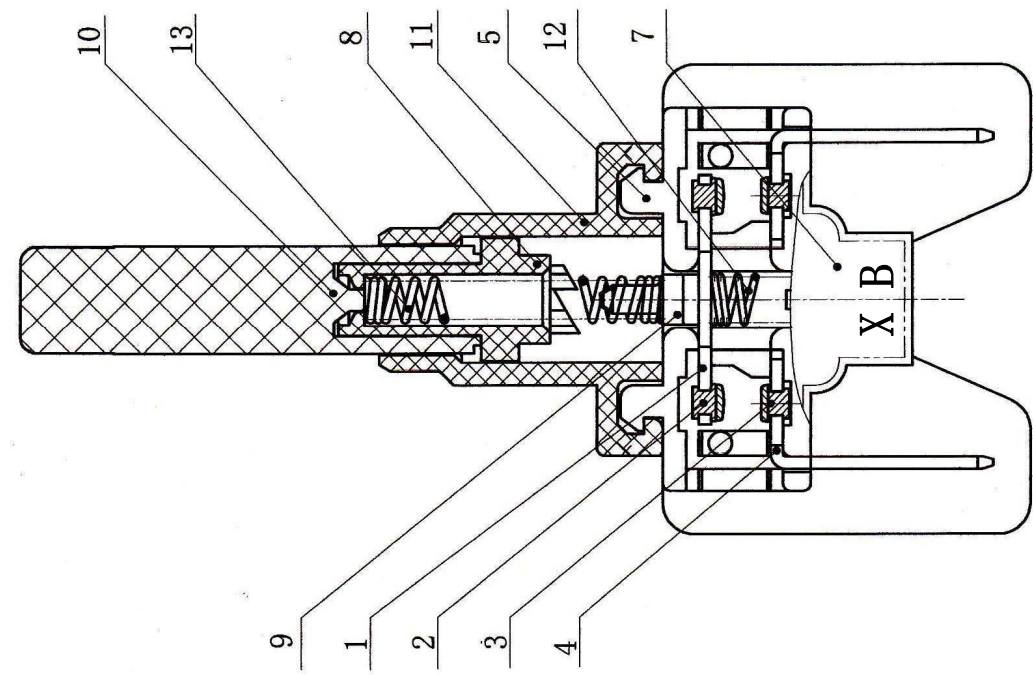
TOLERANCES UNLESS OTHERWISE
未指定容许尺寸公差

BASIC DIMENSION TOLERANCES

UP TO 10(10以下)	±0.3
ABOVE 10 TO 100(10到100)	±0.5
ABOVE 100(100以上)	±0.8
ANGULAR DIMENSIONS(角度)	±3°

DONG GUAN XI BANG ELECTRONIC CO., LTD

DESIGNER	封向荣	DATE	19.7.26	DIN UNIT	mm
CHECKED BY	✓	DATE	✓	TITLE	PS25-16-4
APPROVED BY	彭天	DATE	7/26/19	PAGE	



DONG GUAN XI BANG ELECTRONIC CO., LTD				
DESIGNER	封向荣	DATE	19.7.26	DIN UNIT
CHECKED BY	✓	DATE	✓	TITLE
APPROVED BY	15/7/19	DATE	7/26/19	PAGE

SPECIFICATION 规格书

1	Rating 额定值	16(4)A 250VAC T85		
2	Operating temperature range 使用环境温度	-25~85℃		
3	Operating force 动作力	12±2N		
4	Marking 标记	The following is marked on the switch 开关上作如下标记		
		Manufacture's mark		
		Catalogue No. 型号	PS25-16-4	
		Rating 额定值	16(4)/250~ T85	
		Approval mark 认证标记	 	
5	Approval No. 证书号	Approved	CQC	K
		Catalogue NO.证书类别		
6	Applicable standard 适用标准	PS25-16		
7	Contact resistance 接触电阻	100mΩ Max.		
8	Insulation resistance 绝缘电阻	100MΩ Min.		
9	Voltage proof 耐压	Between terminals of open contacts: 1500VAC 5S Terminals between different circuit: 1500VAC 5S Between terminals and Rod : 3000VAC 5S		
10	Lock travel 工作行程	4.7±0.5mm		
11	Electric life 电气寿命	10000 cycles(16(4)A 250VAC T85)		

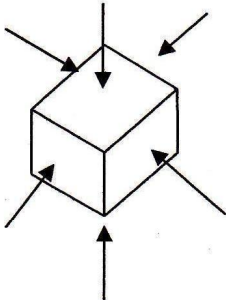
MATERIAL LIST

No. 序号	Part name 零件名称	Description 材料名称	Quantity 数量	Note 说明
1	Blade (动触片)	Copper Alloy	1	H62 H02 GB/T2059-2017
2	Dynamic contact(动触点)	Silver Alloy	2	
3	Static contact(静触点)	Silver Alloy	4	
4	Contact 4(触点脚4)	Copper Alloy	4	H62 H02 GB/T2059-2017
5	Case (基座)	PA66	1	DUPONT DE NEMOUSR
6	Cover (盖板)	PA66	1	DUPONT DE NEMOUSR
7	Cover (盖板)	PA66	1	DUPONT DE NEMOUSR
8	Link (联动杆)	POM	1	IDEMITSU KOSAN CO.,LTD
9	Slider(滑块)	PA66	1	DUPONT DE NEMOUSR
10	Rod (推杆)	PA66	1	DUPONT DE NEMOUSR
11	Bushing(轴套)	PA66	1	DUPONT DE NEMOUSR
12	Spring 1(弹簧1)	Carbon steel wire	2	T9A GB4357-89
13	Spring 2(弹簧2)	Carbon steel wire	1	T9A GB4357-89

DONG GUAN XB ELECTRONICSCO., LTD DONG GUAN XI BANG ELECTRONIC CO., LTD	DESIGNER 设计	封向荣	DATE日期	19.7.26	DIN UNIT 单位	mm
	CHECKED BY审核		DATE日期		TITLE 型号	PS25-16-4
	APPROVED BY批准		DATE日期	7/26/19	DRAWING NO.图号	

DOCUMENT NO 产品型号 XB-PS-25-16-4		TITLE 标题 PRODUCT SPECIFICATIONS 产品规格书		PAGE 页 1/5
1. General 概述				
1.1 Application 适用范围		This specification is applied to power Switches used for electronic equipment. 此规格书适用于电子设备上的电源开关。		
1.2 Operating temperature rang		使用温度范围: -25~85℃		
1.3 Test conditions 测试条件		Unless otherwise specitified ,the atmospheric conditions for making measurements and tests are as follows. 除非另有规定, 否则进行测量与测试的大气条件为: Ambient temperature 环境温度: 5~35℃ Relative humidity 相对湿度: 45~85% Air pressure 气 压: 86~106 kpa (860~1060 mbar) Should any doubt arise in judgement, tests shall be conducted at the following conditions. 若判断中出现争议, 则测试按以下条件进行: Ambient temperature 环境温度: 20±2℃ Relative humidity 相对湿度: 60~70% Air pressure 气 压: 86~106 kpa (860~1060 mbar)		
2. Appearance, construction and dimensions 外观、结构和尺寸				
2.1 Appearance 外观		Switch shall have good finishing, and no rust, crack or plating failures. 开关应有良好的成形, 无锈蚀、裂纹和电镀剥落。		
2.2 construction and dimensions 结构和尺寸		Refer to individual product drawing. 参见产品图		
3.Ratings 额定值 16(4)A 250VAC T85				
4. Electrical specification 电气规格				
No. 序号	Items 项目	Test conditions 测试条件		Criteria 判定标准
4.1	Contact resistance 接触电阻	Shall be measured at 1A,5V DC by voltage drop method after some operations without load. 在无负载条件下, 操作数次后, 用电压降法, 以 1A,5V DC 进行测试。		100 mΩ max.
4.2	Insulation resistance 绝缘电阻	Test voltage: 500V DC, measured after 1min±5s Applied position: Between terminals . Between terminals and ground(frame) 测试条件: 500V DC, 1min±5s 测试位置: 在开路端子之间 在端子与接地外壳之间		100MΩ min.
4.3	Voltage proof 耐 压	Following test voltages shall be applied for 5S. (Cut-off current: 0.5mA) 1. Between terminals of open contacts: 1500V AC(50~60Hz) 2. Terminals between different circuit: 1500V AC(50~60Hz) 3. Between terminals and Rod : 3000V AC(50~60Hz) 按以下测试电压进行 5 秒。 (漏电流: 0.5mA) 1. 在开路端子之间: 1500V AC(50~60Hz) 2. 不同极端子之间: 1500VAC(50~60Hz) 3. 在端子与推杆之间: 3000V AC(50~60Hz)		No dielectric breakdown shall occur. 无击穿、飞弧现象
5. Mechanical specification 机械规格				
No. 序号	Items 项目	Test conditions 测试条件		Criteria 判定标准
5.1	Operating force 操作力	A static Load shall be applied to the tip of actuator in operating direction. 沿操作方向施加静负荷		12±2 N
	Lock travel 工作行程	A distance from the free start of the switch to the lock travel by pressing the actuator. 推杆从自由状态位置到工作状态时的距离		4.7±0.5 mm

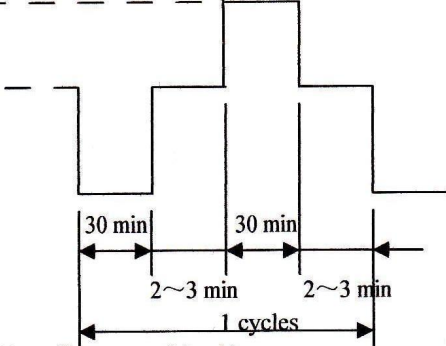
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No. 序号	Items 项目	Test conditions 测试条件	Criteria 判定标准
5.2	Robusmess of terminal 端子强度	A static Load of 88N shall be applied to the tip of terminal in a desired direction for 1 min.The test shall be done once per terminal. 88N 的静负荷将作用到端子顶部 1 分钟，每个端子将测试一次。	Shall be free from terminal looseness. damage and breakage of terminal holding portion. Terminals may be bent after test. Electrical performance requirement specified in item 4 shall be satisfied. 应无端子松动、损坏。测试后，端子可能弯曲，但应满足上面第 4 项中规定的电性能要求。
5.3	Vibration 振 动	Switch shall be secured to a testing machine by a normal mounting device and method. Switch shall be measured after following test. 将开关正常安装在试验装置上，按下例条件试验后进行测试。 (1) Vibration frequency range 振动频率范围: 10~55Hz (2) Total amplitude 全振幅 : 1.5mm (3) Sweep ratio 扫描比: 10~55~10 Hz Approx 约:1min (4) Method of changing the sweep vibration frequency: Logarithmic or linear. 改变扫描振动频率的方法: 对数或线性 (5) Direction of vibration : Three perpendicular directions including actuation. 振动方向: 按钮三个垂直方向 (6) Duration : 2h each (6h in total) 持续时间: 各 2 小时 (共 6 小时)	Switch shall function properly at rated current. 开关应通断正常 Insulation resistance 绝缘电阻(Item4.2): 10 MΩ min. Voltage proof 耐 压(Item4.3): No dielectric breakdown shall occur. 无击穿、飞弧现象 Operating force 操作力(Item5.1): Within specified value. 在规定值之内 Shall be free from mechanical abnormalities. 无机械不正常
5.4	Shock 冲击	Switch shall be measured after following test. 按下例条件试验后进行测试。 (1) Mounting method :Normal mounting method 安装方法: 正常安装方法 (2) Acceleration 加速度: 490 m/s ² (50g) (3) Duration 持续时间: 11ms (4) Test direction : 6 directions 测试方向 : 6 个方向 (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) 	Switch shall function properly at rated current. 开关应通断正常 Insulation resistance 绝缘电阻(Item4.2): 10 MΩ min. Voltage proof 耐 压(Item4.3): No dielectric breakdown shall occur. 无击穿、飞弧现象 Operating force 操作力(Item5.1): Within specified value. 在规定值之内 Shall be free from mechanical abnormalities. 无机械不正常

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No. 序号	Items 项目	Test conditions 测试条件	Criteria 判定标准												
6.2	Endurance (According to IEC61058-1 standard) 耐久性 (根据 IEC61058-1 标准)	16(4)A 250VAC Switch shall be operated 10,000 cycles at 15~20 cycles/min. 开关应能承受 15~20 次/分钟的速率 10,000 次操作。 <table border="1"> <tr> <th>Operate 操作</th><th>Voltage 电压</th><th>Current 电流</th><th>Cos ϕ</th></tr> <tr> <td>ON 接通</td><td>250V</td><td>6×4A *</td><td>0.6</td></tr> <tr> <td>OFF 断开</td><td>250V</td><td>16A</td><td>0.95</td></tr> </table> Temperature rise 温升 Difference between the steady terminal temperature and ambient temperature shall be measured after conducting the rated current. 温升即为开关接通额定电流，稳定后的端子温度值与环境温度值之差。 Voltage proof (Cut-off current : 0.5mA) 耐压（漏电流：0.5mA） Following test voltages shall be applied for 5S. 按以下测试电压进行 5 秒。 Between terminals of open contacts 在开路端子之间: 1125V AC(50~60Hz) Terminals between different circuit 不同极端子之间: 1125V AC(50~60Hz) Between terminals and Rod 在端子与推杆之间 2250V AC(50~60Hz)	Operate 操作	Voltage 电压	Current 电流	Cos ϕ	ON 接通	250V	6×4A *	0.6	OFF 断开	250V	16A	0.95	Switch shall function properly at rated current. 开关应通断正常 Insulation resistance 绝缘电阻 (Item4.2): 10 MΩ min. Voltage proof 耐压: No dielectric breakdown shall occur. 无击穿、飞弧现象 Operating force 操作力(Item5.1): Within +10,-30% of specified value. 在规定值的+10,-30%之内 Temperature rise 温升: 55°C max. No abnormalities shall be recognized in appearance and construction 外观和结构无异常
Operate 操作	Voltage 电压	Current 电流	Cos ϕ												
ON 接通	250V	6×4A *	0.6												
OFF 断开	250V	16A	0.95												

7.Environmental 耐候性			
7.1	Cold 耐寒性	After testing at -25°C for 16h,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. 将开关置于-25°C内 16h 以后，再置于常温、常湿中 1h，除去水滴后，在 1h 内测定之。 Voltage proof (Cut-off current : 0.5mA) 耐压（漏电流：0.5mA） Following test voltages shall be applied for 5S. 按以下测试电压进行 5 秒。 Between terminals of open contacts 在开路端子之间: 1125V AC(50~60Hz) Terminals between different circuit 不同极端子之间: 1125V AC(50~60Hz) Between terminals and Rod 在端子与推杆之间 2250V AC(50~60Hz)	Switch shall function properly at rated current. 开关应通断正常 Insulation resistance 绝缘电阻 (Item4.2): 10 MΩ min. Voltage proof 耐压: No dielectric breakdown shall occur. 无击穿、飞弧现象 Operating force 操作力(Item5.1): Within +10,-30% of specified value. 在规定值的+10,-30%之内 No abnormalities shall be recognized in appearance and construction. 外观和结构无异常

DOCUMENT NO 产品型号		TITLE 标题	PAGE 页
XB-PS-25-16-4		PRODUCT SPECIFICATIONS 产品规格书	4/5
No. 序号	Items 项目	Test conditions 测试条件	Criteria 判定标准
7.2	Dry heat 耐热性	After testing at $85\pm 2^{\circ}\text{C}$ for 16h,the switch shall be allowed to stand under normal room temperature and humidity condition for 1h,and then measurement shall be made within 1h. 将开关置于 $85\pm 2^{\circ}\text{C}$ 内 16h 以后,再置于常温、常湿中 1h,在 1h 内测定之。 Voltage proof (Cut-off current : 0.5mA) 耐压 (漏电流: 0.5mA) Following test voltages shall be applied for 5S. 按以下测试电压进行 5 秒。 Between terminals of open contacts 在开路端子之间: 1125V AC(50~60Hz) Terminals between different circuit 不同极端子之间: 1125V AC(50~60Hz) Between terminals and Rod 在端子与推杆之间 2250V AC(50~60Hz)	Switch shall function properly at rated current. 开关应通断正常 Insulation resistance 绝缘电阻 (Item4.2): 10 MΩ min. Voltage proof 耐压: No dielectric breakdown shall occur. 无击穿、飞弧现象 Operating force 操作力(Item5.1): Within +10,-30% of specified value. 在规定值的+10,-30%之内 No abnormalities shall be recognized in appearance and construction. 外观和结构无异常
7.3	Damp heat 耐湿性	After testing at $40\pm 2^{\circ}\text{C}$ 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. 将开关置于 $40\pm 2^{\circ}\text{C}$,相对湿度 90~95%内 96h 以后,再置于常温、常湿中 1h,除去水滴后,在 1h 内测定之。 Voltage proof (Cut-off current : 0.5mA) 耐压 (漏电流: 0.5mA) Following test voltages shall be applied for 5S. 按以下测试电压进行 5 秒。 Between terminals of open contacts 在开路端子之间: 1125V AC(50~60Hz) Terminals between different circuit 不同极端子之间: 1125V AC(50~60Hz) Between terminals and Rod 在端子与推杆之间 2250V AC(50~60Hz)	Switch shall function properly at rated current. 开关应通断正常 Insulation resistance 绝缘电阻 (Item4.2): 10 MΩ min. Voltage proof 耐压: No dielectric breakdown shall occur. 无击穿、飞弧现象 Operating force 操作力(Item5.1): Within +10,-30% of specified value. 在规定值的+10,-30%之内 No abnormalities shall be recognized in appearance and construction. 外观和结构无异常
7.4	Change of temperature 温度急变	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. 实施如下 5 次温度循环试验后,再置于常温、常湿中 1h,除去水滴后,在 1h 内测定之。 70$\pm 2^{\circ}\text{C}$ Normal room Temperature 正常室温 -25$\pm 3^{\circ}\text{C}$  30 min 30 min 2~3 min 2~3 min 1 cycles Voltage proof (Cut-off current : 0.5mA) 耐压 (漏电流: 0.5mA) Following test voltages shall be applied for 5S. 按以下测试电压进行 5 秒。 Between terminals of open contacts 在开路端子之间: 1125V AC(50~60Hz) Terminals between different circuit 不同极端子之间: 1125V AC(50~60Hz) Between terminals and Rod 在端子与推杆之间 2250V AC(50~60Hz)	Switch shall function properly at rated current. 开关应通断正常 Insulation resistance 绝缘电阻 (Item4.2): 10 MΩ min. Voltage proof 耐压: No dielectric breakdown shall occur. 无击穿、飞弧现象 Operating force 操作力(Item5.1): Within +10,-30% of specified value. 在规定值的+10,-30%之内 No abnormalities shall be recognized in appearance and construction. 外观和结构无异常

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No. 序号	Items 项目	Test conditions 测试条件	Criteria 判定标准
7.5	Salt mist 盐 雾	Switch shall be checked after following test. (1)Temperature: $35 \pm 2^{\circ}\text{C}$ (2)Salt solution: $5 \pm 1\%$(solids by mass) (3)Duration: $16 \pm 1\text{h}$ After test, salt deposit shall be removed in running water. 按下例条件试验后进行测试。 (1)温度: $35 \pm 2^{\circ}\text{C}$ (2)盐溶液: $5 \pm 1\%$(固状) (3)持续时间: $16 \pm 1\text{h}$ 试验后,用流水洗净盐份。	No remarkable corrosion shall be recognized in metal part. 金属部分无锈蚀