



CUSTOMER NAME	客户名称:	
CUSTOMER NO.	客户编号:	
SERIES	系 列:	船型开关
MODEL NO.	型 号:	XB-SS21 series
DRAWING NO.	图 形 号:	XB Rotary Switch

依据和存档之用，多谢合作！

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
<div>研发部</div> <div>戴海明</div> <div>2022.06.08</div>	<div>品质部</div> <div>黄自清</div> <div>2022.06.08</div>	<div>工程部</div> <div>庞军</div> <div>2022.06.08</div>	<div>总经办</div> <div>吴量</div> <div>2022.06.08</div>

Quality core! Afterburner for Made in China!



东莞市溪榜电子有限公司

DONG GUAN XI BANG ELECTRONICS CO., LTD

翘板式开关 测试规格

XB-SS21 SERIES SWITCHES TEST SPECIFICATION

1. TEST CONDITION (测试环境):

THE SWITCH IS TESTED AT A TEMPERATURE RANGE OF 0~55°C AND RELATIVE HUMIDITY RANGE OF 45~85%. OPERATING TEMPERATURE RANGE 0~125°C; STORAGE TEMPERATURE RANGE: 5 ~ 55°C (NORMAL HUMIDITY AND PRESS)

* 测试温度范围 : 0 ~ 55°C * 相对湿度范围 : 45 ~ 85%

* 工作温度范围 : 0 ~ 125°C * 储存温度范围 : 0 ~ 55°C

2. RATING (额定):

(1) . 10A 125/250VAC FOR UL;C-UL

(2) . 12(4)A 250V~T85/55 FOR ENEC17;NEMKO;CQC

3. ELECTRICAL PERFORMANCE (电气性能):

3-1. CONTACT RESISTANCE (接触电阻):

MEASURED BY FALL OF POTENTIAL METER AT DC 0.2 V/1A SHOULD BE LESS THAN 50mΩ INITIAL.

* 以微电阻计在 **DC 0.2V/1A** 的测试规格值下, 接触电阻值应该小于 **50mΩ**.

3-1 INSULATION RESISTANCE (绝缘电阻):

MEASURED WITH DC 500V APPLIED BETWEEN TERMINALS OF OPEN CONTACTS AND BETWEEN TERMINALS OF OPPOSITE POLARITY, SHOULD BE MORE THAN 100MΩ.

* 绝缘电阻计於 **DC 500V 设定值**下量测於开路的端子或不同迴路的端子, 其绝缘电阻值应该大于 **100MΩ**.

3-3 DIELECTRIC STRENGTH (耐电压):

THE SWITCH SHALL WITHSTAND WITHOUT BREAKDOWN A POTENTIAL OF AC 1500V 0.5mA FOR 1 MINUTE BETWEEN TERMINALS OF OPEN CONTACTS AND TERMINALS OF OPPOSITE POLARITY, AC 3000V 0.5mA FOR 1 MINUTE BETWEEN TERMINALS AND METAL COVER.

* 不同极的兩支端子开路時, 必須通過一分鐘 0.5mA 1500VAC 的耐電壓.

* 端子與外殼, 必須通過一分鐘 0.5mA 3000VAC 的耐電壓.

4. MECHANICAL PERFORMANCE(機械性能):

4-1. OPERATION FORCE(操作力量):

NON-PULSE(不回彈): SINGLE POLE(單極)400±200gf DOUBLE POLE(雙極): 800±300gf

4-2. TERMINAL STRENGTH (端子強度):

A STATIC FORCE OF 2.27 Kgf (PCB TYPE) OR 8.5Kgf (QUICK CONNECTOR) BEING APPLIED IN ONE DIRECTION ON THE TIP OF THE TERMINAL FOR 1 MINUTE. THE TERMINAL MAY BE DEFORMED, BUT SHALL NOT SUSTAIN ANY TROUBLE AS DEVIATION AND BREAKING OF TERMINAL, AND BREAKING OF INSULATION MATERIAL.

* 施以固定 PCB 端子 2.27Kgf/快插端子 8.5 Kgf 的力量於同一方向在端子的頂端一分鐘, 端子允許變型, 但是不可以有任何位移(偏向)與端子斷裂及絕緣材料的破裂.

5. OVERLOAD AND ENDURANCE TEST (過負載與壽命測試):

THE SWITCH SHALL BE OPERATED ACCORDING TO FOLLOWING TABLE

* 開關應該依照下列表格的操作方式進行測試.

UL & C-UL STANDARD (北美標準)

CONDITION 測試狀況	VOLTAGE 測試電壓	CURRENT 測試電流	P.F. 功率因素	OPERATION SPEED 操作速率	NUMBER OF OPERATION 操作次數	SAFETY APPLICATION 適用安規
OVERLOAD 過負載	125VAC	15A	0.75~0.8	8 CYCLES PER MINUTE 每分鐘 8 次	50 CYCLES 50 次	UL&C-UL
	250VAC					
ENDURANCE 壽命測試	125VAC	10A	0.75~0.8	8 CYCLES PER MINUTE 每分鐘 8 次	6000 CYCLES 6000 次	UL&C-UL

EUROPE STANDARD (歐洲標準)

INCREASED VOLTAGE TEST AT ACCELERATED SPEED (增加伏特數的加速測試)

CONDITION 測試狀況	VOLTAGE 測試電壓	CURRENT 測試電流	P.F. 功率因素	OPERATION SPEED 操作速率	NUMBER OF OPERATION 操作次數	SAFETY APPLICATION 適用安規
MAKING 閉路	287.5VAC	24A	0.6	15 CYCLES PER MINUTE 每分鐘 15 次	100 Cycles 100 次	ENEC17/ NEMKO
BREAKING 開路		12A	0.95			

TEST AT LOW SPEED (低速測試)

MAKING 閉路	250VAC	24A	0.6	15CYCLES PER MINUTE 每分鐘 15 次	100 Cycles 100 次	ENEC17/ NEMKO
BREAKING 開路		12A	0.95			

TEST AT ACCELERATED SPEED (加速測試)

MAKING 閉路	250VAC	24A	0.6	15 CYCLES PER MINUTE 每分鐘 15 次	9800 Cycles 9800 次	ENEC17/ NEMKO
BREAKING 開路		12A	0.95			

6. TEMPERATURE TEST (溫升試驗):

THE TEMPERATURE TEST SHOULD BE TAKEN AFTER ENDURANCE TEST WITH ITS RATED CURRENT AND VOLTAGE.

THE TEMPERATURE RISING SHALL NOT BE MORE THAN 55°C.

* 溫升測試應該於壽命測試結束後隨即測試, 以同樣的電流與電壓量測, 溫升值必須低於攝氏 55°.

7. SOLDERING (焊錫特性):

IMMERSE THE TERMINAL LEADS INTO MOLTEN SOLDER AT TEMPERATURE OF $230\pm5^{\circ}\text{C}$ FOR 3 ± 0.5 SECONDS. MORE THAN 75% OF PART IMMERSSED SHOULD BE COVERED WITH SOLDER.

* 端子浸入 $230\pm5^{\circ}\text{C}$ 溫度溶化的焊錫中 3 ± 0.5 秒, 75%以上的部分應該被焊錫包覆.

8. SOLDERING HEAT RESISTANCE OF BASE (基座抗熱性):

TEMPERATURE AND DURATION OF DIPPING

TYPE OF TERMINAL 端子型式	TEMPERATURE 溫度	DIPPING TIME 焊錫時間
TERMINAL FOR PCB WIRING * PCB 端子	$260^{\circ}\text{C}\pm5^{\circ}\text{C}$ Max.	3 SECONDS Max.
TERMINAL FOR LEAD WIRING * 焊線端子	$350^{\circ}\text{C}\pm5^{\circ}\text{C}$ Max.	3 SECONDS Max.

THERE SHALL NOT BE EXTREME DEFORMING IN APPEARANCE.

ELECTRICAL PERFORMANCE OF THE ABOVE ITEM 3 SHALL BE ASSURED.

* 基座不可以有極度變形狀況發生.

* 上文第 3 項的電子性能應該被保證.

9. NOTICE (開關使用注意事項):

9-1. When welding, any pressure applied to the terminals may cause conditions as looseness, deformation of terminals and electrical degradations.

給端子進行焊接時, 如果在端子上施加負荷, 因條件不同會有鬆動、變形、及電特性退化的可能, 請在使用時注意。

9-2. When welding, water-soluble flux may causes corrosion to switches.

For second time welding job, please proceed welding after it is recovered to room temperature.

焊接時, 水溶劑助焊劑有可能腐蝕開關的可能, 請避免使用。

進行二次焊接時, 請在第一次焊接部份恢復到常溫之后再進行。

9-3. Continuous heating may cause loose off, deformation of terminals and electrical degradations.

連續加熱可能使外圍部變形、端子鬆動, 脫落及電特性降低。

9-4. Do not clean it with water.

不能用水清洗

9-5. After final assembly as a completed product, please make sure that there's no erosion gas/materials released from peripheral parts/materials as it may causes contact failure of switches.

如果使用開關的整機的周邊材料產生腐蝕性氣體, 有可能造成接觸不良等現象, 所以請事先進

行充分確認。

9-6. Storage (儲存和保管)

a. Keep it storage under normal temperature, humidity and prevent from direct sunshine, erosion gas. Products sure be used within 6 months.

產品以交貨時的狀態在常溫，常濕，不受直射陽光照射，不產生腐蝕性氣體的場所保管，自交貨起 6 個月以內為限度，請盡可能快的使用。

b. For small quantity which taken from main packages, please keep it in plastic bags and sealed. And have it storage under up-mentioned environment.

開封后用塑料袋與外界氣體隔斷，請在與上述相同環境下保管，並盡快使用。

c. Do not pile up package more than 2 levels.

請不要過分地堆積。

修訂日期 REVISED DATE	修訂內容 DESCRIPTION	修訂者 REVISED BY	文件編號 FILE NO.	制 定 WRITE BY	審 核 CHECKED BY	核 准 APPROVED BY
07-Jan-2017	操作力 500 改为 800	PING.GAO	SPEC-003	PING.GAO 5-6-2023	JIE.HAI.LAI 5-6-2023	FEI.LONG.HE 5-6-2023
16-Dec-2016	操作力 200 改为 300	JIE.HAI.LAI	版 次 VERSION			
30-May-2015	取消 ENEC10;VDE 安規	FEI.LONG.HE	A 版 4 次			