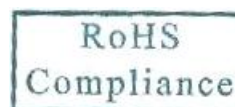




精 进 实 业 有 限 公 司  
SEE — PLUS INDUSTRIAL LTD.

SPECIFICATION



客 户  
CUSTOMER: \_\_\_\_\_

品 种  
ITEM NAME: \_\_\_\_\_ ROCKER SWITCH \_\_\_\_\_

型 号  
PART NO.: \_\_\_\_\_ RL3-113-G-6-BK/BK-P5 \_\_\_\_\_

客 户 型 号  
CUSTOMER PART NO.: \_\_\_\_\_

设计人 DESIGNED BY 	设计日期 DESIGN DATE 21-JAN-2011	审核人 CHECKED BY 	批准人 APPROVED BY 
设计单位 DESIGN DEPARTMENT 	IS09001 认证标志 CERTIFICATION OF IS09001   Certificate No : HK02/01355	客户承认 CUSTOMER APPROVED	



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## 製品規格 SPECIFICATIONS OF PRODUCTS

DOCUMENT NO. 文件編號	QI-RSA-011	ISSUED DATE 發行日期	21-JAN-2011	VERSION 版本: 1.0	PAGE 頁次: 1/3
DRAWN 制訂	<i>Jm</i>	CHECKED 審核	<i>Jm</i>	APPROVED 批准	<i>Greyson</i>
MODEL NO. 產品型號	RL3-113-G-6-BK/BK-P5	ITEM NAME 品 種	ROCKER SWITCH		

1.RATING 額定值 : 10A 125VAC UL C-UL 6(2)A 250VAC T125/55 1E4 ENEC SEMKO

2.OPERATING TEMPERATURE RANGE 工作溫度範圍 : -25℃ ~ +125℃

3.ELECTRICAL CHARACTERISTICS 電氣性能:

ITEM 項目		TEST CONDITIONS 測試條件	PERFORMANCE 性能
3.1	CONTACT RESISTANCE 接觸電阻	MEASURED AT SMALL CURRENT (10mA 1000Hz OR LESS) . 在微小電流 (10mA 1000Hz) 以下測試。	30mΩ Max. 30 毫歐以下
3.2	INSULATION RESISTANCE 絕緣電阻	APPLY A VOLTAGE OF 500V DC SHALL BE APPLIED FOR 1 MINUTE AFTER WHICH MEASUREMENT BE MADE: (1)BETWEEN TERMINALS. (2)BETWEEN INDIVIDUAL TERMINALS AND FRAME. 輸入 500V DC 電壓 1 分鐘, 按以下接觸方法測試: (1)排腳相互之間不導通的。 (2)排腳與外殼之間。	100MΩ Min. 100 兆歐以上
3.3	DIELECTRIC STRENGTH 耐電壓	AC 1500V rms (50-60Hz) FOR 1 MINUTE TRIP CURRENT: 0.5 mA (1)BETWEEN TERMINALS. (2)BETWEEN INDIVIDUAL TERMINALS AND FRAME. 輸入 AC 1500V (50-60Hz) 電壓, 1 分鐘感度電流為 0.5mA, 按以下接觸方法測試: (1)排腳相互之間不導通的。 (2)排腳與外殼之間。	WITHOUT DAMAGE TO PARTS ARCING OR BREAKDOWN ETC. 沒有絕緣破壞等異常。

4. MECHANICAL CHARACTERISTICS 機械性能:

ITEM 項目		TEST CONDITIONS 測試條件	PERFORMANCE 性能
4.1	OPERATING FORCE 作動力	MEASURING PUSH THE TOP OF THE ACTUATOR (KNOB) . 按住開關膠柄頂部作為測定點。	300-800gf
4.2	TERMINAL STRENGTH 端子強度	A STATIC LOAD OF 500gf SHALL BE APPLIED TO THE TERMINAL FOR 15 SEC.IN ANY DIRECTION. 在排腳前端任意一個方向加 500gf 力度測試, 時間為 15 秒。	ELECTRICAL CHARACTERISTICS SHALL BE SATISFIED WITHOUT DAMAGE OR EXCESSIVE LOOSENESS OF TERMINALS . 在排腳中沒有裂開、鬆動等異常, 滿足於機械、電氣性能。



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ITEM 項目		TEST CONDITIONS 測試條件			PERFORMANCE 性能	
4.3	DISPLACEMENT OF ACTUATOR (KNOB) 柄強度	A STATIC LOAD OF 10N (1kgf) SHALL BE APPLIED TO THE TOP OF THE ACTUATOR (KNOB) AND THEN DISPLACEMENT SHALL BE MEASURED TO THE DIRECTION OF THE ARROW. 在柄的前端施加 1kgf 的力度，位移應沿印記的方向上定。			THE LEVER SHALL HAVE NO SERIOUS DEFORMATION AND FUNCTION IS NORMALLY. 柄部無嚴重變形，可以正常工作。	
4.4	LIFE TEST 壽命試驗	ENDURANCE FULL LOADING: A SWITCH SHALL BE SUBJECTED TO 10,000 CYCLES AT A SPEED OF 15 TO 18 CYCLES PER MINUTE WITHOUT LOADING. 負載： 在負載的條件下以每分鐘錶 15~18 回的速度進行 10,000 次的測驗。			1. CONTACT RESISTANCE (接觸電阻) 100mΩ Max. 100 毫歐以下 2. INSULATION RESISTANCE (絕緣電阻) 100MΩ Min. 100 兆歐以上 3. WITHSTAND VOLTAGE (耐電壓) AC 500V 1 MINUTE AC 500V 1 分鐘 4. OPERATING FORCE (作動力) +10% ~ -30% OF INITIAL VALUE 變化範圍：初始值+10% ~-30% 5. WITHOUT DAMAGE TO PARTS ARCING OR BREAKDOWN ETC. (測試後外表無損傷，並且滿足機械性能)	
5. ENVIRONMENT CHARACTERISTICS 环境特性：						
ITEM 項目		TEST CONDITIONS 測試條件			PERFORMANCE 性能	
5.1	SOLDERABILITY TEST 可焊性試驗	THE TOP OF TERMINALS SHALL BE DIPPED 2mm IN THE SOLDER BATH OF 245±5℃ FOR 3±0.5 SECOND. 端子頂部被浸入錫焊池中 2mm 深，溫度為 245±5℃，時間為 3±0.5 秒。			THE AREA OF SOLDERING SHOULD BE OVER 75%. 焊接面積要有 75%以上。	
5.2	RESISTANCE TO SOLDERING HEAT TEST 耐焊性試驗	SOLDER BATH METHOD: SOLDER TEMPERATURE 255±5℃ IMMERSION TIME WITHIN 5 SEC. IMMERSION DEPTH UP TO THE SURFACE OF THE BOARD 0.8mm DIMENSIONS OF COMPONENT HOLES IN THE PRINTED WIRING BOARD SHALL BEING ACCORDANCE WITH THOSE SPECIFIED IN THIS SPECIFICATION. 焊爐焊接的時候溫度控制在 255±5℃，過爐時間 5 秒以內，於（基板）厚度為 0.8mm。 SOLDER IRON METHOD: TEMPERATURE OF SOLDER 350±10℃ TIME OF SOLDER 3±0.5 SEC. 手工焊接時溫度 350±10℃，時間 3±0.5 秒			WITHOUT DEFORMATION OF CASE OR EXCESSIVE LOOSENESS OF TEMINALS ELECTRICAL CHARACTERISTICS SHALL BE SATISFIED. 本體無變形，能滿足於機械、電氣性能。	



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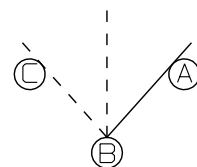
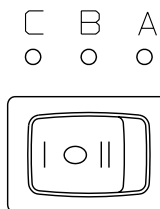
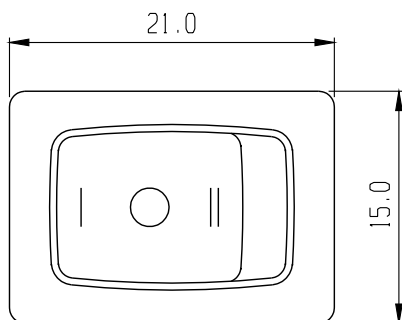
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ITEM    項目		TEST CONDITIONS    測試條件			PERFORMANCE    性能	
5.3	COLD TEST 耐冷試驗	THE SWITCH SHALL BE STORED AT A TEMPERATURE OF -25±3℃ FOR 48 HOURS, THEN THE SWITCH SHALL BE MAINTAINED AT STANDARD ATMOSPHERIC CONDITIONS FOR 1 HOUR AFTER WHICH MEASUREMENT SHALL BE MADE. 放置在溫度-25±3℃中 48 小時後，再放置常溫常濕中 1 小時來進行測試。			THERE SHALL BE NO DEFORMATION OR CRACKS IN MOLDED PART. 外觀無異常，滿足於機械、電氣性能。	
5.4	HEAT TEST 耐熱試驗	THE SWITCH SHALL BE STORED AT A TEMPERATURE OF 125±2℃ FOR 48 HOURS, THEN THE SWITCH SHALL BE MAINTAINED AT STANDARD ATMOSPHERIC CONDITIONS FOR 1 HOUR AFTER WHICH MEASUREMENT SHALL BE MADE. 放置在溫度 125±2℃中測試 48 小時後，再放置正常室溫中 1 小時來測定。				
5.5	HUMIDITY TEST 潮濕試驗	THE SWITCH SHALL BE STORED AT A TEMPERATURE OF 40±2℃ AND A HUMIDITY OF 90% TO 95% FOR 48 HOURS, THEN THE SWITCH SHALL BE MAINTAINED AT STANDARD ATMOSPHERIC CONDITIONS FOR 1 HOUR AFTER WHICH MEASUREMENT SHALL BE MADE. 放置 40±2℃的相對濕度為 90%~ 95%環境中 48 小時後，再將樣板放在正常環境 1 小時後進行測試。			THERE SHALL BE NO DEFORMATION OR CRACKS IN MOLDED PART. 外觀無異常，滿足於機械、電氣性能。	
6. Test condition (UNLESS OTHERWISE SPECIFIED) 测试条件 （特别指定情况除外）    Temperature 溫度:5℃ — 35℃ ; Humidity 湿度:45%—85%R.H; Pressure 气压: 86—106kPa						
7. Construction 产品结构：Shape and dimensions subject to attached chart regulation 另附图纸说明外形及尺寸规格						
8. Amendment 修改(規則) When the amendment of this specification comes into necessity, it shall be made by mutual consultation and agreement between manufacturer and customer. 当指定的这些(規則)必须要修改时，则通过本制造商和客户相互协商来实施。						



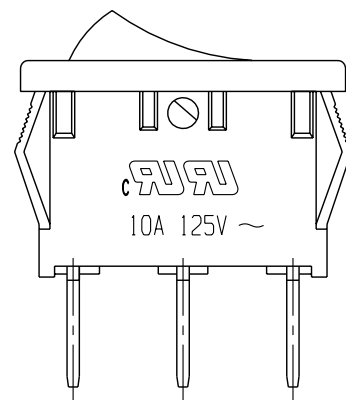
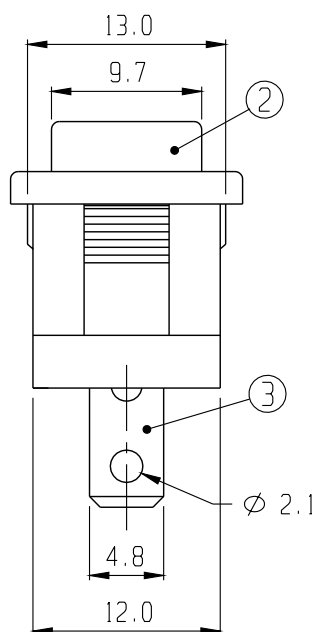
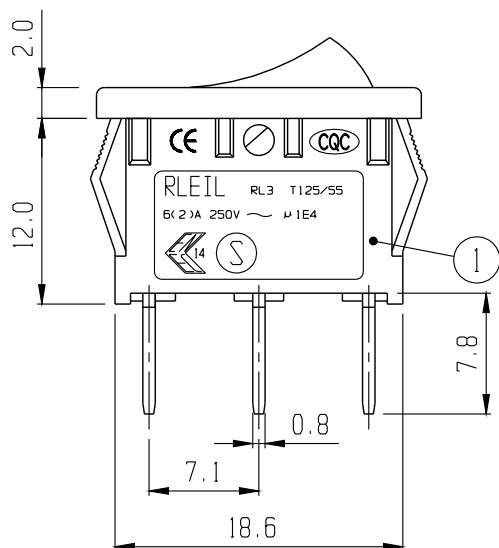
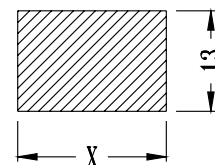
RoHS  
Compliance



SCHEMATIC

Panel thickness	X
0.75-1.25	19.2
1.25-2.0	19.4
2.0-3.0	19.6

PANEL HOLE SIZE



7	CONTACT POINT	Ag	2		8	BUCKLE	BRASS	1	Ag PLATED
5	CONTACT	BRASS	1	Ag PLATED	6	BALL	STEEL	1	
3	TERMINAL	BRASS	2	Sn/Ag PLATED	4	SPRING	STEEL WIRE	1	
1	FRAME	NYLON	1		2	KNOB	NYLON	1	
NO	PART	MATERIAL	QTY	REMARKS	NO	PART	MATERIAL	QTY	REMARKS

ISSUED

SPECIFICATION

TITLE: ROCKER SWITCH (1P3T)



RATING: 10A 125VAC UL C-UL  
6(2)A 250VAC T125/55 1E4 ENEC SEMKO

CONTACT RESISTANCE: 30m OHMS Max

INSULATION RESISTANCE: DC500V 100M OHMS Min

WITHSTAND VOLTAGE: AC 1500V 1 Minute

OPERATION FORCE: REFER ATTACH SPECIFICATION

SWITCHING LIFE: 10,000 Cycles at Full Load

MODEL NO: RL3-113-G-6-BK/BK-P5

TOLERANCE

UNIT: MM

DWN.

UP TO 1.0:±0.1

SCALE: 2:1

CHK'D.

1.0 TO 10.0:±0.2

VERSION: 1

APPD.

OVER 10.0:±0.3

DRWG NO:

BY: Greyson

SEE-PLUS INDUSTRIAL LTD.

DATE: 21-JAN-2011

