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## WATERPROOF ROKCER SWITCH SPECIFICATION FOR APPROVAL

CUSTOMER'S CODE: \_\_\_\_\_

DESCRIPTION : \_\_\_\_\_ rocker switch

SPECIFICATION: \_\_\_\_\_ 31×22

DATE : \_\_\_\_\_ 2018-11-06

PART NO.: \_\_\_\_\_ FL3-KCD4-0401-21L

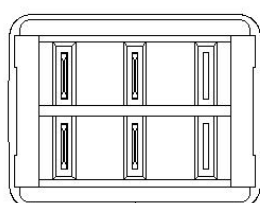
REFERENCE No.: \_\_\_\_\_

Approved By Customer	Qualified By	Form Designer

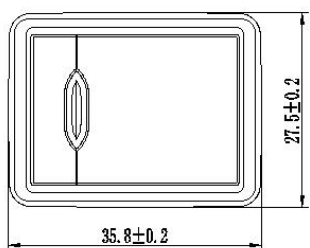
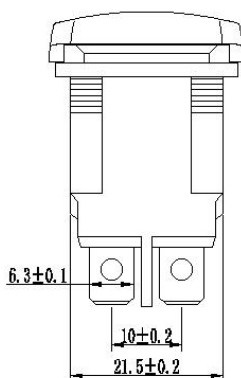
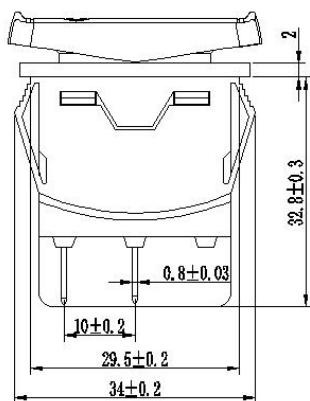
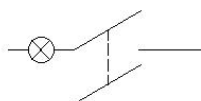
**1. 12V rocker switch real shot diagram:**



### 2.30A rocker switch size chart:



电气简图



### 3 Accessory material:

Accessory name	material
Aluminum sheet	Aluminum alloy
Light guide	PC
support	ABS
protecting mask	rubber
Upper shell	ABS
Base	PA66
Middle seat	PA66
Side/middle/spring board	Copper alloy
Silver contact	AgCdO12
spring	72#
Iron sleeve	08F
washer	rubber
Light assembly	led



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#### 4 temperature range:

Ambient temperature:  $-25^{\circ}\text{C} \sim +85^{\circ}\text{C}$ .

#### 5 Appearance and feel:

##### 5.1 The logo is clear and firm;

The appearance is clean and beautiful, no deformation, no damage, no cracking;

No rust, no electroplating;

The components are firmly connected, no looseness, no falling off;

##### 5.2 The switch operation is flexible, no jamming, no obvious friction.

#### 6 Electrical performance:

project		Test Conditions	skills requirement
6.1	Rating	30A 250VAC	
6.2	Contact resistance	Measured at a small current of 1 KHz.	$\leq 200\text{m}\Omega$
6.3	Insulation resistance	DC500V was applied between the terminals and between the terminals and the casing, measured after one minute.	$\geq 100\text{M}\Omega$
6.4	Withstand voltage	Apply AC1500V between terminals, 0.5mA, 10 seconds;	No breakdown or flashover.
6.5	Electrical durability	Apply AC3000V, 0.5mA, 10 seconds between the terminal and the housing;	1. Appearance and feel are acceptable; 2. Contact resistance $\leq 2\Omega$ ; 3. Terminal temperature rise $\leq 55\text{K}$ ; The pressure test is qualified.

#### 7 Mechanical behavior:

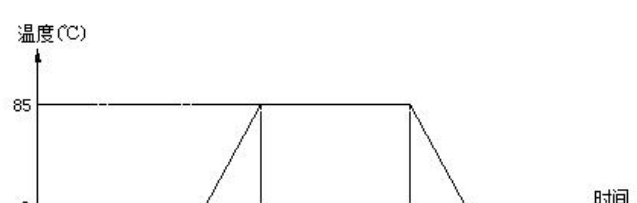
7.1	Operating force	The switch is placed perpendicular to the direction of operation, applying a force on one side of the button to measure the maximum force required to turn the switch	According to customer requirements.
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7.2	Terminal strength	A 60N static load was applied to the top of the terminal for an inward push for 60 seconds.	The terminal has no damage, falls off, and the switch function works normally.
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project		Test Conditions	skills requirement
7.3	Solderability	The terminal was immersed in a molten tin bath at a temperature of $235 \pm 5^{\circ}\text{C}$ for a time of $3 \pm 0.5$ seconds.	More than 90% of the surface of the immersed portion is covered with tin.
7.4	Resistance to soldering heat	<p>The welded portion of the terminal was immersed in a molten tin furnace at a temperature of <math>260 \pm 5^{\circ}\text{C}</math> for <math>3 \pm 1</math> second.</p> <p>Manual soldering iron welding, welding temperature <math>350 \pm 5^{\circ}\text{C}</math>, welding time <math>3 \pm 1</math> second. Do not apply pressure to the terminals during soldering.</p>	<p>1. The body has no obvious deformation;</p> <p>2. Mechanical performance, electrical performance test qualified.</p>

## 8 Weather resistance:

8.1	High temperature resistance	It was allowed to stand in an environment of $85 \pm 2^{\circ}\text{C}$ for 72 hours, and then placed in a natural environment for 1 hour and then tested.	<p>1. Appearance and feel are acceptable;</p> <p>2. Contact resistance <math>\leq 2\Omega</math>;</p> <p>3. The pressure test is qualified;</p> <p>4. Mechanical performance is qualified.</p>
8.2	Heat and humidity resistance	It was placed at $40 \pm 2^{\circ}\text{C}$ , humidity 91% - 95% RH for 96 hours, and then placed in a natural environment for 1 hour and tested.	
8.3	Low temperature resistance	It was allowed to stand in an environment of $-25 \pm 2^{\circ}\text{C}$ for 12 hours, and then placed in a natural environment for 1 hour and then tested.	
8.4	Temperature alternation	<p>The temperature was alternated according to the temperature and time shown in the figure, and the test was carried out 5 times in a row and then placed in the natural environment for 1 hour.</p>  <p>温度(°C)</p> <p>85</p> <p>0</p> <p>时间</p>	