

Qingliupower®

承认书

SPECIFICATION FOR APPROVAL *Switching power Supply/ 电源适配器*

客 户:

CUSTOMER:

D012

产品描述:

CUSTOMER SPEC: Input:100~240V AC 50/60Hz Output:24VDC 1.5A

机种型号:

OUR MODEL NO:

QL036-2401500J

样品编号:

日期:

PRODUCT NO: 20230315-05

DATE: 2023.3.15

产品颜色:

PRODUCT COLOR: BLACK

WHITE

APPROVAL SIGNATURE/客户确认

核准/APPROVED BY

审核/CHECKED BY

检测/TESTED BY

Manufacturer/制造商

业务/SALES

核准/APPROVED BY

审核/CHECKED BY

设计/DESIGNED BY

Cathy

戚春丽

广东省清流电子有限公司

Guangdong Qingliu Electronics Co., Ltd

中国广东省 深圳市宝安区福海街道和平社区福海大道新兴工业园一区 13栋401

Add: Room 401, Building 13, Xinxing Industrial Zone 1, Fuhai Avenue, Heping Community, Fuhai Street

Baoan District, Shenzhen District, Shenzhen City, Guangdong, China.

电话 (Tel): 13418575406

传真 (Fax): 0755-23209522

版本目录 Rev. List

版本/Rev.	日期/Date	描述Changes	制订/Design
A0	2023-3-15		戚春丽

Table of contents

1、描述/SCOPE..... 3

2、输入特性/INPUT CHARACTERISTICS..... 3

3、输出特性/OUTPUT CHARACTERISTICS..... 4~5

4、保护功能/PROTECTION REQUIREMENT..... 5

5、环境条件/ENVIRONMENTAL REQUIREMET..... 5~6

6、EMC安全要求/SAFETY AND EMC REQUIREMENT..... 6

7、外形尺寸/OUTLINE DIMENSION..... 7

8、铭牌附图/LABEL..... 8

9、线材尺寸/Wire size..... 9

1、描述/SCOPE:

本规格书适应于 QL036-2401500J

The purpose of the document is to specify the functional requirements of at 36 W switching power supply.

2、输入特性/INPUT CHARACTERISTICS:

2.1输入电压/Input Voltage:

额定电压/Rated Voltage:100~240Vac

调整范围/Variation Range:90-264Vac

2.2输入频率/Input Frequency:

额定频率/ Rated Frequency: 50/60Hz.

调整频率/Variation Frequency:47-63Hz

2.3输入电流/Input Current:

当输入交流电压为额定值的下限电压负载满载时,最大输入交流电流 1.0A

1.0A mps max At any input voltage and rated, DC output rated load.

2.4浪涌电流/Inrush Current:

当输出为额定负载,环境温度为25℃,输入240Vac冷态起机时的最大浪涌电流小于为 50A

50A mps Max. Cold start at 240Vac input, with rated load and 25℃ ambient.

2.5AC漏电流/Ac Leakage Current:

当输入电压240Vac时,最大漏电流为 0.25mA

0.25mA Max.At 240Vac input.

3、输出特性/OUTPUT CHARACTERISTICS:

3.1 输出功率/Power output

电压 Voltage	最小负载 Min. Load	额定负载 Rated. Load	峰值功率 Peak	输出功率 Output power
24 Vdc	0.01A	1.5 A		36 W

3.2负载特性,调整率/Combined Load/Line Regulation

电压 Voltage	最小负载 Min. Load	额定负载 Rated. Load	输出电压范围 Output Voltage Range	负载调整 Load Regulation
24 Vdc	0.01A	1.5 A	22.8-25.2 Vdc	±5%

3.3纹波和噪音Ripple and Noise:

测试条件:在额定电压及额定负载条件下,使用示波器带宽为20MHz连接到充电器的输出端,同时输出端并联一个47uF的电解电容和一个0.1uF的瓷片电容.

Under nominal voltage and nominal load,the ripple and noise are as follows when measure with Max.Bandwidth of 20MHz and Parallel 47uF/0.1uF,crossed connected at testing point.

电压
Voltage

最大纹波/最大噪音
Ripple and Noise(Max.)

+ 24 Vdc 120 mV p-p

3.4启动延迟时间/Turn on delay time:

当开启输入115Vac和输出最大负载时,输出电压最大启动延迟时间为3S.

When the input 115Vac is turned on and the output maximum load is turned on, the maximum start delay time of the output voltage is 3S..

3.5上升时间/Rise time:

当输入115Vac和输出最大负载时,输出电压从零伏到额定输出电压最大上升时间为40mS.

When input 115Vac and output maximum load are applied, the maximum rise time of output voltage from zero volt to rated output voltage is 40 mS.

3.6保持时间/Hold up time:

当输入115Vac和输出最大负载时,关断输入电压,输出电压最小保持时间为5Ms.

When input 115 Vac and output maximum load, turn off input voltage, output voltage minimum hold time is 5 Ms.

3.7效率/Efficiency:

当115V/230Vac输入电压时,1/4,1/2,3/4和满载计算平均效率,最小87.403%。

87.403% Min, At 115V/230Vac input voltage, 1/4, 1/2, 3/4 and full load calculation average efficiency.

适配器满足能效VI。

Adapter meet efficiency level VI .

3.8空载功率/NO-load Power:

当输入115V/230Vac输入电压时, 空载功率 $\leq 0.1W$

NO-load Power $\leq 0.1W$, At 115V /230Vac input voltage.

3.9过冲/Overshoot:

在电源开启或关闭的时候,最大15%.

15% Max. When power supply at turn or turn off.

4、保护功能/PROTECTION REQUIREMENT:

4.1短路电路保护/Short circuit protection:

该电源供给器在短路解除时能正常工作恢复.

The power supply will be auto recovered when short circuit faults remove.

4.2过流保护/Over current Protection:

(1) 过流故障排除后, 电源将自动恢复正常工作.

The power supply will be auto recovered when over current faults remove.

(2)输出电流大于1.8A, 小于2.7A将会保护.

Output current greater than 1.8A, less than 2.7A will be protected

5、环境要求/ENVIRONMENTAL REQUIREMENT:

5.1 工作温度/Operating Temperature:

0°C-40°C,满载,正常工作/Full load, Normal operation.

0°C to 40°C, Full load, Normal operation.

5.2 储藏温度/Storage Temperature:-10°C to 80°C

带外壳/With package

5.3工作湿度/Relative Humidity:

5% (0°C) ~90% (40°C) ,72小时,满载,正常工作.

5%(0°C)~90%(40°C)RH,72Hrs, Full load, Normal operating.

5.4 振动/Vibration:

1. 测试标准:国际电工电子委员会

Operating: IEC 721-3-3 3M3

5~9Hz, A=1.5mm

加速度 (9~200Hz, Acceleration 5m / S²)

2. 运输/Transportation:

IEC 721-3-2 2M2

5-9Hz, A=3.5mm

9~200Hz, 加速度 Acceleration=5m / S²

200~500Hz, 加速度 Acceleration=15m / S²

3. 轴向振动/Axes,10 cycles per axis.

在测试过程中不能出现永久性的损坏.

No permanent damage may occur during testing.

在电源开启和关闭后,样机能够恢复到最初条件.

The product has to restore to its original situation after power off / on..

6、安全及EMI要求 / SAFETY AND EMI REQUIREMENT:

6.1 安全标准:J61347-1 (H29), J61347-2-13 (H29), J55015 (H29)

高压/DIELECTRIC STRENGTH Hi-Pot:

一次侧对二次侧: AC3000V, 最大5mA max, 标准测试1分钟,

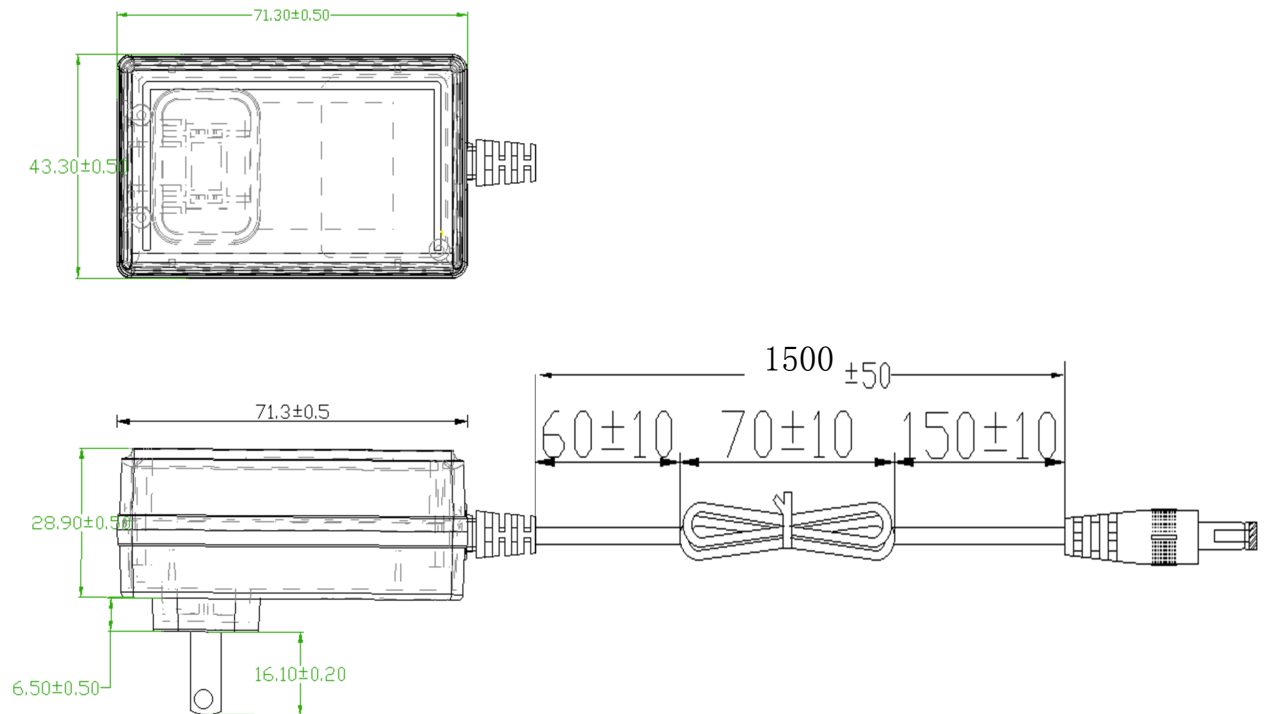
Primary side to secondary side: AC3000V, maximum 5mA max, Standard Test for 1 minute.

量产测试3300V 5mA 3秒钟。

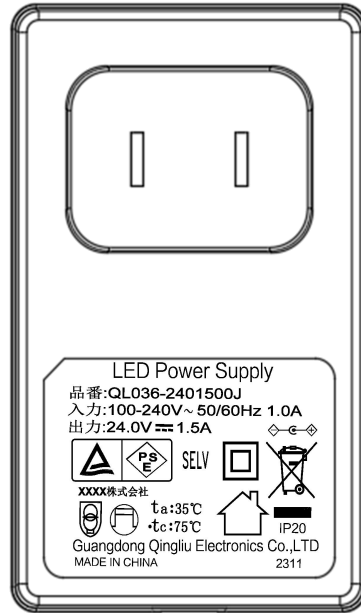
Production test 3300V 5mA 3 seconds.

7、外形尺寸/OUTLINE DIMENSION:

日规黑色外壳



8、铭牌/LABEL:

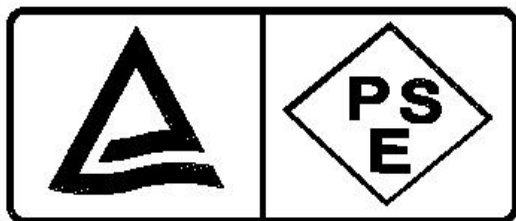


LED Power Supply

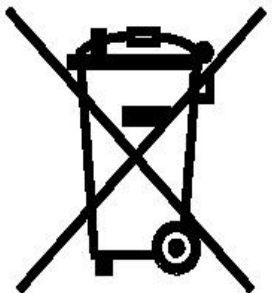
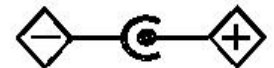
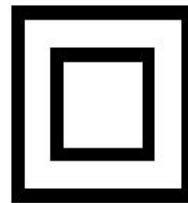
品番:QL036-2401500J

入力:100-240V~ 50/60Hz 1.0A

出力:24.0V ≐ 1.5A



SELV



XXXX株式会社



ta:35°C

tc:75°C



IP20

Guangdong Qingliu Electronics Co.,LTD

MADE IN CHINA

2311

23 代表年份 11 代表周期

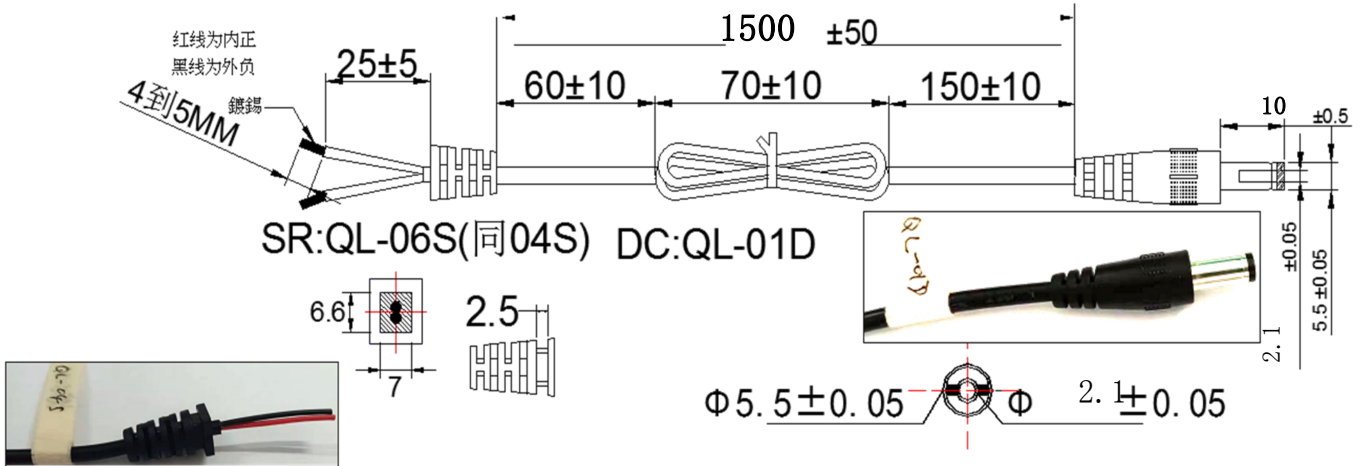
镭射铭牌

镭雕字体: Arial

9、线材尺寸/Wire size:

出线: 2464 22# 总长 1.5 米, DC 头尺寸为 5.5*2.1*10 MM

Out Cord: 2464 22# Length: 1.5 M, DC plug 5.5*2.1*10 MM



注: 黑色输出线 UL2464

22AWG (17*0.16) 1500 mm

DC头: 直头音叉沟槽内缩1-2mm Φ

5.5*2.1*10

mm

SR(6.6*7*2.5mm)

单位:mm