Doc. No.: MSSD-2675_02A0

LED DRIVER SPECIFICATIONS

Part Description: Input: 90～305Vac, Output: 24Vdc/0-8.33A

Customer's Part Number:
MOONS' Part Number: MU200A024AP

Customer:

Company:
Department:
Approved by:
Date:

EDITED:	**DATE:**
CHECKED:	**DATE:**
STANDARD:	**DATE:**
APPROVED:	**DATE:**

REVISIONS:

Rev.	Date	Descriptions	ECO No.	Edited	Checked	Approved
A0	2015.10.14			陈建华	杨智	涂必林

1. ELECTRICAL CHARACTERISTICS

1.1 Input Specifications:

1.1.1 Rated Voltage

100Vac ～ 277Vac

1.1.2 Input Voltage Range

90Vac ～ 305Vac

1.1.3 Rated Frequency

50Hz/60Hz

1.1.4 Frequency Range

47Hz ~ 63Hz

1.1.5 Efficiency

88%（Typical）, 86%（minimum）, at 110Vac input voltage and 100% load.

91%（Typical）, 89%（minimum）, at 220Vac input voltage and 100% load.

（Measured after the unit is thermally stabilized. It will be lower about 1%, if measured immediately after startup.）

1.1.6 Power Factor

0.99（Typical）， 0.98（minimum），at 110Vac input voltage and 100% load.

0.96（Typical）， 0.95（minimum），at 220Vac input voltage and 100% load.

1.1.7 Inrush Current

Less than 65A at 220Vac/50Hz input voltage and max load, 25°C, cold start,.

1.1.8 Maximum Input Current

Less than 2.4A at 100Vac input voltage and 100% load.

1.2 Output Specifications:

1.2.1 Output Channel

Single output

1.2.2 Output Voltage and Current

Output Voltage: 24Vdc±5%

Output Current: constant current 0-8.33A

1.2.3 Total Output Power

200W Max.

1.2.4 Operating Mode

Continuous operating.

1.2.5 Turn-on Delay Time

The time after switch on for the output current reach the normal current should be within 3.0S when operating at rated input and rated load.

1.3 Protection:

1.3.1 Short Circuit Protection

The short circuit protection is provided. The characteristic is hiccup mode, automatic recovery. The function operates when the output is shorted. The output will be automatically recovered when the short circuit is released.

1.3.2 Over Voltage Protection

OVP may occur when internal regulation function of the power supply fails, OVP

function operates to insure the output voltage value less than 34V（Typical）.

1.3.3 Over Temperature Protection

When the inside temperature of PSU rise to 100~130℃,the PSU will shutdown. The power supply should resume it's normal operation when the inside temperature of PSU drop to normal temperature.

1.3.4 Over Current Protection

The power supply shall limit the maximum output current of more than 110%. And should be auto recovered when the fault condition is removed.

1.4 Life Time:

More than 50,000 hours（case temperature: 75℃）

1.5 MTBF:

More than 300,000 hours（full load at ambient temperature: 25℃）

2. ENVIRONMENTAL CHARACTERISTICS

2.1 Temperature:

2.1.1 Operating Temperature(Refer to the derating curve for detail)

-35℃ ～ 60℃（Maximum case temperature 90°C）

2.1.2 Storage Temperature

-40℃ ～ 85℃

2.2 Humidity:

2.2.1 Operating Humidity

20% ～ 95% RH

2.2.2 Storage Humidity

10% ～ 95% RH。

2.3 Altitude:

Operating altitude: 0~3km（otherwise, check HI-POT and leakage current.）

2.4 Vibration:

Sweep range：10-55-500Hz

Peak acceleration：2G（10～55Hz），5G（55～500Hz）

Sweep rate：1 octave/minute

Repeat periods：1h/axis（X/Y/Z）

2.5 Shock:

Acceleration value：40G

Duration：11ms

Shock times：6 shocks/ axis（X/Y/Z）

2.6 Degree of protection:

IP67

3. SAFETY TESTS

3.1 Dielectric Withstand Voltage (HI-POT):

3.1.1 Input to Output: 3.75kVac, 10mA, 1 minute.

3.1.2 Input to FG: 1.875kVac, 10mA, 1 minute.

3.1.3 Output to FG: 500Vac, 10mA, 1 minute.

3.2 Leakage Current:

3.2.1 Line to FG: 0.75 mA Max at 277Vac input voltage.

3.2.2 Neutral to FG: 0.75mA Max at 277Vac input voltage.

3.3 Insulation Resistance:

3.3.1 Input to Output: 500Vdc, 100MΩ, 1 minute.

3.3.2 Output to FG: 500Vdc, 100MΩ, 1 minute.

4. SAFETY & EMC COMPLIANCE

4.1 The power supply must be compliant with the following safety rules:

EN61347-1,EN61347-2-13

4.2 Conducted Emission: FCC PART15 Class B, EN55015

4.3 Radiated Emission: FCC PART15 Class B, EN55015

4.4 Harmonic Emission: EN61000-3-2

4.5 Surge Immunity: EN61000-4-5

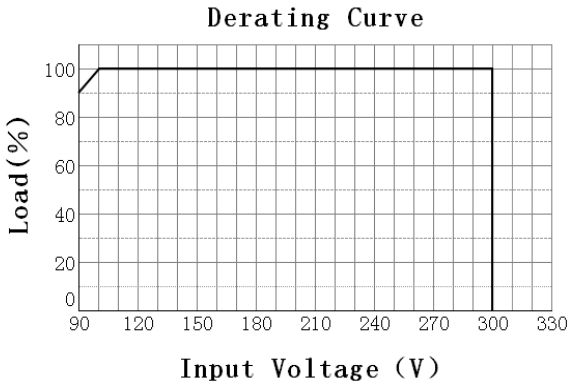
Line to FG: ±4kV, Neutral to FG: ±4kV, Line to Neutral: ±2kV

4.6 Electrostatic Discharge (ESD): EN61000-4-2

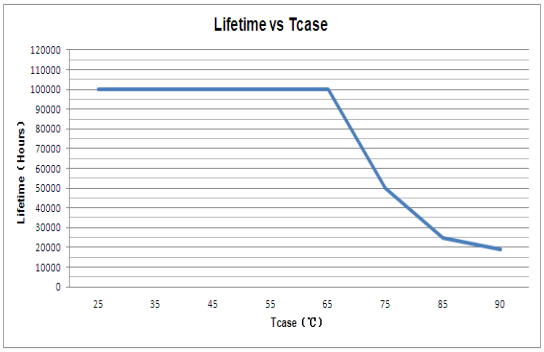
Level 4（±8kV contact discharge, ±15kV air discharge）

5. DERATING CURVE

5.1 DERATING CURVE

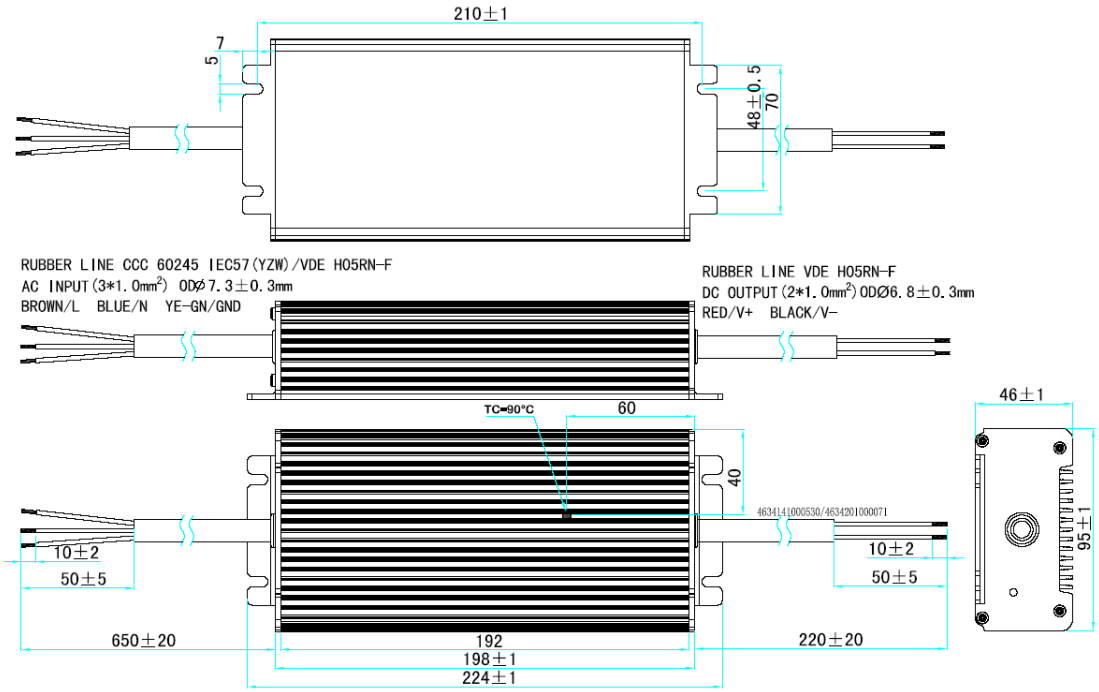


5.2 LIFETIME CURVE



6. MECHANICAL CHARACTERISTICS

6.1 Outline:



6.2 Weight:

1500g(Typical)

7. NAMEPLATE