

## TABLE OF CONTENTS

### 1、 DESCRIPTION

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### 2、 INPUT CHARACTERISTICS

---

### 3、 OUTPUT CHARACTERISTICS

---

### 4、 PROTECTION FUNCTION

---

### 5、 ENVIRONMENTAL REQUIREMENT

---

### 6、 SAFETY AND EMC REQUIREMENT

---

### 7、 OUTLINE DIMENSION

---

### 8、 LABEL

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## 1、 SCOPE:

The purpose of the document is to specify the functional requirements of a 12.0 W switching power supply.

## 2、 INPUT CHARACTERISTICS:

### 2.1 Input Voltage:

Rated Voltage: 100-240Vac

Variation Range: 90-264Vac

### 2.2 Input Frequency:

Rated Frequency: 50/60Hz.

Variation Frequency: 47-63Hz

### 2.3 Input Current:

0.4 Amps max At any input voltage and rated, DC output rated load. **2.4 Ac**

### Leakage Current:

0.7mA PEAK At 264Vac input **2.5**

### Inrush Current:

30Amps Max. Cold start at 240Vac input, with rated load and 25°C ambient

### 3、OUTPUT CHARACTERISTICS:

#### 3.1 Power output

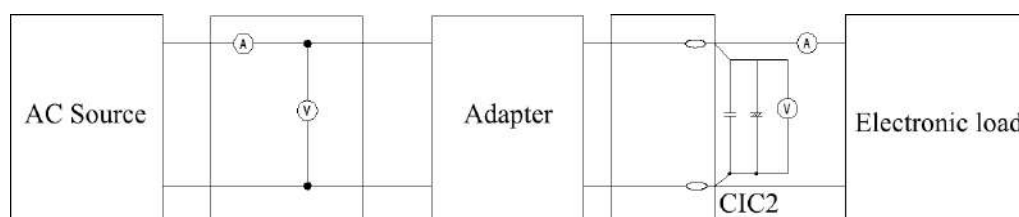
Voltage	Min. Load	Rated. Load	Peak Current	Rated output power
3.0-12.0Vdc	0.00A	1.0A	1.1-6.0A	12.0W

#### 3.2 Combined Load/Line Regulation

Voltage	Min. Load	Rated. Load	Line Regulation	Load Regulation
3.0-6.0Vdc	0.00A	1.0A	±3% (2.91-6.18V)	±10% (2.7-6.6V)
7.5-12.0Vdc	0.00A	1.0A	±3% (7.27-12.36V)	±5% (7.12-12.6V)

#### 3.3 Ripple and Noise:

Output Ripple voltage is 120mV peak to peak or less.(100Vac 60Hz / 240Vac 50Hz)



Measured methods:

\*The ripple is measured from peak to peak with band width limit of 20MHz C1:0.1uF Ceramics capacitor C2:47uF/50V aluminum capacitor under DC output full load, AC nominal input 25°C ambient temperature).

#### 3.4 Turn on delay time:

3 Second Max.at 100Vac input and output Max.load.

#### 3.5 Rise time:

40 mS Max.at 100Vac input and output Max load.

#### 3.6 Hold up time:

5 mS Min.at 100Vac input and output Max.Load.

#### 3.7 Efficiency:

3V: 69.64% / 4.5V: 72.81% / 5V: 73.62% / 6V: 78.88% / 7.5V: 80.26% / 9V: 81.34% / 12V: 82.96%  
at 115Vac input and output Max.Load

3V: 69.64% / 4.5V: 72.81% / 5V: 73.62% / 6V: 78.88% / 7.5V: 80.26% / 9V: 81.34% / 12V: 82.96%  
at 230Vac input and output Max.Load

#### 3.8 Standby Power:

Rated Voltage:100-240Vac 0.1W max

#### 4、 PROTECTION FUNCTION:

##### 4.1 Short circuit protection:

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

##### 4.2 Over current Protection:

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

##### 4.3 Output voltage achieve over voltage protection point.

##### 4.4 Will auto protection without output.be capable of auto-recovery function

#### 5、 ENVIRONMENTAL REQUIREMENT:

**5.1 Operating Temperature:** -20°C to 50°C,Full load, Normal operation.

**5.2 Storage Temperature:** -40°C to 80°C With package

**5.3 Relative Humidity:** 25%(0°C) ~75%(40°C) RH,72Hrs,Full load, Normal operating.

#### 6、 SAFETY AND EMI REQUIREMENT:

##### 6.1 Regulatory Standards.

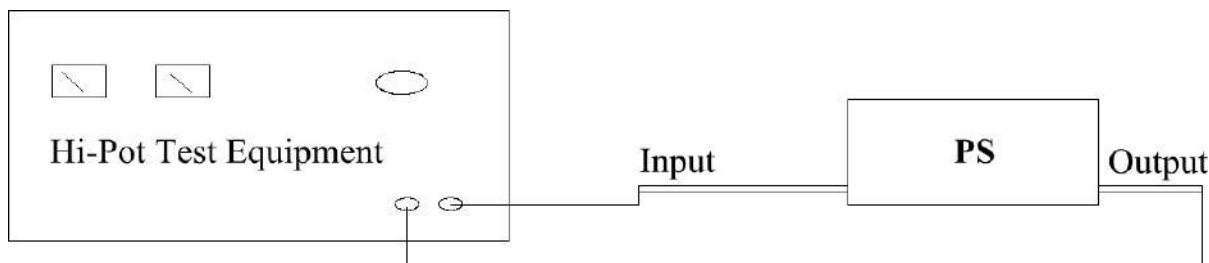
CE EUROPE EN62368-1

##### 6.2 500VDC - 100MΩ

Insulation Resistance: 500VDC primary to the secondary input impedance of 100MΩ(Min)

##### 6.3 DIELECTRIC WITHSTAND Hi-Pot:

HI-POT-- primary to secondary 3000Vac 5mA 1m



##### 6.4 EMI STANDARD

Meets the Limits of

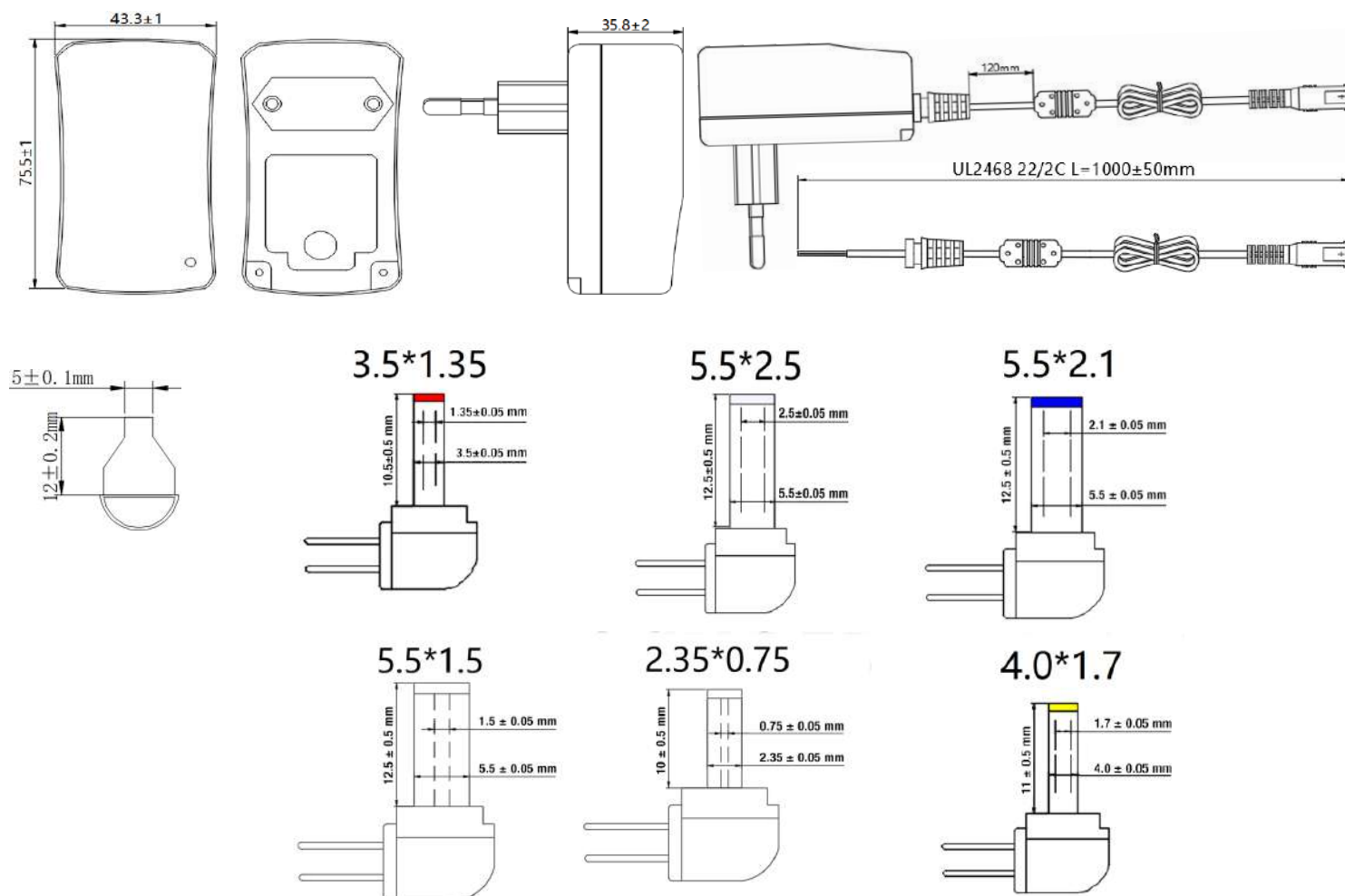
EN 55032:2015+A11:2020

EN 55035:2017+A1:2020

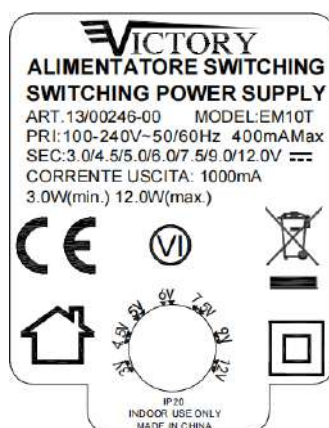
EN IEC 61000-3-2:2019

EN 61000-3-3:2013+A1:2019

## 7. OUTLINE DIMENSION:



## 8. LABEL:



### Informazione agli utenti ex art. 26 D.Lgs. 49/2014

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