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1. Scope

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

Description:

SMPS Adaptor (Wall mount) 2 pin European plug

2. Input Parameters

2.1 (Input voltage):

(Nominal Range): 100-240VAC (Input voltage Range): 90-264VAC

2.2 (Frequency):

(Nominal Frequency): 50/60Hz Frequency Range): 47~63Hz

2.3 (Input current): 0.9A.

0.9A rms Max. At nominal input voltage and nominal output current.

2.4 (Inrush Current):

25°C 240Vac

When the output of the rated load, the ambient temperature is 25°C, input from 240Vac cold machine without damage to.

2.5 AC (Leakage Current):

240VAC 0.25mA.

0.25mA Max.at 240VAC input.

- 3. Output Parameters
- 3.1 (Output Voltage/Output Current):
- 3.1.1 (Nominal Output Voltage/Current): 24V/1.5A
- 3.1.2 Output Voltage Range): 22.8=25.2Vdc
- 3. Combined Load/Line Regulation

Rated Output	Min.Value	Max.Vale	Rated Output	Load
			power	Regulation
+24Vdc1.5A	22.8V	25.2V	36W	±5%

3.3 No Load Combined

No load Voltage	Min.Value	Max.Value	Standbypower
			consumption (Max)
22.8-25.2V	22.8V	25.2V	0.3W(Max)

3.4 (Ripple&Noise):

At the rated input voltage, rated load and room Ripple&noise temperature, using 20 MHZ bandwidth and a 10uF (Max) electrolytic capacitor in parallel with a 0.1uF ceramic tile capacitance test.

Output Current

1.5A 200mVp-p

3.5 (Efficiency):

115/230Vac, 100%,75%,50%,25%:84.63% Min.

Input 115/230Vac. and 100%,75%,50%,25% Rated Load condition. Average efficiency: 84.63% Min

3.6 (Rise Time):

115VAC 30mS.

30mS Max.at 115VAC input and nominal output current.

3.7 (Hold up Time):

115VAC 4mS.

4mS Min. at 115VAC input and nominal output current.

3.8 Overshoot):

230VAC 15%.

15% Max. at 230VAC input and turn on.

3.9 (Turn on Delay Time):

115VAC 5S

5Second Max. at 115VAC input and nominal output current.

4. Protection Function

4.1 (Short Circuit Protection):

The input power shall decrease when the output is short to GND, the power supply shall not be damaged, and shall self-recover when the fault condition is removed

4.2 (Over Current Protection):

1.5A < OCP < 3.0A

OCP Point Limited: 1.5A < OCP < 3.0A

The power supply will auto recover when over current fault is removed

4.3 (Over Voltage Protection):

The charger will auto recovered when open loop faults removed.

5. EMI / Safety and EMI Standard

5.1 (Safety):

IEC 60950-1

Meet IEC 60950-1

5.2 Dielectric Strength(Hi-pot):

3000VAC/5mA/60S

Primary to secondary, 3000VAC/5mA/60S.

3000VAC/5mA/60S

Primary to Enclosure, 3000VAC/5mA/60S.

5.3 Insulation Resistance

 $10M\Omega$ min. @ primary to secondary add a 500Vdc test voltage

5.4 EMI (EMI STANDARD)

Meet EN55032

5.5 (Surge)

(1)

Common Mode 1KVClass I (line to earth, neutral to earth)

(2)

Differential Mode 1KV. Class II (line to neutral)

5.6 (ESD)

Air discharge - 8KV Contact discharge -4KV.

6. Environment Requirements

6.1 (Operating Temperature:

0°C-40°C, Full load, Normal operating.

6.2 Storage Temperature:

-20°Cto 85°CWith Enclosure

6.3 Relative Humidity:

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

7. RELIABILITY

7.1 Mean time between failure(MTBF)

The power supply shall be designed and Prediction to have a mean time between failure(MTBF) of 30Koperating hours minimum and conditions: @115Vac/230Vac, full load 25°C, MTBF calculation meet Telcordia Technologies Special Report SR-332(1ssue 2)

7.2 Drop Test (IEC60950 CLAUSE 4.2.6)

Products from 100 cm high to hardwood surface dropped six times (6 sides, each side

once test), there will be no mechanical or electrical damage after the test

7.3 Vibration:

7.3.1 Test Standard:

IEC 721-3-3 3M3

5-9Hz, Acceleration 1.5mm/S2

9-200Hz, Acceleration 5M/S2

7.3.2 Transportation:

IEC 721-3-2 2M2

5—9Hz, Acceleration 3.5mm/S2

9-200Hz, Acceleration 5M/S2

200-500Hz, Acceleration 15M/S2

7.3.3 Testing

Axes,10 cycles per axis

No permanent damage may occur during testing.

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

8. Mechanical Parameters

8.1 Enclosure: Black

Enclosure Dimension: L94×W50×H36mm(For Reference)

8.2 Input Connector:

Two pins AC plug - EU

8.3 DC Cord (Black)

2464, 22AWG, VW-1, 80°C, 300V, 3 (±5cm) Meters Long