

DAN-122W

Switching Power Supply

Input:100-240V AC 50/60Hz

Output:12.0VDC 2.0A



1. SCOPE:

The purpose of the document is to specify the functional requirements of a 24.0W 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:

0.5Amps max At any input voltage and rated, DC output rated load.

2.4 AC /Ac Leakage Current:

0.7mA Peak.At264Vac input



dvc.video

For more information, please visit our website



**alarm
automatika**®

| www.alarmautomatika.com |

3. OUTPUT CHARACTERISTICS:**3.1 Power output**

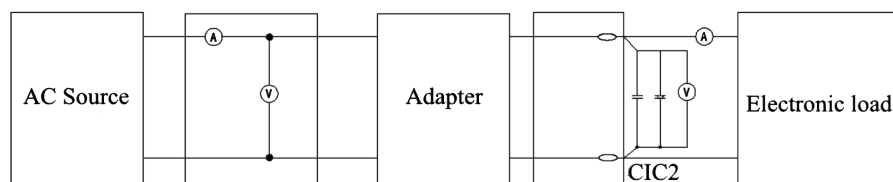
Voltage	Min. Load	Rated. Load	Peak Load	Output power
12.0Vdc	0.00A	2.0A	2.0-3.5A	24.0W

3.2 Combined Load/Line Regulation

Voltage	Min. Load	Rated. Load	Line Regulation	Load Regulation
12.0Vdc	0.00A	2.0A	$\pm 3\%$ 11.64 - 12.36V	$\pm 5\%$ 11.4 - 12.6V

3.3 Voltage accuracy: $\pm 5\%$ **3.4 Ripple and Noise:**

Output Ripple voltage is_150mV peak to peak or less.(100Vac 60Hz/240Vac 50Hz)



Measured methods:

*The ripple is measured from peak to peak with band width limit of 20MHzC1:0.1uF Ceramics capacitor C2:47uF/50Vluminum capacitor under DC output full load,AC nominal input 25°C ambient temperature).

3.5 Turn on delay time:

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

3.6 Rise time:

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

3.7 Hold up time:

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

3.8 Efficiency:

Energy Star Compliance: Level VI Requirement

Average Efficiencyachieve 86.2% 115Vac input.

Average Efficiency achieve 86.2% 230Vac input.

3.9 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 will auto protection without output.be capable of auto-recovery function

5. ENVIRONMENTAL REQUIREMET:**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.

5.4 Operating Altitude: -50 to 2000m AMSL**5. EMI SAFETY AND EMI REQUIREMENT:****6.1 Regulatory Standards**

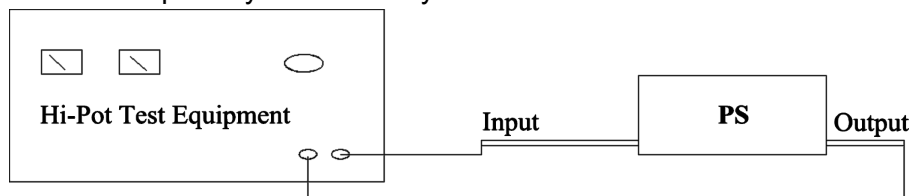
	Type	Country	Standard		Type	Country	Standard
✓	ETL	USA	ETL1310	✓	CB	SINGAPORE	IEC62368
	TUV	EUROPE	EN62368-1	✓	PSE	JAPAN	J62368-1
✓	CCC	CHINA	GB4943	✓	KC	KORE	K62368-1
✓	CE/UKCA	EUROPE	EN62368-1		CSA	CANADIAN	CAS C22.2
✓	RCM	AUSTRALIA	AS/NZ62368 - 1				

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 1min

**6.4 EMI/EMI STANDARD**

Meets the Limits of EN

55032:2015+A11:2020 EN

55035:2017+A11:2020 EN

EC 61000-3-2:2019

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

7. RELIABILITY REQUIREMENTS:

7.1 Vibration

5 to 500Hz sweep at a shift gears for 20 minute for each of the perpendicular axes X,Y,Z
Thereinto:acceleration frequency for 10 m2/s3 at 5~10Hz;acceleration frequency for 3 m2/s3
At 10~200Hz; acceleration frequency for 1 m2/s3 at 200~500Hz

7.2 Drop in

Random surface in all twice,Height: 1.0m,on the cement plane

7.3 STEEL BALL IMPACT

Ball weight: 500g±25g , diameter: 50mm
Top surface&back surface in all once,steel ball @Height:1.3m free faller,on the cement
Plane,the case can not crack

7.4 Qualification

The MTBF shall be at least 50000hours at 25°C, Full load and input 230Vac

7.5 The lifetime electrolyte capacitor

The lifetime of electrolyte capacitor shall be at least 17520 hours at 25°C, 80% load and
Rated input condition

7.6 Case description and flame retardant grade

The case is Black.the material is ABS+PC,and the flame retardant grade is UL94V-0

7.7 DC wire and SR test

DC wire use 20#2468, Hang 0.3kg weight at the position of below DC wire or SR,rocking
angle±90°, Swaying frequency 40 times perminute,and wobble 3000 times,The connectivity
shall be well, and the Rate of wire breaking shall be less than 30%

7.8 Connector Insertion test

The connector insertion test 5000 times,after the test is completed,functional connectivity is
normal And no loosening

7.9 Temperature delta of the case surface

Temperature delta of the case surface should not exceed 45K

8. OUTLINE DIMENSION:

