



DESCRIPTION

Switching Power
Supply

MODEL NO.

8736-12V

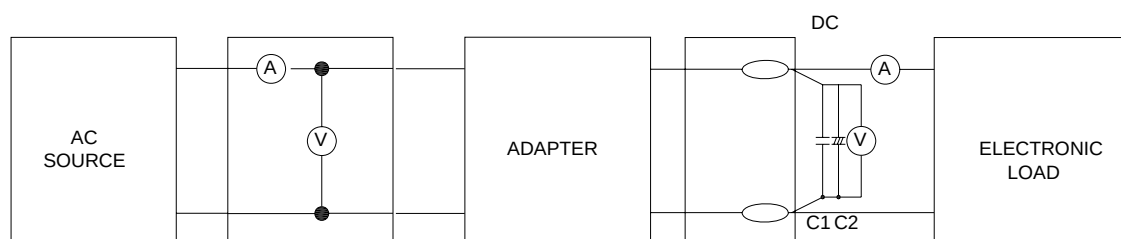
1、INPUT REQUIREMENT

ITEM	SPECIFICATION	MIN	TYP.	MAX
NORMAL AC INPUT VOLTAGE	SINGLE PHASE	100Vac	110Vac/220Vac	240Vac
AC INPUT VOLTAGE RANGE	SINGLE PHASE	90Vac	110Vac/220Vac	264Vac
AC INPUT FREQUENCY	SINGLE PHASE	47Hz	50/60Hz	63Hz
AC INPUT CURRENT	TYPICAL INPUT VOLTAGE&OUTPUT AT FULL LOAD.			2000mA
AC INRUSH CURRENT	TYPICAL INPUT VOLTAGE&OUTPUT AT FULL LOAD, 25℃	30A		80A
EFFICIENCY	TYPICAL INPUT VOLTAGE&OUTPUT AT FULL LOAD.	80%		

2、OUTPUT SPECIFICATION

ITEM	SPECIFICATION	MIN	TYP.	MAX
NORMAL DC OUTPUT VOLTAGE			12VDc	
DC OUTPUT VOLTAGE RANGE	TYPICAL OUTPUT VOLTAGE	11.4V		12.6V
LOAD CURRENT RANGE		0.0 A		3.0 A
PEAK LOAD CURRENT	TIME<60S			1 A
RIPPLE	TYPICAL INPUT VOLTAGE, TYPICAL LOAD CURRENT, 25℃			300mV
HOLD-UP TIME	AT TYPICAL INPUT VOLTAGE AND FULL LOAD	10ms		30ms
TURN-ON DELAY	TYPICAL INPUT VOLTAGE AND TOP LOAD CURRENT			3S
OVER CURRENT PROTECTION	AUTO RECOVERY			5.5 A
SHORT CIRCUIT PROTECTION	THE ADAPTER SHALL NOT DAMAGE BY SHORT THE DC OUTPUT TO GROUND			
OVER VOLTAGE PROTECTION			1 V	1 V
NO LOAD POWER DISSIPATION				0.3W

*TEST MEASURES



C1 : 0.1uF CERAMICS CAPACITOR
C2 : 10uF/50V ALUMINUM CAPACITOR



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3、MECHANICAL

ITEM	SPECIFICATION OR TEST CONDITION	ACCEPTANCE CRITERIA
BENDING TEST	NORMAL TEMPERATURE THE CORD SHALL WITHSTAND WEIGHT OF 200g,SWINGING FROM LEFT TO RIGHT AT AN ANGLE OF 60 DEG. 1000CYCLE TIMES MIN. S/R SHALL WITHSTAND WEIGHT OF 1N. SWINGING FROM LEFT TO RIGHT AT AN ANGLE OF 60DEG. 1000CYCLE TIMES MIN. BENDING SPEED 40CYCLE/MINUTE	NO SHORT CIRCUIT NO BREAKAGE OF THE CORD
VIBRATION	FREQUENCY RANGE:10~55Hz AMPLITUDE:1.5mm ACCELERATION:1G SWEEP 1MINUTE FOR X,Y,Z,AXIS EACH	THERE SHALL BENO ABNORMALITY ON THE APPEARANCE STRUCTURE AND OPERATING

4、RELIABILITY

ITEM	SPECIFICATION OR TEST CONDITION	ACCEPTANCE CRITERIA
TEMPERATURE UP WITH TYPICAL LOAD	TEST AT SURFACE OF THE CASE WITH TYPICAL AC INPUT AND TYPICAL LOAD IN OUTPUT 50/60Hz	TEMPERATURE UP UNDER 35 DEGREES
HI-POT TEST	INPUT TO OUTPUT GRADUALLY RAISED FROM 0 TO THE 4242Vdc/3000Vac AND HELD AT THAT VALUE FOR 1Minute,10mA	NO DAMAGE
INSULATION RESISTANCE	INPUT TO OUTPUT,DC 500V	>50M Ω
MTBF	TYPICAL INPUT&FULL LOAD,25℃	50000HOURS
LIFE	TYPICAL INPUT&FULL LOAD,40℃ TYPICAL INPUT&FULL LOAD,25℃	1YEARS ABOVE 2YEARS ABOVE
BURN-IN	AT 30℃(±10℃),NORMAL INPUT VOLTAGE	2~4 HOURS

5、ENVIRONMENT

ITEM	SPECIFICATION OR TEST CONDITION	min.	typ.	max.
OPERATING TEMPERATURE		0℃		40℃
STORAGE TEMPERATURE		-20℃		85℃
OPERATING HUMIDITY	NON-CONDENSING	5%RH		90%RH
STORAGE HUMIDITY	NON-CONDENSING	5%RH		90%RH



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6、OUTLOOKING

DIMENSION : 100.5(L)*49(W)*32.5(H)mm

WEIGHT : ABOUT 209.6g

AC INPUT TYPE : Desk Top

DC OUTPUT TYPE : 5.5*2.5*10 S TYPE



DC OUTPUT CABLE : UL1185 20AWG/2C BLACK

INDICATION : LABEL

CASE MATERIAL : ABS+PC

PCB MATERIAL : /

7、SAFETY

Item	Country	Certified	Standard	Present
UL	USA	MEET	UL60950-1 2 nd	☒
CUL	Canada		CSA C22.2 NO.60950-1	☐
FCC	USA	MEET	PART 15 CLASS B	☒
VDE/GS	Europe		EN 60950-1 2 nd	☐
CE	Europe	MEET	EN 60950-1 2 nd	☒
BS/UK	Britain		BS EN 60950-1 2 nd	☐
SAA	Australia		AS/NZS 60950-1	☐
CCC	China		GB4943	☐
Ko	Korea		K60950	☐
PSE	Japan		J60950 (H20)	☐
Others				☐



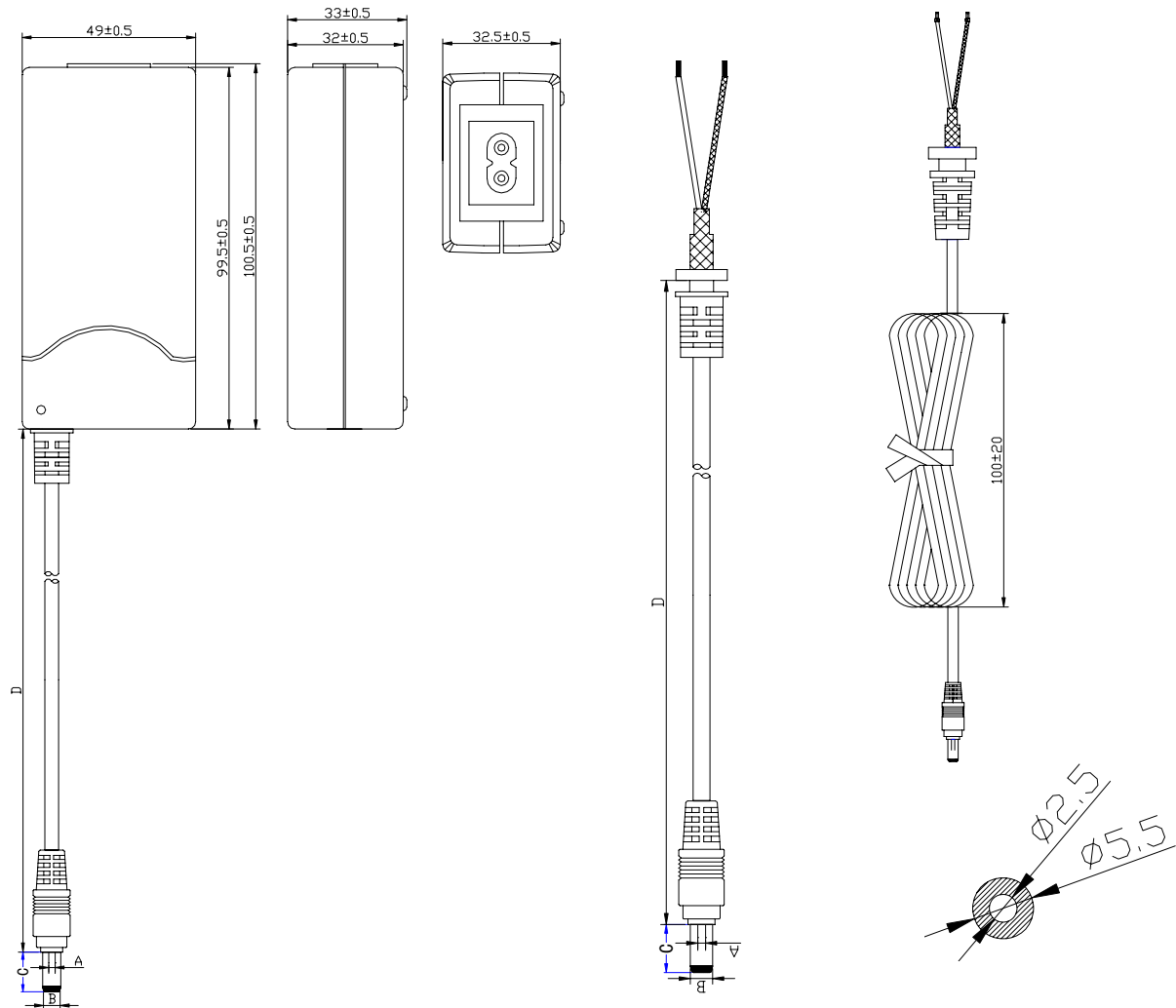
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8、DIMENSION



Unit : mm

	ΦA	ΦB	C	D
DIMENSION	2.5	5.5	10	1200
TOLERANCE	+0.1/-0	±0.1	±0.5	±50
REMARK	AWG20/2C UL1185 BLACK			



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11、QC CHECK

ALL OF THE QUANTITY SHALL BE CHECKED BEFORE SHIPMENT,CHECK ITEM AS BELOW:

- (1) DC PLUG POLE CHECK
- (2) OCP FUNCTION CHECK
- (3) DC OUTPUT VOLTAGE CHECK
- (4) HIPOT&INSULATION CHECK
- (5) OUTLOOKING CHECK

12、SAMPLE PRIMARY TEST REPORT

Test Items.	Test Condition	Unit	Sample Number and Test Result										Pass/ Fail
			1#	2#	3#	4#	5#	6#	7#	8#	9#	10#	
Unload output voltage/(0.0A) <u>12±5%Vdc</u>	100Vac	V	12.15										PASS
	240Vac	V	12.15										PASS
Rated load output voltage/(3.0A) <u>12±5%Vdc</u>	100Vac	V	11.78										PASS
	240Vac	V	11.79										PASS
Output ripple & noise voltage≤ <u>300mV</u> (test at full loading)	100Vac	mV	86										PASS
	240Vac	mV	78										PASS
Short-circuit protection test (Short at end of DC plug) (SCP≤ <u>6W</u>)	100Vac	W	0.008										PASS
	240Vac	W	2.73										PASS
Overcurrent Protection (OCP≤ <u>5.5A</u>)	100Vac	A	4.4										PASS
	240Vac	A	4.47										PASS
Efficiency test ($\eta \geq$ <u>80%</u>)	100Vac	%	83.08										PASS
	240Vac	%	84.67										PASS
Hi-pot test	4242Vdc or 3000Vac10mA/ 1Minute		OK										PASS

NOTES: The products which are no use in the three months need to aging test



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13、SAMPLE TEST REPORT

Items No	Test Items	Unit	Test condition & result				Spec. Limit	Pass/Fail
			90Vac 60Hz	115Vac 60Hz	230Vac 50Hz	264Vac 50Hz		
1	Unload input current	mA	7.8	9.8	16	18	—	-
2	Unload input power	W	0.06	0.06	0.1	0.11	$\leq 0.3W$	PASS
3	Rated load input current	mA	732	602	367	329	$\leq 2000mA$	PASS
4	Rated load input power	W	42.8	42	41.56	41.78	—	-
5	Unload output voltage(0.0A)	V	12.15	12.15	12.15	12.15	$12 \pm 5\% V_{dc}$	PASS
6	Rated load output voltage(3.0 A)	V	11.77	11.78	11.79	11.79	$12 \pm 5\% V_{dc}$	PASS
7	Rated load Output ripple&noise voltage (300mV)	mV	92	80	76	74	$\leq 300mV_{p-p}$	PASS
8	Short-circuit test (Pin&lout)	W	0.006	0.01	0.22	2.52	$\leq 6W$	PASS
9	Over current protection	A	4.35	4.45	4.46	4.5	$OCP \leq 5.5 A$	PASS
10	Output overshoot	%	3.16	3.08	3	3	$\leq 10\%$	PASS
11	Turn on delay time	mS	/	/	/	/	$\leq 3000mS$	-
12	Hold up time	mS	/	/	/	/	$\geq 10mS/(115Vac)$ $\geq 20mS/(230Vac)$	-
13	Efficiency	%	82.5	84.14	85.10	84.65	$\geq 80\%$	PASS
14	Hi-pot test	Pri. to Sec. : 4242Vdc or 3000Vac, 1Minute, Cut off current $\leq 10mA$						PASS
15	Max. and Light load change test	Max. load to Light load: OK Light load to max. load: OK (90-264Vac)						
16	Burn-in	Burn-in 4 Hrs, The sample OK						
17	Appe. label and fusion	Appearance: <u>OK</u> , Label: <u>OK</u> , Fusion: <u>OK</u>						



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14、ENERGY STAR TEST REPORT

Items No.	Test parameter	Unit	Input voltage 115Vac/60Hz						Spec. Limit	Pass /Fail
			100%	75%	50%	25%	0%	Aver.Eff		
1	Input current	mA	603	470	330	180	9.7		$\leq 2000\text{mA}$	Pass
2	Input power	W	41.96	31.28	20.76	10.39	0.06		-	-
3	Output current	A	3	2.25	1.5	0.75			-	-
4	Output voltage	V	11.78	11.88	11.97	12.06			-	-
5	Power factor	-	/	/	/	/			-	-
6	Efficiency	%	84.22	85.45	86.48	87.05		85.08	$\geq 80\%$	Pass

Items No.	Test parameter	Unit	Input voltage 230Vac/50Hz						Spec. Limit	Pass /Fail
			100%	75%	50%	25%	0%	Aver.Eff.		
1	Input current	mA	362	284	204	111.4	15.9		$\leq 2000\text{mA}$	Pass
2	Input power	W	41.68	31.43	20.77	10.49	0.02		-	-
3	Output current	A	3	2.25	1.5	0.75			-	-
4	Output voltage	V	11.79	11.88	11.97	12.06			-	-
5	Power factor	-	/	/	/	/			-	-
6	Efficiency	%	84.86	85.04	86.44	86.22		85.64	$\geq 80\%$	Pass

Note: 1. Aver.Eff.Spec.($\geq 80\%$ Unload input power Spec.($\leq 0.3\text{W}$)for CEC LEVEL/)