
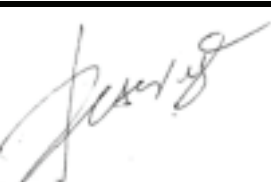



APPROVAL SHEET

CUSTOMER	凱盛
CUSTOMER P/N	
DESCRIPTION	9V/2.77A SERIES NO. (03)
EDAC MODEL	EA10402A-090
DATE	2010-02-05
REVISION	0

APPROVED	DESIGN	PREPARE	RoHS
			
CONCLUSION 判定結果	APPROVED 承認	CONDITON APP'D 有條件承認	CUSTOMER'S SIGNATURE: 客戶簽章:



翌勝電子股份有限公司
 EDAC POWER ELECTRONICS CO., LTD.
 台北縣中和市建一路 150 號 11 樓之 2(E 棟)
 TEL: 886-2-82263289 FAX: 886-2-82263327

翌勝電子(蘇州)有限公司
 Edac Power Electronics (Suzhou) Co., Ltd.
 江蘇省蘇州工業園區勝浦鎮常勝路 59 號
 No.59, Chang Sheng Road, Sheng Pu,
 Suzhou Industrial Park, Jiangsu, China
 Tel: 512-6282-1628 Fax: 512-6282-9608

Index

1. General Description
2. Input Electrical Specification
3. Output Electrical Specification
4. Reliability Specification
5. Environmental Specification
6. Safety Specification
7. Mechanical Specification

1. General Description

The purpose of this document is to specify a single phase AC input switching power supply with full range. The product is AC to DC switch mode power supply that provide single output EA10402A_9V@2.77A_{max} with 25W max DC output with constant voltage source. This Specification defines the input, output, performance characteristics, environment , noise and safety requirement.

2. Input Electrical Specification

2-1. AC Input Voltage

Maximum Voltage: 264Vac
Normal Voltage : 100~240Vac
Minimum Voltage: 90Vac

2-2. AC Input Frequency

Maximum Frequency: 63Hz
Normal Frequency: 50~60Hz
Minimum Frequency: 47Hz

2-3. Input Current

- a. 1.0A (Max.) @ AC100Vac input with full load.
- b. 0.75A (Max.) @ AC 240Vac input with full load.

2-4. Efficiency

Meet CEC Level IV

	Nameplate Output Power	Energy Star Spec
<input type="checkbox"/>	0 to ≤ 1 Watt	$\geq 0.50 * P_{no}$
<input type="checkbox"/>	$> 1 \leq 50$ Watts	$\geq [0.09 * \ln (P_{no})] + 0.50$
<input type="checkbox"/>	> 50 to 250 Watts	≥ 0.85

Efficiency $\geq 79\%$ (avg.) @ normal input & 25% , 50% , 75% , 100% of max output load.

2-5. Configuration

2-wire AC input (**Line ,Neutral**)

2-6. Input Fuse

The Line of the AC input shall have a fuse , rated is T3.15A/250V

2-7. Inrush Current

- ≤ 30 A at 110 Vac At cold start, nominal load.
- ≤ 60 A at 240 Vac At cold start, nominal load.

2-8. Hold Up Time

\geq 10 mSec., @ normal line, with full load.

2-9. Rise Time

\leq 20 mSec. @ min Input voltage , with full load from 10% to 90% of output voltage.

2-10 Turn-ON Time

The output voltage should rise to 90% of rated output voltage in less than 3 seconds.

3. Output Electrical Specification

3-1. Output Voltage and Current

Output Voltage	Min Current(A)	Max Current(A)	Peak Current(A)
+9V	0A	2.77A	

3-2. Line / Load Regulation

	Output Voltage (V)	Tolerance (%)	Regulation(V)
Vo	+9V	+5% ~ -5%	8.55 ~ 9.45V

3-3. Dynamic Load Regulation

$\pm 5\%$ excursion from 50% to 100% load and back to 50% load change of DC output at any frequency up to 1KHz(duty 50%)

3-4. Ripple & Noise

The power supply shall not exceed the following limits on the indicated voltage for 60Hz or 50Hz ripple, Switching frequency ripple and noise and dynamic load variations measured with a 20MHz bandwidth and output parallel with a 0.1uF ceramic capacitor and a 47uF electrolytic capacitor to ground. Temperature at 25°C and nominal AC input voltage

Output	Ripple/Noise(PK)
9V	120mV max.

Ripple / Noise: 60Hz ripple + switching ripple and noise

3-5. Short Circuit Protection :

The output should shut-down when subjected to short circuit. The power supply shall return to normal operating after removing the short situation .

3-6. Open Circuit Protection :

When primary power is applied with no load on any output level, no damage or hazardous conditions should be occurred..

3-7. Over Power Protection :

150% -- 200% of max current

When over-power occurred, the output should shut down and the over –power situation is removed, the output shall auto-recover without any harm .

3-8. Stability

2% Max. at constant load with constant input (after **30 minutes** of operation).

3-9 Drop-out (Power Line Disturbance)

Output voltage shall remain within the specified regulation range, through the absence of a line input during 1/2 cycle, at full load and normal AC line input.

4. Reliability Specification

4-1. MTBF (MIL-STD-781C)

The power supply shall be designed and produced to have a mean time between failures (MTBF) of 50000 operating hours minimum conditions: 80% maximum load at 25 °C, nominal input voltage.

5. Environment Specification

5-1 Temperature

- a. Operating: 0 to 40°C
- b. Storage: -20 to 60°C

5-2 Humidity

- a. Operating: 20 to 85 % RH, NON-CONDENSING
- b. Storage: 5 to 95 % RH, NON-CONDENSING

5-3 Altitude

From sea level to 2000M(operation) and 5000M(non operation).

6-0. Safety Specification

6-1. Hi-Pot Test

3000VAC, 10mA, 3 seconds or 4242Vdc 5mA 3 seconds between primary and secondary circuit

6-2. Insulation Test

500Vdc, 3 Sec. between primary and secondary circuit
IR should $\geq 100 \text{ M}\Omega$.

6-3. Leakage Current

\leq 250 uA @ 240VAC 50Hz

6-4. Safety

UL, CUL, TUV/GS, CE, FCC, PSE, CCC, BSMI

7. Mechanical Specification

7-1. Physical Size : 85.5 L x 35.7 W x 25.7H (mm)

7-2. Enclosure material : 94V-0

7-3. Net Weight (Reference) : 160g

64+/-1

27+/-1

EDAC EDACPOWER ELEC.

AC ADAPTER 电源适配器 電源供應器

MODEL 型号 型號 :EA10402A-090

AC INPUT 输入 輸入:100-240V~1.0A, 50-60Hz

DC OUTPUT 输出 輸出: 9V==2.77A

CAUTION 注意 注意


FOR INDOOR USE ONLY 室内产品使用 室內產品使用


I.T.E. USE ONLY


DATE CODE:


10	11	12			1	2	3	4	5
1	2	3	4	5	6	7	8	9	0

出厂日期 出廠日期














I.T.E. POWER SUPPLY
41TJ
E209833











R33147

MADE IN CHINA 中国制造 中國製造

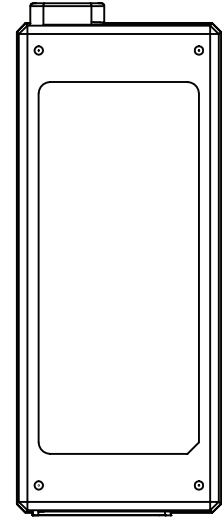
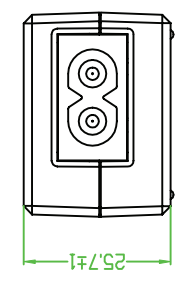
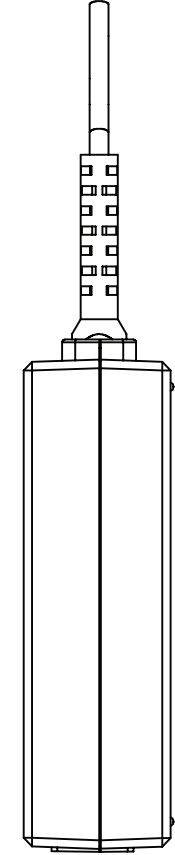
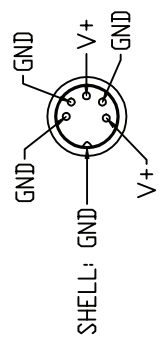
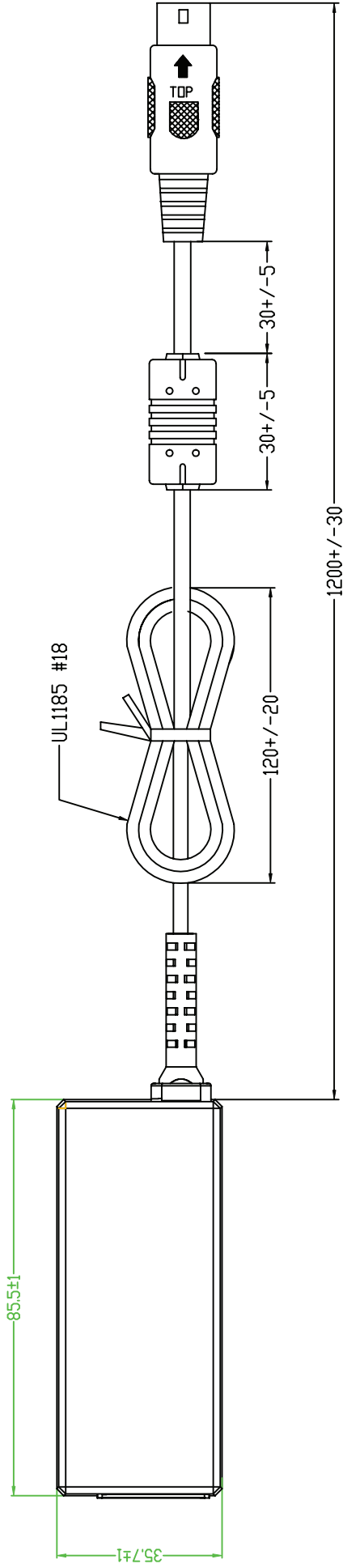
1312 C3

EDAC LABEL P/N.: 312

Background: Black color

Character: Siliver color

Unit: mm



EDACPOWER ELEC.		APPROVED
MODEL	EA10402A(03)	DESIGNED
COLOR	BLACK	CHECK
CUS.	DATE	DRAWING
	UNIT	2010-02-05
	SCALE	mm