



**58 x 120 x 42 (mm)**

## General Specifications:

Input voltage ..... 85 VAC to 264 VAC  
 Input frequency ..... 47 Hz to 63 Hz  
 Inrush current (cold start at 25°C) ..... < 60A at 230VAC  
 Meet green mode ..... < 0.3W (at no load)  
 Energy saving ..... CEC efficiency level IV  
 Efficiency ..... 75%~85% depends on models  
 Holdup time..... 16 ms typical  
 at rated load and 115VAC  
 Over voltage protection ..... latch off  
 Short circuit protection..... auto recovery

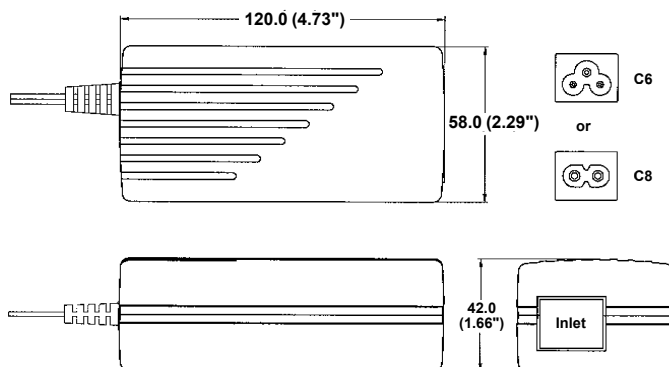
## Features:

- IEC320 C6 or C8 Input Socket
- With Medical safety
- Compatible to Class I / II safety & EMC
- No load input power < 0.3W
- Energy Saving CEC level IV compliant

## Applications:

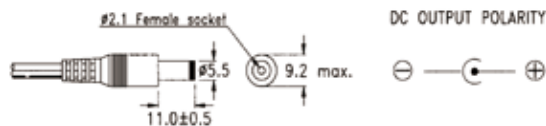
- For medical device.
- For peak power required system.

## Mechanical Specifications:



### Notes:

1. Size:  
58 x 120 x 42 (mm)
2. Connectors:  
AC input :  
IEC 320 C8: SNP-A04x-M  
C6: SNP-A04x-M3 (\* x: 7/8/9)  
DC output :  
Power Jack, OD=5.5mm, ID=2.1mm (SNP-A04x-M)  
T type, 1.98mm Dia. x 3 socket pins (SNP-A04x-M3)



3. Box Color : Black
4. Packing:  
Net weight: 300 g approx. / unit  
Gross weight: 16.5 kg approx. / carton, 48 units / carton  
Carton size (mm): 549 (L) x 490 (W) x 241 (H)

## Output Specifications:

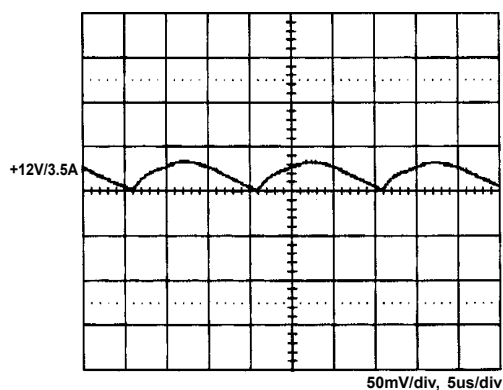
| MODEL NO.                 | OUTPUT RAIL | LOAD |       |      |      | VOLTAGE ACCURACY | RIPPLE NOISE | LINE REG. | LOAD REG. | EFFICIENCY TYPICAL |
|---------------------------|-------------|------|-------|------|------|------------------|--------------|-----------|-----------|--------------------|
|                           |             | MIN. | RATED | MAX. | PEAK |                  |              |           |           |                    |
| SNP-A047-M<br>SNP-A047-M3 | +12V        | 0A   | 3.5A  |      | 5.6A | +11.40V~+12.60V  | 100mVpp      | ±1%       | ±2%       | 83%                |
| SNP-A048-M<br>SNP-A048-M3 | +15V        | 0A   | 2.8A  |      | 4.5A | +14.25V~+15.75V  | 100mVpp      | ±1%       | ±2%       | 85%                |
| SNP-A049-M<br>SNP-A049-M3 | +24V        | 0A   | 1.9A  |      | 2.9A | +22.80V~+25.20V  | 200mVpp      | ±1%       | ±1%       | 86%                |

### Note:

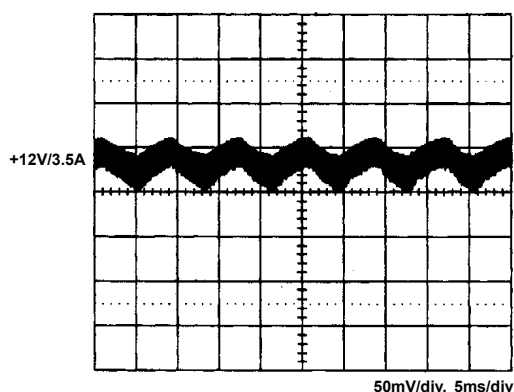
- Output can provide up to peak load when the power supply starts up. Continuous staying in more than rated load is not allowed.
- At factory, in 60% rated load condition, each output is checked to be within voltage accuracy.
- Line regulation is defined by changing ±10% of input voltage from nominal line at rated load.
- Load regulation is defined by changing ±40% of measured output load from 60% rated load.
- Ripple & noise is measured by using 15MHz bandwidth limited oscilloscope and terminated each output with a 0.47uF capacitor at rated load and nominal line.
- Hold up time is measured from the end of the last charging pulse to the time which the main output drops down to low limit of main output at rated load and nominal line.
- Efficiency is measured at rated load, and nominal line.
- Model Selection:  
SNP-A04x-M is for Class II, Medical application.  
SNP-A04x-M3 is for Class I, Medical application.

## Performance for SNP-A047-M:

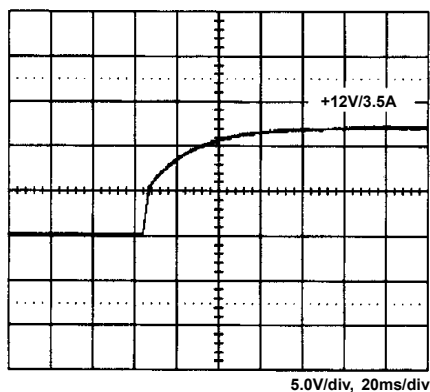
### 1. Switching frequency ripple



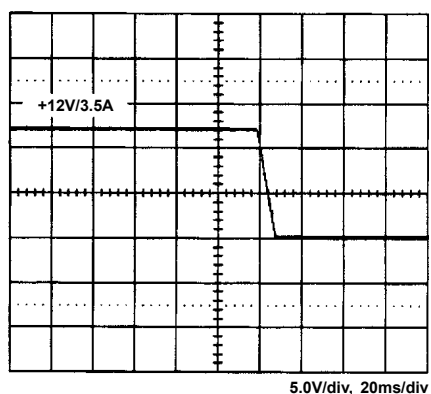
### 2. Line frequency ripple



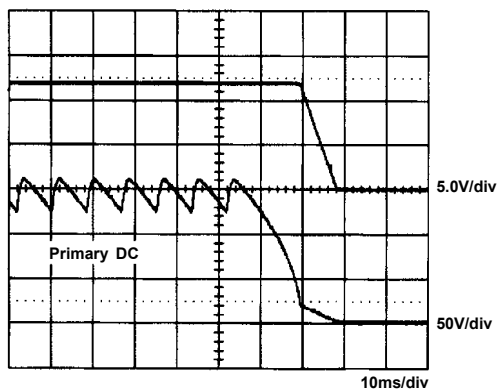
### 3. Output turn on wave form



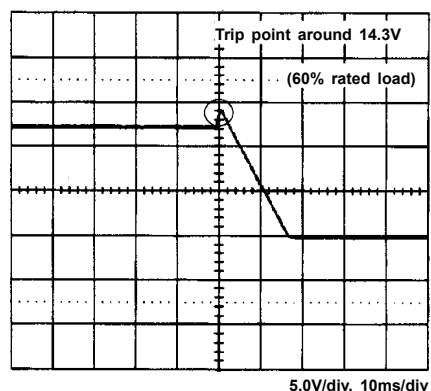
### 4. Output turn off wave form



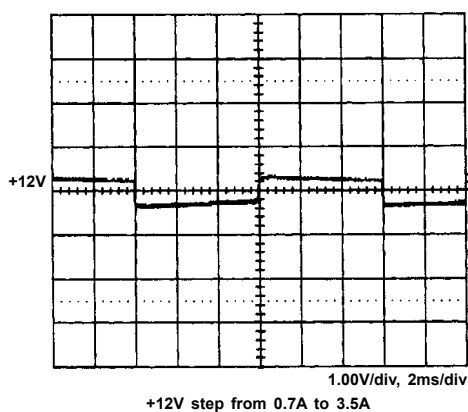
### 5. Hold-up time



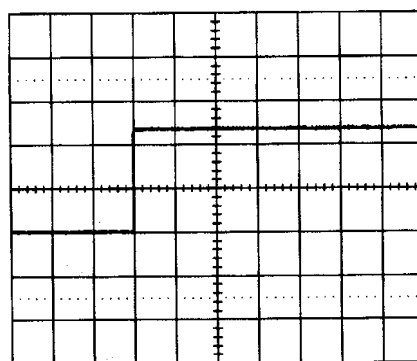
### 6. Over voltage protection



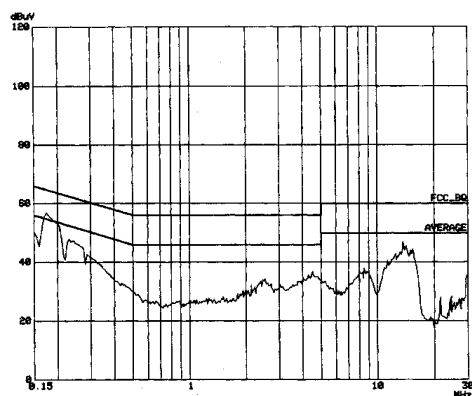
## 7. +12V step response



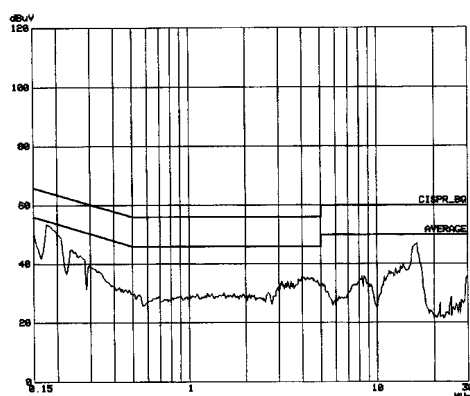
## 8. Peak Load



## 9. FCC B



## 10. EN 55022 B



## 11. Power derating curve

