



FU-ADPY24-12 • Switching power supply



1. Scope

The purpose of the document is to specify the functional requirements of a 24W switching power supply.

2. Input characteristics

Input Voltage	Rated voltage	100~240VAC
	Variation range	90-264VAC
Input Frequency	Rated frequency	50/60Hz
	Variation frequency	47-63Hz
Input Current	0.7Amps max At any input voltage and rated, DC output rated load	
AC Leakage current	0.25mA Max.At264Vac input	

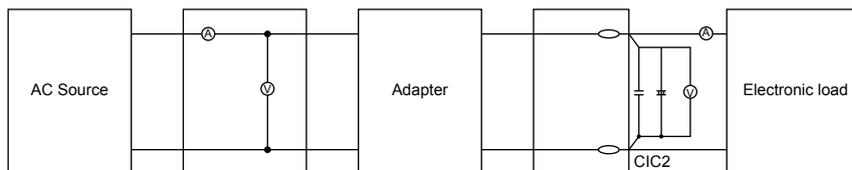
3. Output characteristics

Power output				
Voltage	Min. Load	Rated Load	Peak Load	Output power
12.0VDC	0.00A	2.0A		24.0W

Combined Load/Line Regulation				
Voltage	Min. Load	Rated Load	Peak Load	Output power
12.0VDC	0.00A	2.0A	±3%	±5%

3.1 Ripple and Noise

Output Ripple voltage is 200mV peak to peak or less.(100Vac 60Hz/240Vac 50Hz).



Measured methods:

* The ripple is measured from peak to peak with band width limit of 20MHz (C1:0.1uF Ceramics capacitor
C2:47uF/50V Aluminum capacitor under DC output full load,AC nominal input 25°C ambient temperature).

3.2 Turn on delay time

3 Second Max.at 115Vac input and output Max.load

3.3 Rise time

70 mS Max.at 115Vac input and output Max load.

3.4 Hold up time

5 mS Min.at 115Vac input and output Max.Load.

3.5 Efficiency

74% Min. at 115Vac input and output Max.Load.

74% Min. at 230Vac input and output Max.Load.

3.6 Standby Power

Rated Voltage: 100~240Vac 0.3W 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

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

5.2 Storage Temperature: -10°C to 80°C

With package.

5.3 Relative humidity

25%(0°C)~75%(40°C)RH, 72Hrs, Full load, Normal operating.

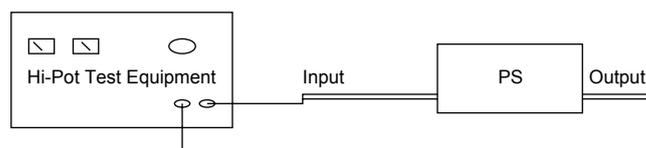
6. SAFETY AND EMI REQUIREMENT

6.1 Safety: Comply with EN62368.

6.2 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 standard

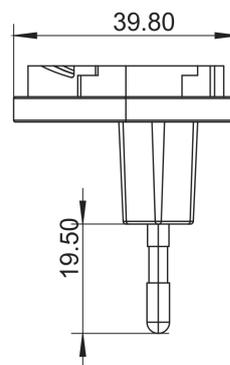
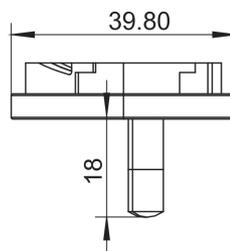
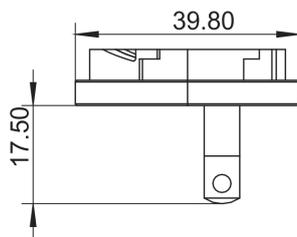
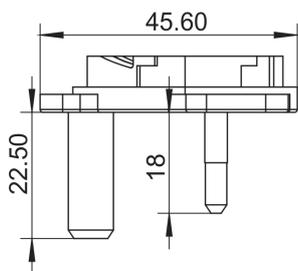
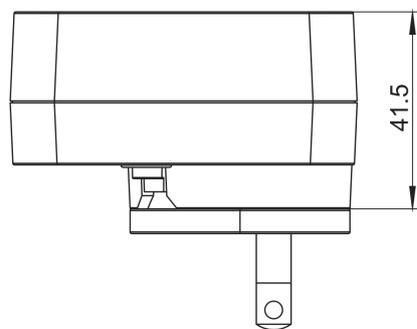
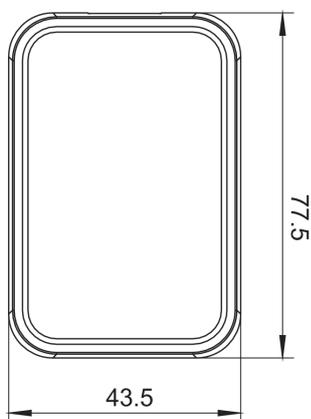
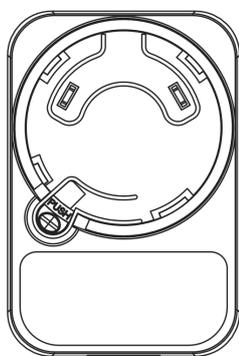
Meets the Limits of

<1>. EN55032 class B rules

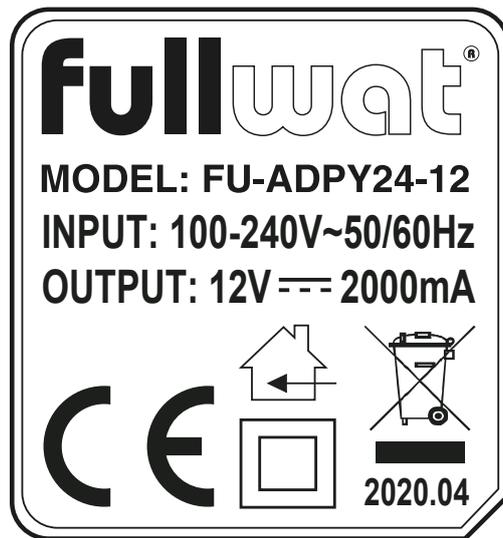
7. Enclosure

The power supply size: L78 x W45 x H31mm

Outline dimensions

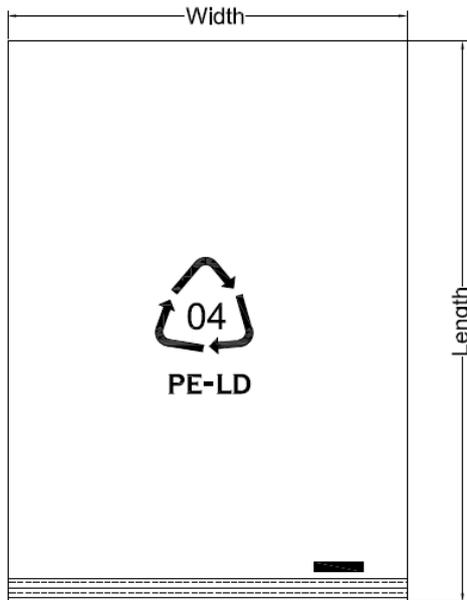


LABEL



24 x 21,4 mm

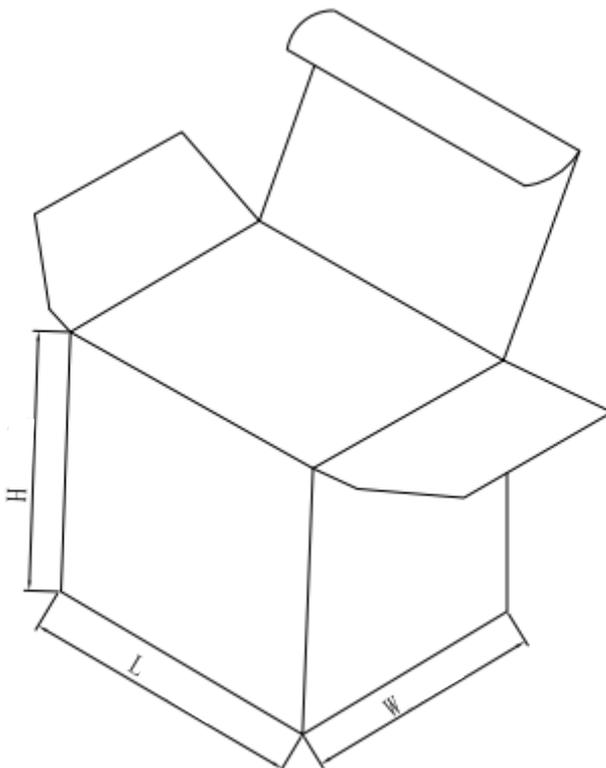
Packing step



PE bag

Length: 170mm

Width: 120mm



Inner box

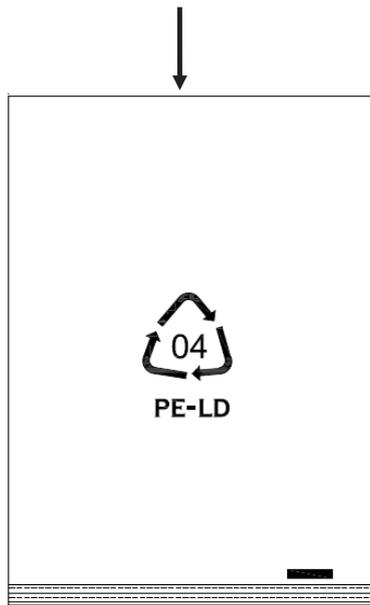
Length: 100mm

Width: 58mm

Height: 72mm

Packing step

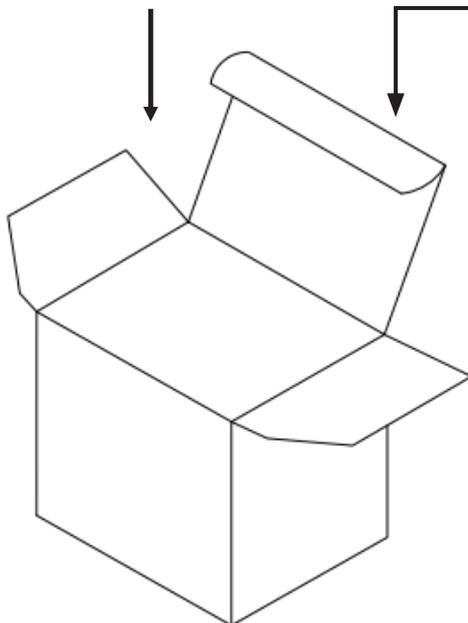
A. Product



B. PE bag



C. Inner box



MODEL DETAIL SPEC.		FU-ADPY24-12-H		
INPUT	Input Voltage:	85-265VAC		
	Input Frequency:	50/60Hz		
	Inrush Current:	40A/115VAC 60A/230VAC		
	AC Current:	0.5A max.		
	Leakage Current:	< 0.25mA/240VAC		
	Efficiency:	86%		
OUTPUT	DC Voltage:	12V		
	Rated Current:	2A		
	Rated Power:	24W		
	Voltage Tolerance:	±5.0%		
	Ripple and Noise:	120mVp-p		
	Line Regulation:			
	Load Regulation:	±5%		
	Setup, Rise, Hold Up time:	500ms, 30ms/120ms 230VAC 1000ms, 30ms/25ms 115VAC at full load		
ENVIRONMENTAL	Operating Temperature:	-20 ~ +60 (Refer to "Derating Curve")		
	Storage Temp:	-40°C ~ 85°C		
	Storage Humidity:	10 ~ 95% RH		
	Working Humidity:	20 ~ 95% RH non-condensing		
PROTECTION	Over Load:	Above 105% rated output power		
		Protection type: Hiccup mode, recovers automatically after fault condition is removed		
	Over Voltage:	≤Vout*150%		
		Protection type: Shut down o/p voltage, re-power on to recover		
Over Temperature:	N/A			
SAFETY & EMC	Safety Regulations:	UL62368-1, TUV BS EN/EN62368-1, EAC TP TC 004, BSMI CNS14336-1, AS/NZS 62368.1 approved		
	Withstand Voltage:	I/P-O/P:3KVAC I/P-FG:2KVAC O/P-FG:0.5KVAC		
	Isolation Resistance:	I/P-O/P, I/P-FG, O/P-FG:100M Ohms / 500VDC / 25°C/ 70% RH		
	EMC Emission:	Compliance to BS EN/EN55032 (CISPR32), BS EN/EN61204-3 Class B, BS EN/EN61000-3-2,-3, EAC TP TC 020, CNS13438 Class B		
	EMC Immunity:	EN/EN61000-4-2,3,4,5,6,8,11		
OTHER	MTBF:	500Khrs min. MIL-HDBK-217F(25°C)		
	Size:	77.5*43.5*41mm		
	Weight:	187g / pc		
	Packaging:			