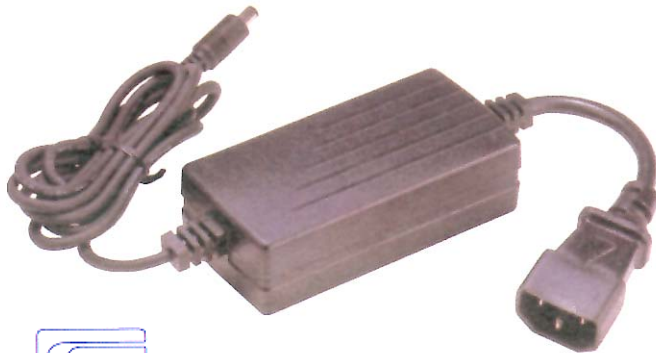




Switching Adapter (Universal)

10W Con. / 20W Pk.
SNP-Q21 series
SNP-Q31 series



Description:

SNP-Q21 and SNP-Q31 series are 10-12 watts, single output and universal input switching mode power supplies in a small-sized plastic box which is with color option (beige or black).

These two series are designed in full compliance with DL, CSA and VDE regulations for the application of general purpose.

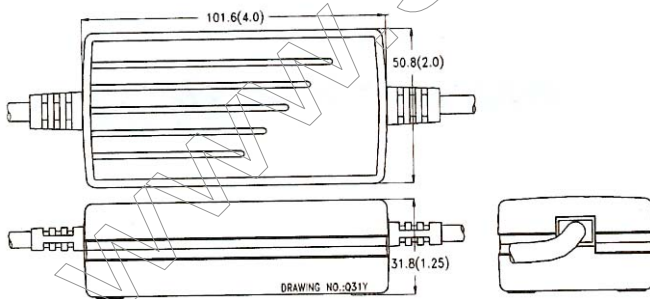
SNP-Q21 series is for class II type.
SNP-Q31 series is for class I type.

General Specifications :

Input voltage.....85V AC to 276V AC
 Input frequency.....47Hz to 63Hz
 Inrush CUITentless than 30A at 115V AC
 (cold start) less than 60A at 230V AC
 Outputssee output table
 Efficiency65%-70% typical
 at nominal line and rated load
 Hold up time> 15ms
 at rated load and 115VAC

Over load protection auto recovery
 Short circuit protection auto recovery
 Operating temperature..... 0 to 40°C
 Coolingfree air convection
 Storage temperature..... -20°C to +85°C
 EMIFCC class "B"
 Vfg 243/1991
 Safety DL 1950
 CSA 22.2 No.234
 VDE EN60 950

Mechanical Specifications :



Notes:

- Dimensions shown in mm (inch) as above.
Tolerance : ± 1 mm (excluding cables).
- Size: 50.8 X 101.6 X 31.8mm
2.0" X 4.0" X 1.25"
- Connectors:
 - AC input
for SNP-Q21 series
North America, Class II Ungrounded 2 wires plug
for SNP-Q31 series
North America, Nema 5-15P style 3 wires plug
 - DC output
for SNP-Q21 & -Q31 series
DC power jack $\varnothing 2.1$ or $\varnothing 2.5$ socket type

** options available for AC input and DC output connector, if the detailed specifications can be provided.



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Output Specifications:

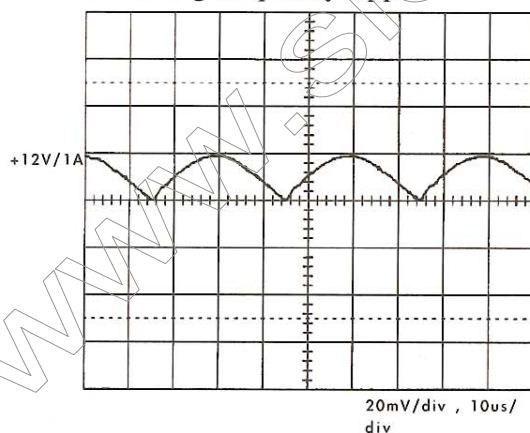
MODEL NO.	OUTPUT RAIL	LOAD			VOLTAGE ACCURACY	RIPPLE NOISE	LINE REG.	LOAD REG.
		MIN.	RATED	PEAK				
SNP-Q216	+5V	0A	2A	4A	+4.95~+5.10V	50mVpp	±1%	±3%
SNP-Q217	+12V	0A	1A	1.8A	+11.4~+12.6V	100mVpp	±1%	±3%
SNP-Q219	+24V	0A	0.5A	0.9A	+22.8~+25.2V	100mVpp	±1%	±3%
SNP-Q21C	+9V	0A	1.5A	1.8A	+9.2~+9.8V	100mVpp	±1%	±3%
SNP-Q316	+5V	0A	2A	4A	+4.95~+5.10V	50mVpp	±1%	±3%
SNP-Q317	+12V	0A	1A	1.8A	+11.4~+12.6V	100mVpp	±1%	±3%
SNP-Q319	+24V	0A	0.5A	0.9A	+22.8~+25.2V	100mVpp	±1%	±3%
SNP-Q31C	+9V	0A	1.5A	1.8A	+9.2~+9.8V	100mVpp	±1%	±3%

Note:

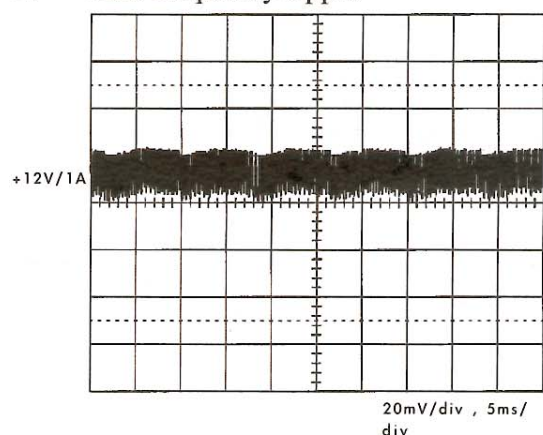
1. Each output can provide up to peak load temporarily. Continuous staying in more than rated load is not allowed.
2. At factory, in 60% rated load condition, each output is checked to be within voltage accuracy.
3. Line regulation is defined by changing $\pm 10\%$ of input voltage from nominal line at rated load.
4. Load regulation is defined by changing $\pm 40\%$ of measured output load from 60% rated load at another output set to 60% rated load.
5. Ripple & noise is measured by using 15MHz bandwidth limited oscilloscope and terminated each output with a 0.47 μ F capacitor at rated load and nominal line.
6. Hold up time is measured from the end of the last charging pulse to the time which the +5V output drop down to 4.75V at rated load and nominal line.
7. Efficiency is measured at rated load.

Performance for SNP-Q317:

1. Switching frequency ripple



2. Line frequency ripple

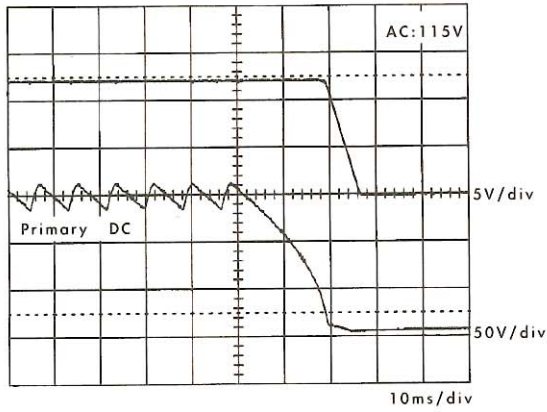




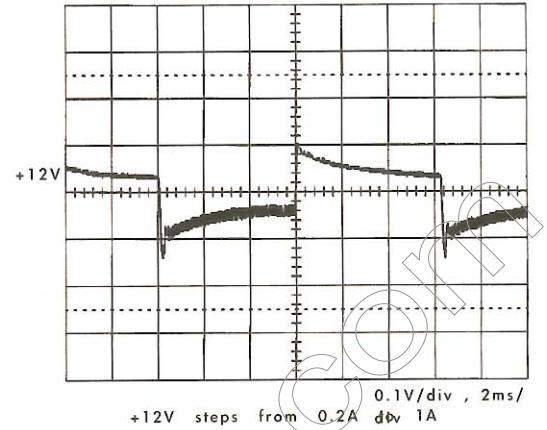
Switching Adapter (Universal)

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3. Hold-up time

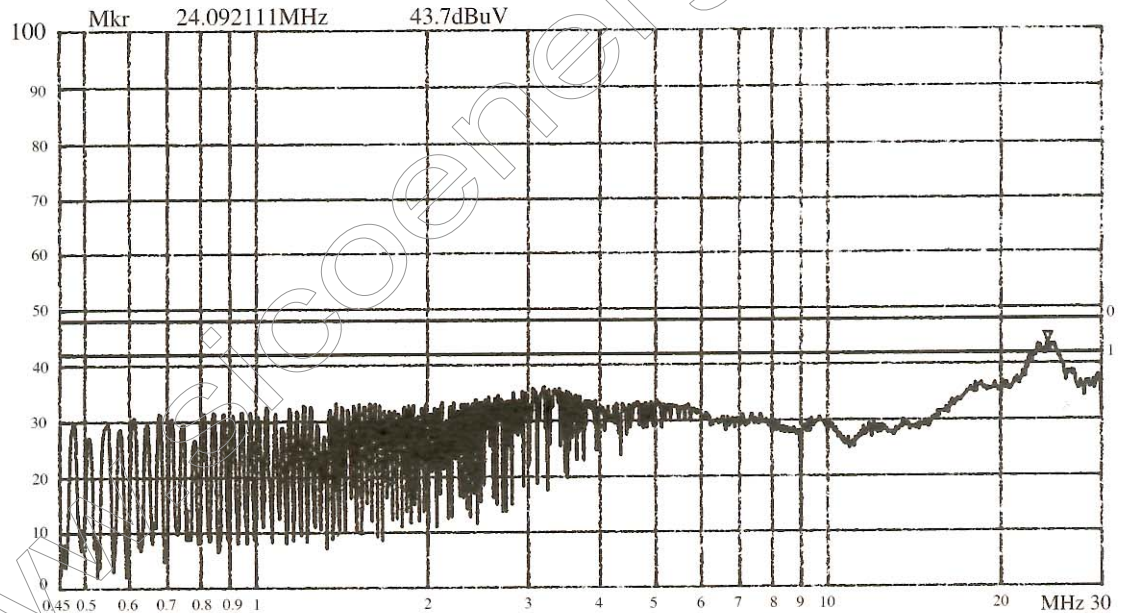


4. +12V step response



5. FCC B PERFORMANCE

dBuV



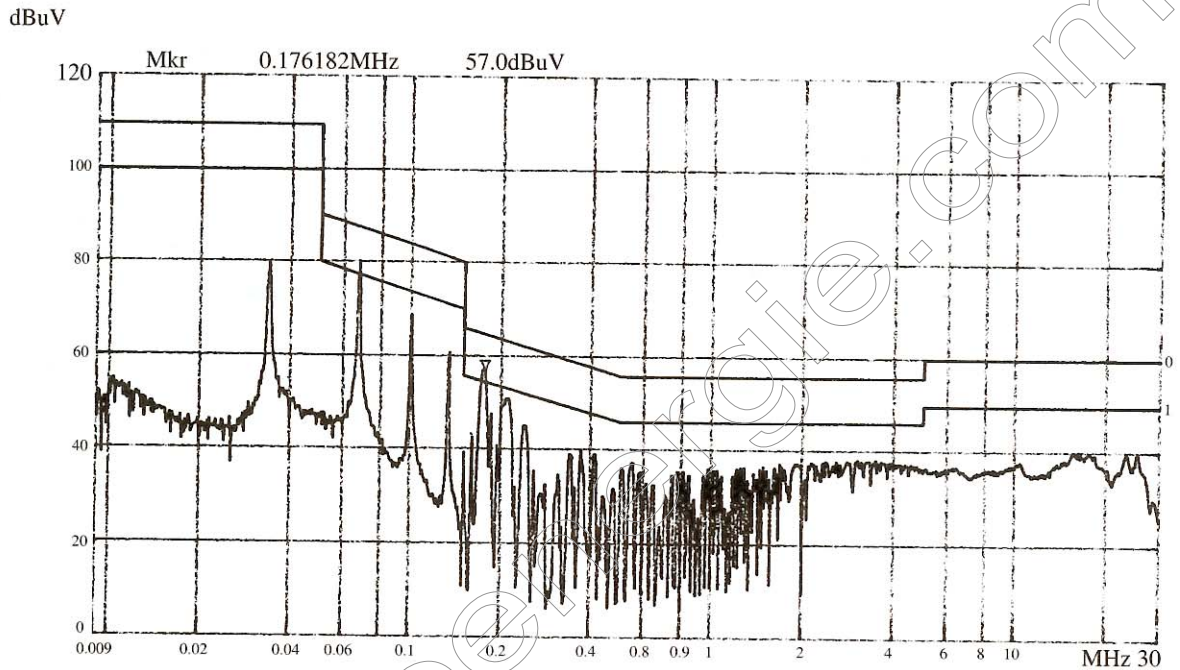
Date 05. SEP. '93 Time 05:17:59
SKYNET EUT: POWER. M/N: SNP-Q317
LINE: VA. Q.P.: 24.0035MHz 42.1dBuV

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T.T. EMC. CORP.



Switching Adapter (Universal)

10W Con. / 20W Pk.
SNP-Q21 series
SNP-Q31 series



Date 05. SEP. '93 Time 04:48:24
SKYNET EUT: POWER_M/N: SNP-Q317
LINE: L1. Q.P: 0.1668MHz 44.7dB7V

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T.T. EMC. CORP.