



Size : 99*82*30mm

Features:

- Universal AC input/Full range
- Built-in EMI filter, tiny ripple
- Protections:short circuit/overload/over voltage
- Cooling by free air convection
- 43,000 hours of continuous operation at 20 °C
- 100% full load burn-in test
- LED indicator for power on
- Compliance to IEC/EN60335-1 (PD3) and IEC/EN61558-1,2-16 suitable for home appliance
- 3 years warranty

SPECIFICATION

Model		NRS-60-12	NRS-60-15	NRS-60-24	NRS-60-36	NRS-60-48
OUTPUT	DC VOLTAGE	12V	15V	24V	36V	48V
	RATED CURRENT	5A	4A	2.5A	1.67A	1.25A
	CURRENT RANGE	0 ~ 5A	0~4A	0 ~ 2.5A	0 ~ 1.67A	0 ~ 1.25A
	RATED POWER	60W	60W	60W	60.12W	60W
	RIPPLE&NOISE(Max)	120mVp-p	120mVp-p	150mVp-p	200mVp-p	200mVp-p
	VOLTAGE ADJ.RANGE	10.2 ~ 13.8V	13.5~18V	21.6 ~ 28.8V	32.4 ~ 39.6V	43.2 ~ 52.8V
	VOLTAGE TOLERANCE	±1.0%	±1.0%	±1.0%	±1.0%	±1.0%
	LINE REGULATION	±0.5%	±0.5%	±0.5%	±0.5%	±0.5%
	LOAD REGULATION	±0.5%	±0.5%	±0.5%	±0.5%	±0.5%
	SETUP,RISE TIME	1000ms, 30ms/230VAC		200ms, 30ms/115VAC		
HOLD UP TIME (Typ.)	30ms/230VAC		12ms/115VAC			
INPUT	VOLTAGE RANGE	85 ~ 264VAC		120 ~ 373VDC		
	FREQUENCY RANGE	47 ~ 63Hz				
	EFFICIENCY(Typ.)	86%	88%	88%	89%	90%
	AC CURRENT(Typ.)	0.95A/115VAC		0.56A/230VAC		
	INRUSH CURRENT(Typ.)	COLD START 45A/230VAC				
LEAKAGE CURRENT	<0.75mA / 240VAC					
PROTECTION	OVERLOAD	110~ 150% rated output power Protection type:Hiccup mode,recovers automatically after fault condition is removed				
	OVER VOLTAGE	13.8~16.2V	18.75~21.75V	28.8~33.6V	41.4~48.6V	55.2~64.8V
ENVIRONMENT	WORKING TEMP.	-20 ~ +70°C (Refer to "derating curve")				
	WORKING HUMIDITY	20 ~ 90% RH non-condensing				
	STORAGE TEMP.,HUMIDITY	-45 ~ +85°C, 20% ~ 95% RH non-condensing				
	TEMP.COEFFICIENT	±0.03%/°C (0 ~ 50°C)				
	VIBRATION	10 ~ 500Hz, 2G 10 min/1cycle,60min.each X、Y、Z axes				
SAFETY	SAFETY STANDARDS	GB4943.1, EN 60950.1 APPROVED				
	WITHSTAND VOLTAGE	I/P-O/P:1.5KVAC I/P-FG:1.5KVAC 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 EN61000-3-2:2014/EN61000-3-3:2013				
EMC IMMUNITY	Compliance to EN 55032:2015/EN55035:2017/60950-1					
OTHERS	MTBF	≥763.6K hrs MIL-HDBK-217F(25°C)				
	DIMENSION	99*82*30mm (L*W*H)				
	PACKING	0.23Kg/PCS,60PCS/14.8KG/CTN,43*23*33CM				
NOTE	1. All parameters NOT specially mentioned are measured at 230VAC input,rated load and 25°C of ambient temperature. 2. Ripple&noise are measured at 20MHz of bandwidth by using a 12 "twisted pair -wire terminated with a 0.1uf and 47uf parallel capacitors. 3. Tolerance:includes set up tolerance,line regulation and load regulation. 4. Derating output is required under low input voltage. Please refer to the derating curve for details. 5. The power supply should be considered as a part of the components in the system. All EMC tests will test the test samples on a metal iron plate with a thickness of 1mm, a length of 360mm * width of 360mm.					

60W Single Output Switching Power Supply

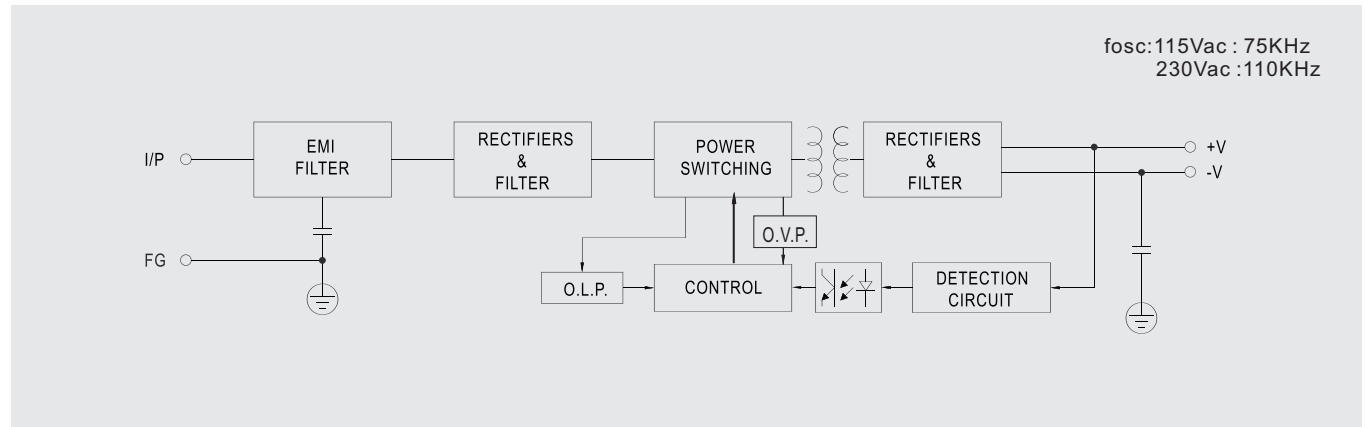
NRS-60 Series

Mechanical Specification

Terminal Pin No.Assignment:

Pin No.	Assignment	Pin No.	Assignment
1	AC/L	4	DC OUTPUT -V
2	AC/N	5	DC OUTPUT +V
3	FG		

Block Diagram



Derating Curve

Static Characteristic

