



350W Single Output Switching Power Supply

NES-350 series



■ Features :

- AC input range selectable by switch
- Protections: Short circuit / Overload / Over voltage / Over temperature
- Forced air cooling by built-in DC fan
- Withstand 300vac surge input for 5 second
- Built-in cooling Fan ON-OFF control
- Built-in constant current limiting circuit
- 100% full load burn-in test
- LED indicator for power on
- Fixed switching frequency at 90KHz
- Low cost, high reliability
- 2 years warranty

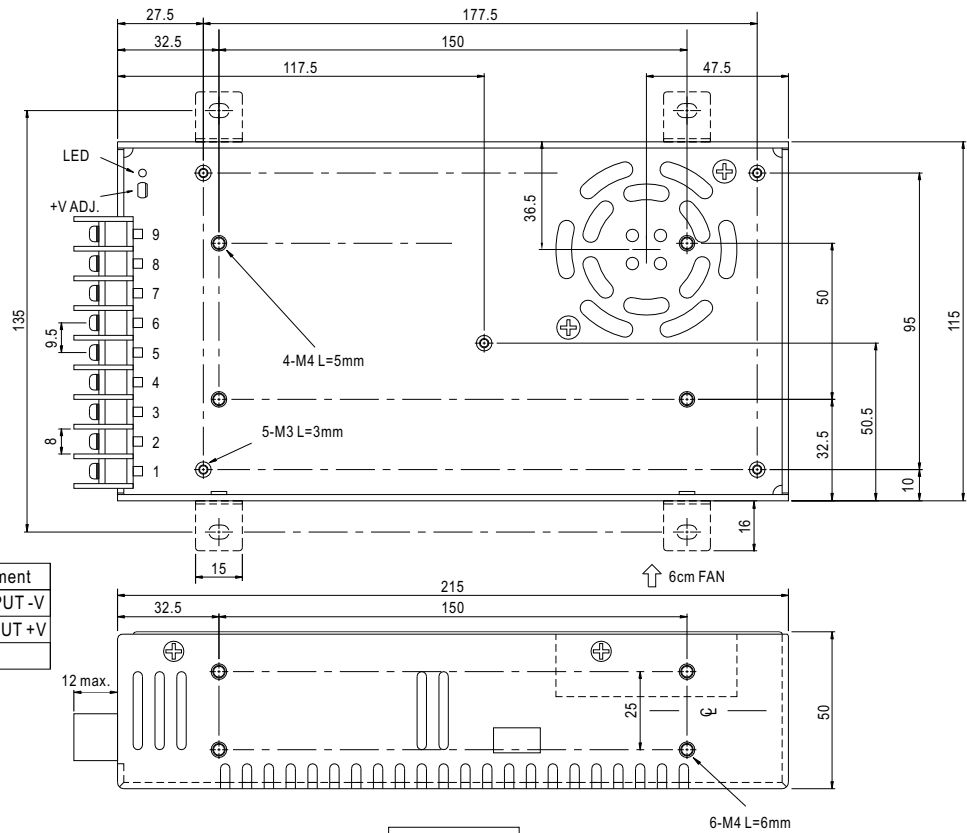


SPECIFICATION

MODEL		NES-350-3.3	NES-350-5	NES-350-7.5	NES-350-12	NES-350-15	NES-350-24	NES-350-27	NES-350-36	NES-350-48	
OUTPUT	DC VOLTAGE	3.3V	5V	7.5V	12V	15V	24V	27V	36V	48V	
	RATED CURRENT	60A	60A	46A	29A	23.2A	14.6A	13A	9.7A	7.3A	
	CURRENT RANGE	0 ~ 60A	0 ~ 60A	0 ~ 46A	0 ~ 29A	0 ~ 23.2A	0 ~ 14.6A	0 ~ 13A	0 ~ 9.7A	0 ~ 7.3A	
	RATED POWER	198W	300W	345W	348W	348W	350.4W	351W	349.2W	350.4W	
	RIPPLE & NOISE (max.) Note.2	150mVp-p	150mVp-p	150mVp-p	150mVp-p	150mVp-p	150mVp-p	200mVp-p	240mVp-p	240mVp-p	
	VOLTAGE ADJ. RANGE	2.97 ~ 3.7V	4.5 ~ 5.6V	6 ~ 9V	10 ~ 13.5V	13.5 ~ 18V	20 ~ 26.4V	26 ~ 32V	32~40V	41 ~ 56V	
	VOLTAGE TOLERANCE Note.3	±2.0%	±2.0%	±2.0%	±1.5%	±1.0%	±1.0%	±1.0%	±1.0%	±1.0%	
	LINE REGULATION	±0.5%	±0.5%	±0.5%	±0.5%	±0.5%	±0.5%	±0.5%	±0.5%	±0.5%	
	LOAD REGULATION	±2.0%	±2.0%	±2.0%	±1.0%	±0.5%	±0.5%	±0.5%	±0.5%	±0.5%	
	SETUP, RISE TIME	1000ms, 50ms/230VAC 1000ms,50ms/115VAC at full load									
HOLD UP TIME (Typ.)	20ms/230VAC 16ms/115VAC at full load										
INPUT	VOLTAGE RANGE	90 ~ 132VAC / 180 ~ 264VAC by switch 254 ~ 370VDC									
	FREQUENCY RANGE	47 ~ 63Hz									
	EFFICIENCY (Typ.)	74%	78%	80%	83%	84%	87%	88%	87.5%	87.5%	
	AC CURRENT (Typ.)	7A/115VAC 4A/230VAC									
	INRUSH CURRENT (Typ.)	40A/115VAC 60A/230VAC									
	LEAKAGE CURRENT	<3.5mA / 240VAC									
PROTECTION	OVER LOAD	105 ~ 135% rated output power Protection type : Constant current limiting, recovers automatically after fault condition is removed									
	OVER VOLTAGE	3.8 ~ 4.6V 5.75 ~ 6.75V 9.4 ~ 10.9V 13.8 ~ 16.2V 18 ~ 21V 27.6 ~ 32.4V 33.7 ~ 39.2V 41.4~46.8V 57.6 ~ 67.2V Protection type : Hiccup mode, recovers automatically after fault condition is removed									
	OVER TEMPERATURE	85℃ ±10℃ (RTH2) Detect on inside ambient temperature Protection type : Hiccup mode, recovers automatically after temperature goes down									
FUNCTION	FAN ON/OFF CONTROL(Typ.)	RTH2≥50℃ FAN ON, ≤45℃ FAN OFF (3.3 ~ 7.5V) RTH2≥55℃ FAN ON, ≤50℃ FAN OFF (12 ~ 48V)									
ENVIRONMENT	WORKING TEMP.	-20 ~ +60℃ (Refer to output load derating curve)									
	WORKING HUMIDITY	20 ~ 90% RH non-condensing									
	STORAGE TEMP., HUMIDITY	-20 ~ +85℃, 10 ~ 95% RH									
	TEMP. COEFFICIENT	±0.03%/℃ (0 ~ 50℃)									
	VIBRATION	10 ~ 500Hz, 2G 10min./1cycle, 60min. each along X, Y, Z axes									
SAFETY & EMC	SAFETY STANDARDS	UL60950-1 approved									
	WITHSTAND VOLTAGE	I/P-O/P:3KVAC 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℃ / 70% RH									
	EMI CONDUCTION & RADIATION	Design refer to EN55022 (CISPR22) Class A									
	EMS IMMUNITY	Design refer to EN61000-4-2, 3, 4, 5, 6, 8, 11, ENV50204, EN55024, light industry level, criteria A									
OTHERS	MTBF	234.3K hrs min. MIL-HDBK-217F (25℃)									
	DIMENSION	215*115*50mm (L*W*H)									
	PACKING	1.07Kg; 12pcs/13.5Kg/0.92CUFT									
NOTE	1. All parameters NOT specially mentioned are measured at 230VAC input, rated load and 25℃ of ambient temperature. 2. Ripple & noise are measured at 20MHz of bandwidth by using a 12" twisted pair-wire terminated with a 0.1uf & 47uf parallel capacitor. 3. Tolerance : includes set up tolerance, line regulation and load regulation.										

Mechanical Specification

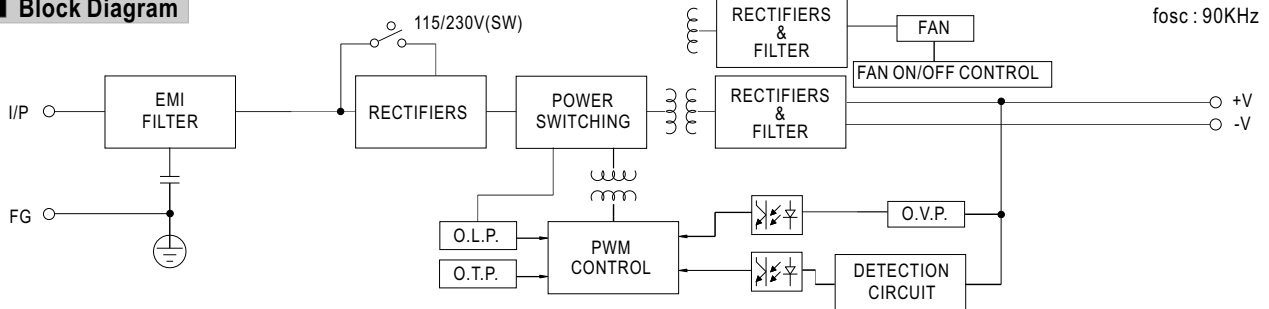
Case No. 912C Unit:mm



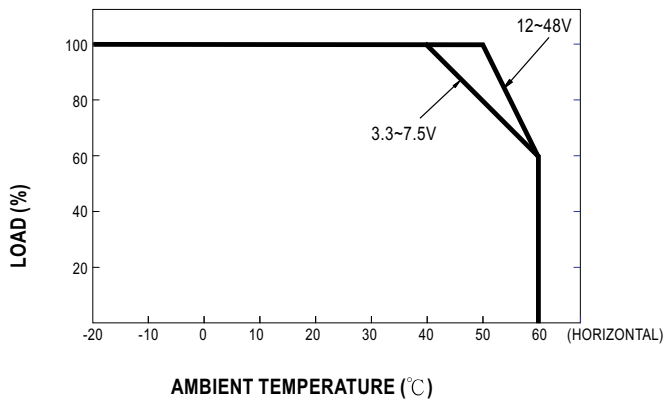
Terminal Pin No. assignment :

Pin No.	Assignment	Pin No.	Assignment
1	AC/L	4~6	DC OUTPUT -V
2	AC/N	7~9	DC OUTPUT +V
3	FG		

Block Diagram



Derating Curve



Static Characteristics

