



■ Features :

- Low leakage current<1mA
- Protections: Short circuit / Overload / Over voltage / Over temperature
- Cooling by free air convection
- Low profile:31mm
- Conformal coated
- LED indicator for power on
- Low cost, high power reliability
- 100% full load burn-in test
- 2 years warranty

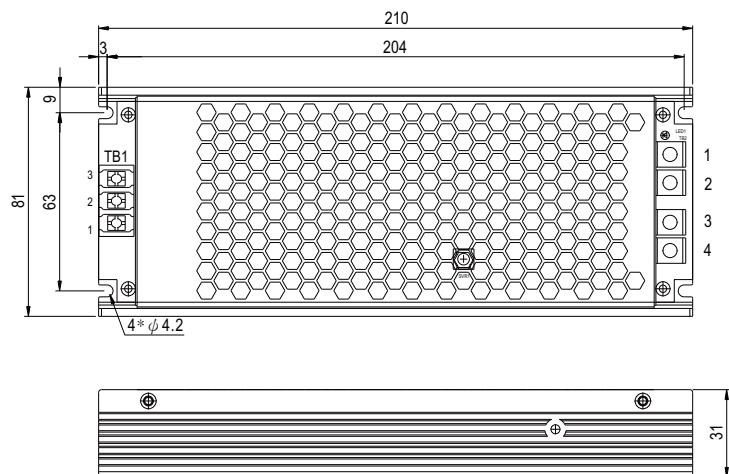
SPECIFICATION



MODEL	HSN-300-4.2A	HSN-300-4.2B	HSN-300-5A	HSN-300-5B
OUTPUT	DC VOLTAGE	4.2V	4.2V	5V
	RATED CURRENT Note.2	50A	60A	50A
	CURRENT RANGE	0 ~ 50A	0 ~ 60A	0 ~ 50A
	RATED POWER(convective)	210W	252W	250W
	ripple & noise (max.) Note.3	150mVp-p	150mVp-p	150mVp-p
	VOLTAGE ADJ. RANGE	3.6~4.4V	3.6~4.4V	4.5~5.5V
	VOLTAGE TOLERANCE Note.4	±3.0%	±3.0%	±3.0%
	LINE REGULATION	±0.5%	±0.5%	±0.5%
	LOAD REGULATION	±2.0%	±2.0%	±2.0%
INPUT	SETUP, RISE TIME	2500ms, 100ms/230VAC; 2500ms, 100ms/115VAC		
	HOLD UP TIME (Typ.)	10ms/230VAC; 8ms/115VAC at full load		
PROTECTION	VOLTAGE RANGE	90~132VAC or 254~373VDC	180~264VAC or 254~373VDC	90~132VAC or 254~373VDC
	FREQUENCY RANGE	47 ~ 63Hz		
	EFFICIENCY (Typ.)	85%	86%	
	AC CURRENT (Typ.)	3.0A/230VAC; 5.0A/115VAC		
	INRUSH CURRENT (Typ.)	Cold start 90A/230VAC		
	LEAKAGE CURRENT	<1mA		
ENVIRONMENT	OVERLOAD	A Type:105~170% rated output power Protection type : Hiccup mode, recovers automatically after fault condition is removed	B Type:105~140% rated output power	
	SHORT CIRCUIT	Protection type : Hiccup mode, recovers automatically after fault condition is removed		
	OVER VOLTAGE	4.7 ~ 5.7V Protection type : Hiccup mode, recovers automatically after fault condition is removed	5.7 ~ 7.0V	
	OVER TEMPERATURE	Protection type : Shut down O/P voltage, recovers automatically after temperature goes down		
	WORKING TEMP.	-20 ~ +70°C (Refer to "Derating Curve")		
SAFETY & EMC (Note 5)	WORKING HUMIDITY	20 ~ 90% RH non-condensing		
	STORAGE TEMP., HUMIDITY	-40 ~ +85°C, 10 ~ 95% RH		
	TEMP. COEFFICIENT	±0.03%/°C (0 ~ 60°C)		
	VIBRATION	10 ~ 500Hz, 3G 10min./1cycle, 60min. each along X, Y, Z axes		
	SAFETY STANDARDS	UL60950-1 approved		
OTHERS	WITHSTAND VOLTAGE	I/P-O/P:3.0KVAC 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	Refer to EN55022 (CISPR22) Class A		
	EMC IMMUNITY	Refer to EN61000-4-5; light industry level (surge 4KV), criteria A		
	MTBF	226.4K hrs min. MIL-HDBK-217F (25°C)		
NOTE	DIMENSION	210*81*31mm (L*W*H)		
	PACKING	0.67kg; 20pcs/14.4kg/0.91CUFT		
1. All parameters NOT specially mentioned are measured at 230VAC input, rated load and 25°C of ambient temperature. 2. Please refer to "static characteristics". 3. Ripple & noise are measured at 20MHz of bandwidth by using a 12" twisted pair-wire terminated with a 0.1uf & 47uf parallel capacitor. 4. Tolerance : line regulation and load regulation. 5. Derating may be needed under low input voltages. Please check the static characteristics for more details. 6. The power supply is considered a component which will be installed into a final equipment. The final equipment must be re-confirmed that it still meets EMC directives.				

■ Mechanical Specification

CASE NO.:233A Unit:mm



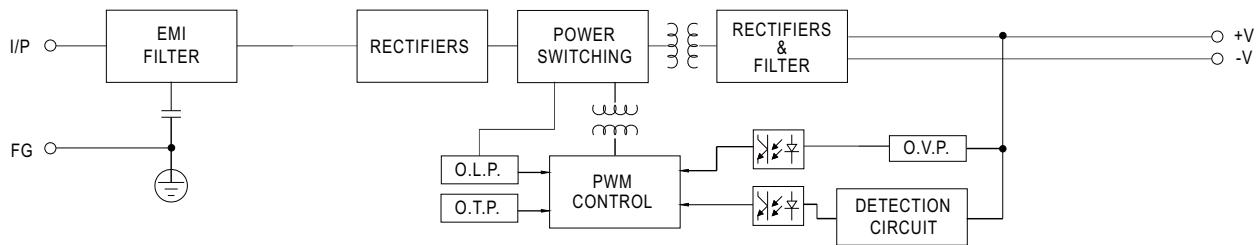
AC Input Terminal(TB1) pin NO. Assignment

Pin No.	Assignment	Terminal
1	AC/L	
2	AC/N	DG28C-B-03P-13-00AH
3	\pm	

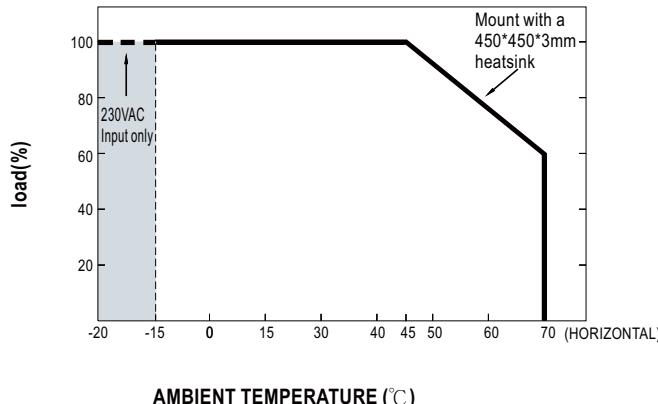
DC Output Terminal pin NO. Assignment

Pin No.	Assignment
1~2	-V
3~4	+V

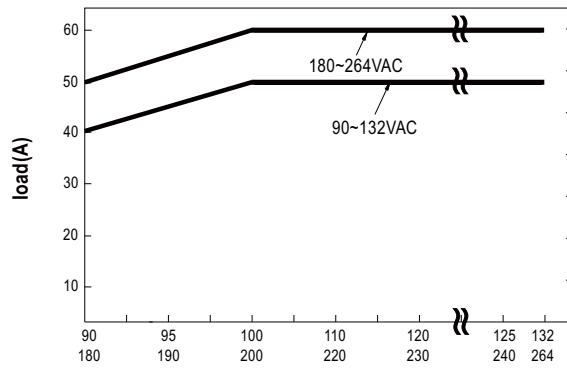
■ Block Diagram



■ Derating Curve

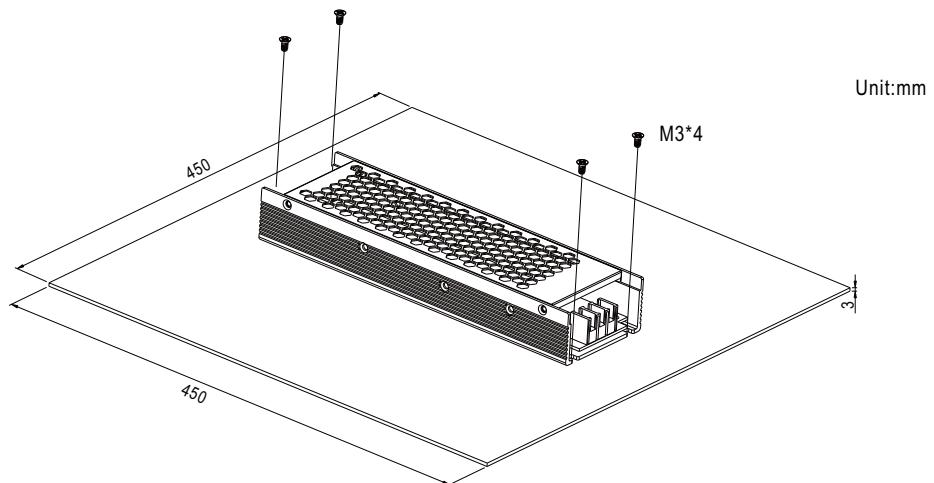


■ Static Characteristics



■ Installation**1. Operate with additional aluminum plate**

In order to meet the "Derating Curve" and the "Static Characteristics", HSN-300 series must be installed onto an aluminum plate (or the cabinet of the same size) on the bottom. The size of the suggested aluminum plate is shown as below. And for optimizing thermal performance, the aluminum plate must have an even and smooth surface (or coated with thermal grease), and HSN-300 series must be firmly mounted at the center of the aluminum plate.



2. For heat dissipation, at least 5cm installation distance around the PSU should be kept, shown as below:

