

300W Single Output Switching Power Supply

HSN-300 series



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



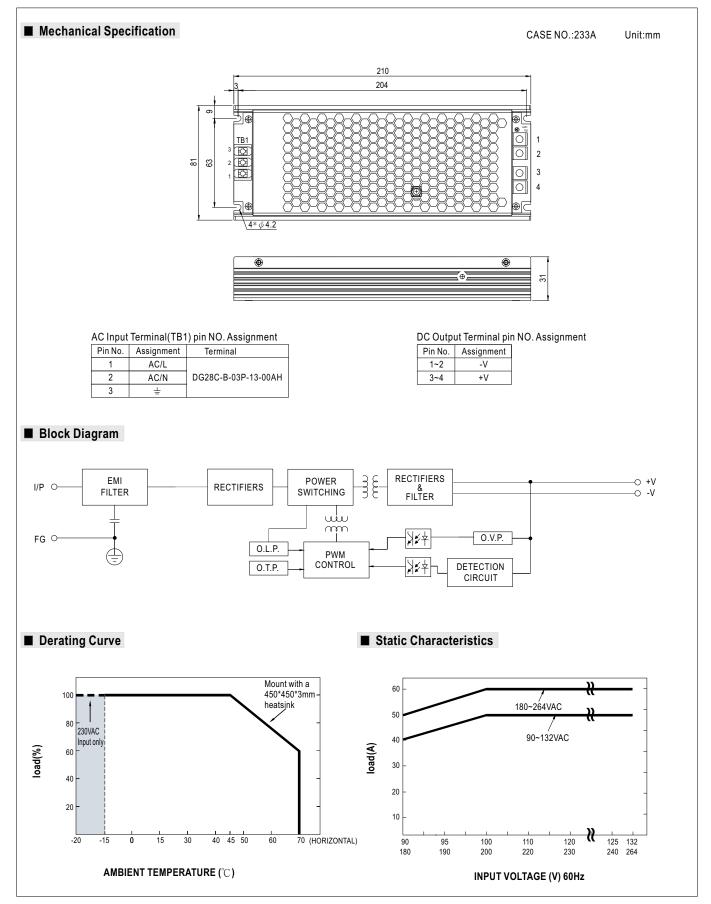
SPECIFICATION

MODEL		HSN-300-4.2A	HSN-300-4.2B	HSN-300-5A	HSN-300-5B	
	DC VOLTAGE	4.2V	4.2V	5V	5V	
OUTPUT	RATED CURRENT Note.2	50A	60A	50A	60A	
	CURRENT RANGE	0~50A	0~60A	0~50A	0~60A	
	RATED POWER(convection)	210W	252W	250W	300W	
	RIPPLE & NOISE (max.) Note.3	150mVp-p	150mVp-p	150mVp-p	150mVp-p	
	VOLTAGE ADJ. RANGE	3.6~4.4V	3.6~4.4V	4.5~5.5V	4.5~5.5V	
	VOLTAGE TOLERANCE Note.4	±3.0%	±3.0%	±3.0%	±3.0%	
	LINE REGULATION	±0.5%	±0.5%	±0.5%	±0.5%	
	LOAD REGULATION	±2.0%	±2.0%	±2.0%	±2.0%	
	SETUP, RISE TIME	2500ms, 100ms/230VAC; 2500ms, 100ms/115VAC				
	HOLD UP TIME (Typ.)	10ms/230VAC; 8ms/115VAC at full load				
INPUT	VOLTAGE RANGE	90~132VAC or 254~373VDC	180~264VAC or 254~373VDC	90~132VAC or 254~373VDC	180~264VAC or 254~373VDC	
	FREQUENCY RANGE	17 ~ 63Hz				
	EFFICIENCY (Typ.)	85%		86%		
	AC CURRENT (Typ.)	3.0A/230VAC; 5.0A/115VAC				
	INRUSH CURRENT (Typ.)	Cold start 90A/230VAC				
	LEAKAGE CURRENT	<1mA				
PROTECTION		A Type:105~170% rated output power B Type:105~140% rated output power				
	OVERLOAD	Protection type : Hiccup mode, recovers automatically after fault condition is removed				
	SHORT CIRCUIT	Protection type : Hiccup mode, recovers automatically after fault condition is removed				
		4.7 ~ 5.7V 5.7 ~ 7.0V				
	OVER VOLTAGE	Protection type : Hiccup mode, recovers automatically after fault condition is removed				
	OVER TEMPERATURE	Protection type : Shut down O/P voltage, recovers automatically after temperature goes down				
ENVIRONMENT	WORKING TEMP.	-20 ~ +70°C (Refer to "Derating Curve")				
	WORKING HUMIDITY	20 ~ 90% RH non-condensing				
	STORAGE TEMP., HUMIDITY	-40 ~ +85℃ , 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 & EMC (Note 5)	SAFETY STANDARDS	UL60950-1, EAC TP TC 004 approved				
	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, EAC TP TC 020				
	EMC IMMUNITY	Refer to EN61000-4-5; light industry level (surge 4KV), criteria A, EAC TP TC 020				
OTHERS	MTBF	226.4K hrs min. MIL-HDBK-217F (25°C)				
	DIMENSION	210*81*31mm (L*W*H)				
	PACKING	0.67kg; 20pcs/14.4kg/0.91CUFT				
NOTE	 All parameters NOT specially mentioned are measured at 230VAC input, rated load and 25°C of ambient temperature. Please refer to "static characteristics". Ripple & noise are measured at 20MHz of bandwidth by using a 12" twisted pair-wire terminated with a 0.1uf & 47uf parallel capacitor. Tolerance : line regulation and load regulation. Derating may be needed under low input voltages. Please check the static characteristics for more details. 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. Y Product Liability Disclaimer : For detailed information, please refer to https://www.meanwell.com/serviceDisclaimer.aspx 					

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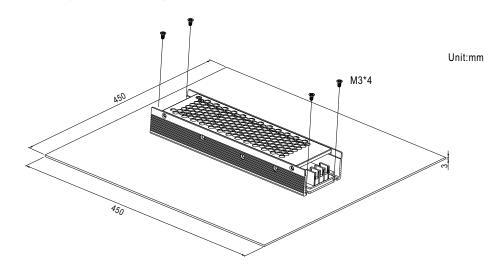


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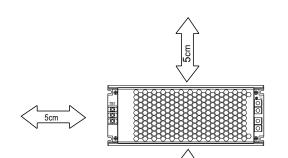
Installation

1. Operate with additional aluminum plate

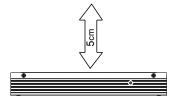
In order to meet the "Derating Curve" and the "Static Characteristics", HSN-300 series must be installed onto an aluminum plate(or the cabinet of the same size) on the bottom. The size of the suggested aluminum plate is shown as below. And for optimizing thermal performance, the aluminum plate must have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







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