



■ 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

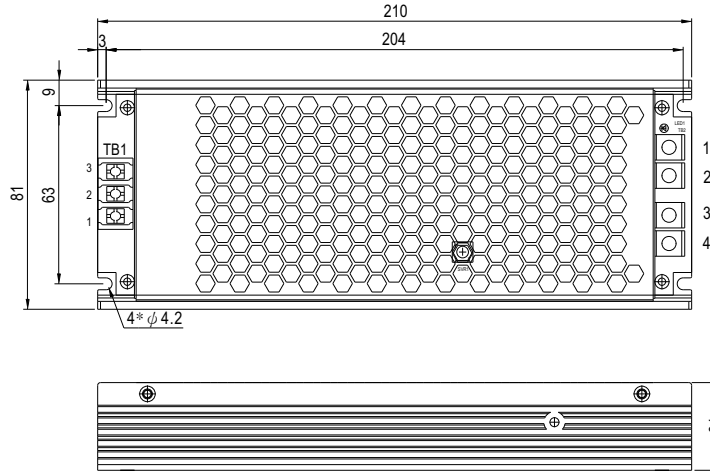


SPECIFICATION

| MODEL | | HSN-300-4.2A | HSN-300-4.2B | HSN-300-5A | HSN-300-5B |
|-----------------------|--|--|--------------------------|-------------------------|--------------------------|
| OUTPUT | DC VOLTAGE | 4.2V | 4.2V | 5V | 5V |
| | RATED CURRENT <small>Note.2</small> | 50A | 60A | 50A | 60A |
| | CURRENT RANGE | 0 ~ 50A | 0 ~ 60A | 0 ~ 50A | 0 ~ 60A |
| | RATED POWER (convection) | 210W | 252W | 250W | 300W |
| | RIPPLE & NOISE (max.) <small>Note.3</small> | 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 <small>Note.4</small> | ±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 | 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 | | | | |
| PROTECTION | OVERLOAD | A Type:105~170% rated output power B Type:105~140% rated output power Protection type : Hiccup mode, recovers automatically after fault condition is removed | | | |
| | SHORT CIRCUIT | Protection type : Hiccup mode, recovers automatically after fault condition is removed | | | |
| | OVER VOLTAGE | 4.7 ~ 5.7V | | | 5.7 ~ 7.0V |
| | 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°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 & 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 | <p>1. All parameters NOT specially mentioned are measured at 230VAC input, rated load and 25°C of ambient temperature.</p> <p>2. Please refer to "static characteristics".</p> <p>3. Ripple & noise are measured at 20MHz of bandwidth by using a 12" twisted pair-wire terminated with a 0.1uF & 47uF parallel capacitor.</p> <p>4. Tolerance : line regulation and load regulation.</p> <p>5. Derating may be needed under low input voltages. Please check the static characteristics for more details.</p> <p>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.</p> <p>※ Product Liability Disclaimer : For detailed information, please refer to https://www.meanwell.com/serviceDisclaimer.aspx</p> | | | | |

■ Mechanical Specification

CASE NO.:233A Unit:mm



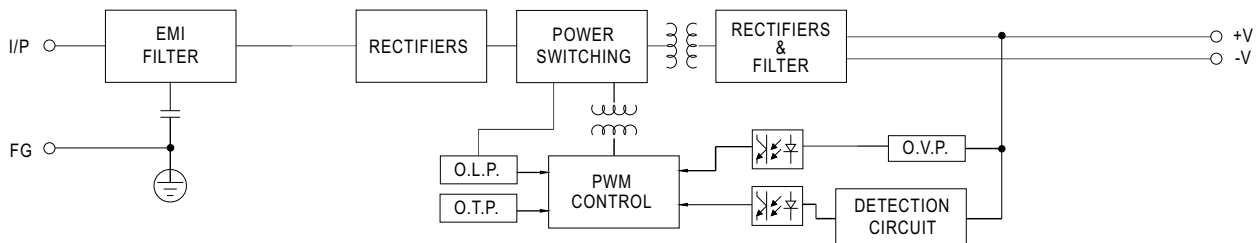
AC Input Terminal(TB1) pin NO. Assignment

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

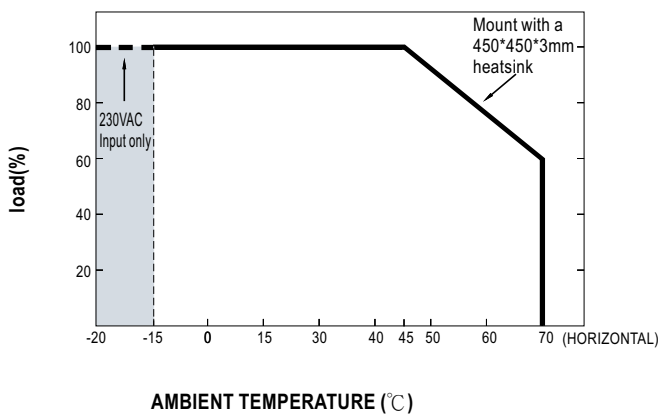
DC Output Terminal pin NO. Assignment

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

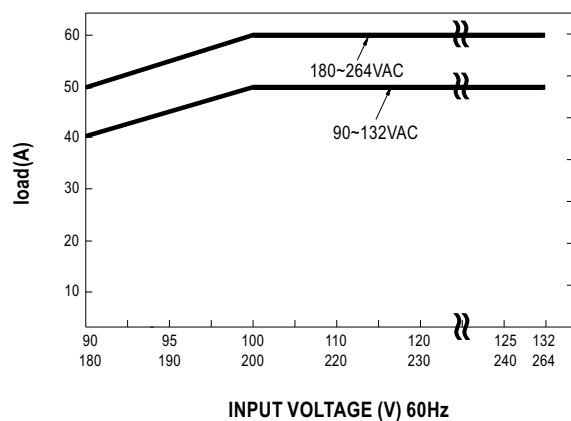
■ Block Diagram



■ Derating Curve



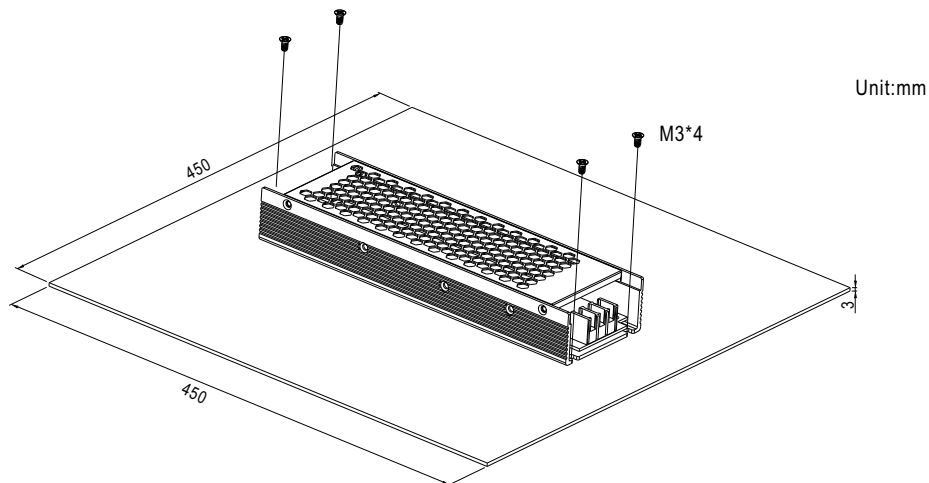
■ Static Characteristics



■ 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:

