



■ Features :

- Universal AC input / Full range
- Built-in active PFC function
- Low leakage current<1.0mA
- Protections: Short circuit / Overload / Over voltage / Over temperature
- Low profile:31mm
- Conformal coated
- LED indicator for power on
- 3 years warranty



■ GTIN CODE

MW Search:<https://www.meanwell.com/serviceGTIN.aspx>

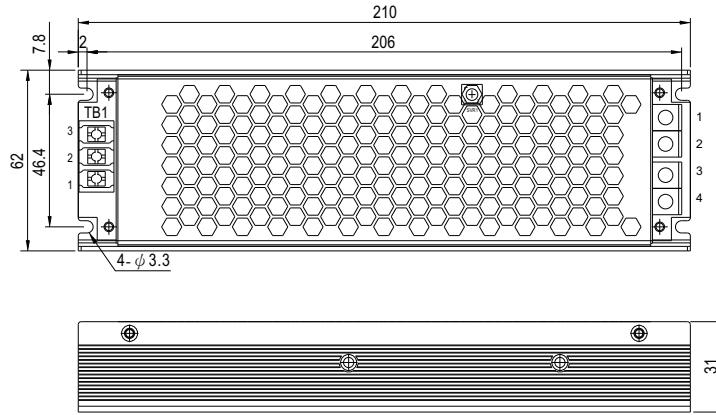


SPECIFICATION

| MODEL                 |  | HSP-200-4.2   | HSP-200-5                         |
|-----------------------|--|---|-----------------------------------|
| OUTPUT                | DC VOLTAGE   | 4.2V  | 5V                                |
|                       | RATED CURRENT  | 40A   | 40A                               |
|                       | CURRENT RANGE  | 0 ~ 40A   | 0 ~ 40A                           |
|                       | RATED POWER(convection)  | 168W  | 200W                              |
|                       | RIPPLE & NOISE (max.) Note.2   | 150mVp-p  | 150mVp-p                          |
|                       | VOLTAGE ADJ. RANGE   | 3.6~4.4V  | 4.5~5.5V                          |
|                       | VOLTAGE TOLERANCE Note.3   | ±2.0%   | ±2.0%                             |
|                       | LINE REGULATION  | ±0.5%   | ±0.5%                             |
|                       | LOAD REGULATION  | ±1.0%   | ±1.0%                             |
|                       | SETUP, RISE TIME   | 2000ms, 200ms/230VAC  | 3000ms, 200ms/115VAC at full load |
| HOLD UP TIME (Typ.)   | 16ms/230VAC  | 16ms/115VAC at full load  |                                   |
| INPUT                 | VOLTAGE RANGE Note.4   | 90 ~ 264VAC   | 127 ~ 370VDC                      |
|                       | FREQUENCY RANGE  | 47 ~ 63Hz   |                                   |
|                       | POWER FACTOR (Typ.)  | PF ≥0.95/230VAC   | PF ≥0.98/115VAC at full load      |
|                       | EFFICIENCY (Typ.)  | 88%   | 88.5%                             |
|                       | AC CURRENT (Typ.)  | 2.5A/115VAC   | 1.5A/230VAC                       |
|                       | INRUSH CURRENT (Typ.)  | Cold start 70A/230VAC   | 3.0A/115VAC                       |
| LEAKAGE CURRENT       | <1.0mA / 240VAC  | 2.0A/230VAC   |                                   |
| PROTECTION            | OVERLOAD   | 110~140% rated output power<br>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   | 4.6 ~ 5.4V  | 5.6 ~ 7.0V                        |
|                       | OVER TEMPERATURE   | Shut down O/P voltage, recovers automatically after fault condition is removed  |                                   |
| ENVIRONMENT           | WORKING TEMP.  | -30 ~ +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, 2G 10min./1cycle, 60min. each along X, Y, Z axes  |                                   |
| SAFETY & EMC (Note 5) | SAFETY STANDARDS   | UL60950-1, IEC/BS EN/EN62368-1, GB 4943.1, 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   | Compliance to BS EN/EN55032 (CISPR32), GB17625.1, GB/T 9254.1, Class B, BS EN/EN61000-3-2,-3, EAC TP TC 020           |                                   |
| EMC IMMUNITY          | Compliance to BS EN/EN61000-4-2,3,4,5,6,8,11; BS EN/EN55035, light industry level (surge 4KV), EAC TP TC 020   |   |                                   |
| OTHERS                | MTBF   | 1684.5K hrs min. Telcordia SR-332(Bellcore) ; 202.14K hrs min. MIL-HDBK-217F (25°C)                                   |                                   |
|                       | DIMENSION  | 210*62*31mm (L*W*H)   |                                   |
|                       | PACKING  | 0.52kg; 20pcs/ 11.4kg/0.76CUFT  |                                   |
| NOTE                  | <p>1. All parameters NOT specially mentioned are measured at 230VAC input, rated load and 25°C of ambient temperature.</p> <p>2. Ripple &amp; noise are measured at 20MHz of bandwidth by using a 12" twisted pair-wire terminated with a 0.1uf &amp; 47uf parallel capacitor.</p> <p>3. Tolerance : line regulation and load regulation.</p> <p>4. Derating may be needed under low input voltages. Please check the static characteristics for more details.</p> <p>5. Length of set up time is measured at cold first start. Turning ON/OFF the power supply may lead to increase of the set up time.</p> <p>6. The power supply is considered a component which will be installed into a final equipment. All the EMC tests are been executed by mounting the unit on a 450mm*450mm metal plate with 1mm of thickness. The final equipment must be re-confirmed that it still meets EMC directives. For guidance on how to perform these EMC tests, please refer to "EMI testing of component power supplies." (as available on <a href="https://www.meanwell.com/Upload/PDF/EMI_statement_en.pdf">https://www.meanwell.com/Upload/PDF/EMI_statement_en.pdf</a>)</p> <p>※ Product Liability Disclaimer : For detailed information, please refer to <a href="https://www.meanwell.com/serviceDisclaimer.aspx">https://www.meanwell.com/serviceDisclaimer.aspx</a></p> |   |                                   |

## Mechanical Specification

CASE NO.: 232B Unit:mm



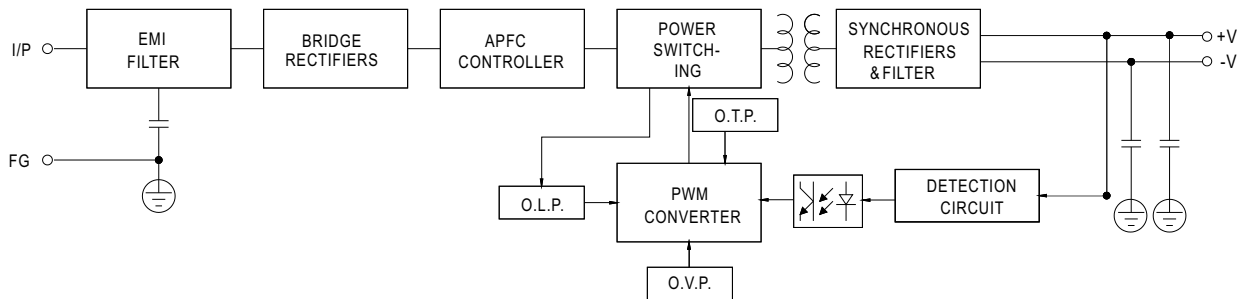
AC Input Terminal(TB1) pin NO. Assignment

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

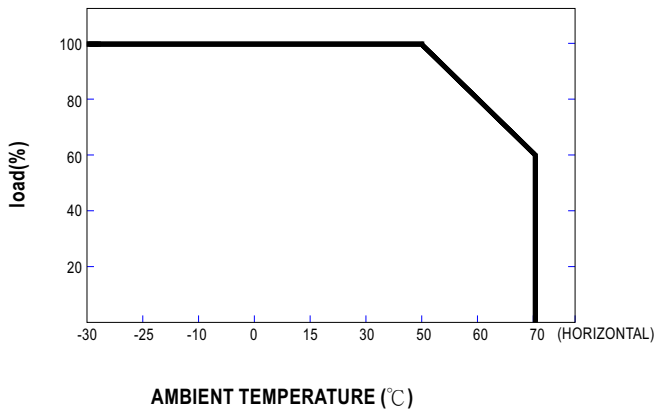
DC Output Terminal pin NO. Assignment

| Pin No. | Assignment | Terminal   |
|---------|------------|------------|
| 1,2     | -V         | K14-20A(H) |
| 3,4     | +V         |            |

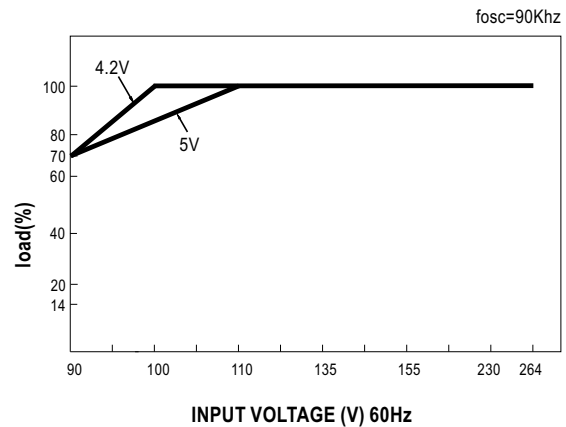
## Block Diagram



## Derating Curve



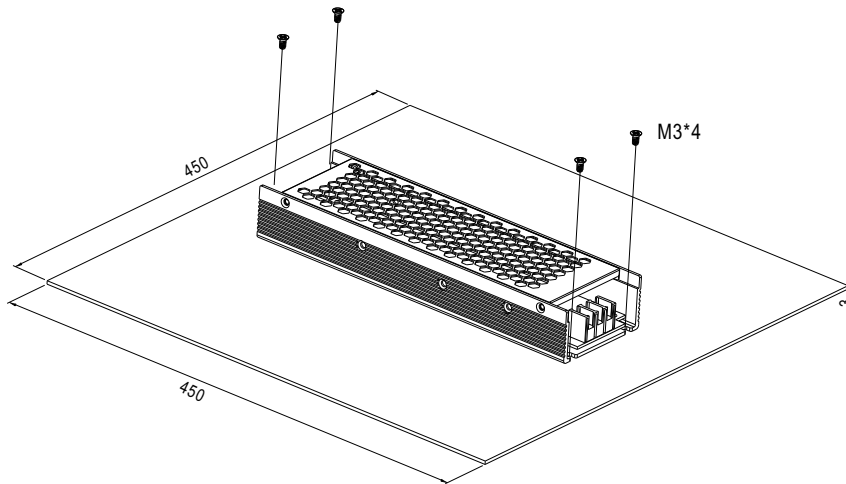
## Static Characteristics



## ■ Installation

### 1. Operate with additional aluminum plate

In order to meet the "Derating Curve" and the "Static Characteristics", HSP-200 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 HSP-200 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:

