



200W Single Output with PFC Function

HRP-200 series



■ Features :

- Universal AC input / Full range
- Built-in active PFC function, PF>0.95
- High efficiency up to 89%
- Withstand 300VAC surge input for 5 seconds
- Protections: Short circuit / Overload / Over voltage / Over temperature
- Cooling by free air convection
- Built-in constant current limiting circuit
- 1U low profile 38mm
- Built-in remote sense function
- 5 years warranty



SPECIFICATION

| MODEL | HRP-200-3.3 | HRP-200-5 | HRP-200-7.5 | HRP-200-12 | HRP-200-15 | HRP-200-24 | HRP-200-36 | HRP-200-48 | | |
|-----------------------|--|---|-------------|-----------------------------|--------------|----------------|--------------|--------------|--------------|--|
| OUTPUT | DC VOLTAGE | 3.3V | 5V | 7.5V | 12V | 15V | 24V | 36V | 48V | |
| | RATED CURRENT | 40A | 35A | 26.7A | 16.7A | 13.4A | 8.4A | 5.7A | 4.3A | |
| | CURRENT RANGE | 0 ~ 40A | 0 ~ 35A | 0 ~ 26.7A | 0 ~ 16.7A | 0 ~ 13.4A | 0 ~ 8.4A | 0 ~ 5.7A | 0 ~ 4.3A | |
| | RATED POWER | 132W | 175W | 200.3W | 200.4W | 201W | 201.6W | 205.2W | 206.4W | |
| | RIPPLE & NOISE (max.) Note.2 | 80mVp-p | 90mVp-p | 100mVp-p | 120mVp-p | 150mVp-p | 150mVp-p | 250mVp-p | 250mVp-p | |
| | VOLTAGE ADJ. RANGE | 2.8 ~ 3.8V | 4.3 ~ 5.8V | 6.8 ~ 9V | 10.2 ~ 13.8V | 13.5 ~ 18V | 21.6 ~ 28.8V | 28.8 ~ 39.6V | 40.8 ~ 55.2V | |
| | VOLTAGE TOLERANCE Note.3 | ±2.0% | ±2.0% | ±2.0% | ±1.0% | ±1.0% | ±1.0% | ±1.0% | ±1.0% | |
| | LINE REGULATION | ±0.5% | ±0.5% | ±0.5% | ±0.3% | ±0.3% | ±0.2% | ±0.2% | ±0.2% | |
| | LOAD REGULATION | ±1.5% | ±1.0% | ±1.0% | ±0.5% | ±0.5% | ±0.5% | ±0.5% | ±0.5% | |
| | SETUP, RISE TIME | 1000ms, 50ms/230VAC 2500ms, 50ms/115VAC at full load | | | | | | | | |
| HOLD UP TIME (Typ.) | 16ms/230VAC 16ms/115VAC at full load | | | | | | | | | |
| INPUT | VOLTAGE RANGE Note.5 | 85 ~ 264VAC 120 ~ 370VDC | | | | | | | | |
| | FREQUENCY RANGE | 47 ~ 63Hz | | | | | | | | |
| | POWER FACTOR (Typ.) | PF>0.95/230VAC | | PF>0.99/115VAC at full load | | | | | | |
| | EFFICIENCY (Typ.) | 80% | 84% | 86% | 88% | 88% | 88% | 89% | 89% | |
| | AC CURRENT (Typ.) | 2.1A/115VAC 1.1A/230VAC | | | | | | | | |
| | INRUSH CURRENT (Typ.) | 35A/115VAC 70A/230VAC | | | | | | | | |
| | LEAKAGE CURRENT | <1.2mA / 240VAC | | | | | | | | |
| PROTECTION | OVERLOAD | 105 ~ 135% rated output power Protection type : Constant current limiting, recovers automatically after fault condition is removed | | | | | | | | |
| | OVER VOLTAGE | 3.96 ~ 4.62V | 6 ~ 7V | 9.4 ~ 10.9V | 14.4 ~ 16.8V | 18.8 ~ 21.8V | 30 ~ 34.8V | 41.4 ~ 48.6V | 57.6 ~ 67.2V | |
| | OVER TEMPERATURE | Shut down o/p voltage, recovers automatically after temperature goes down | | | | | | | | |
| ENVIRONMENT | WORKING TEMP. | -40 ~ +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 ~ 50°C) | | | | | | | | |
| | VIBRATION | 10 ~ 500Hz, 5G 10min./1cycle, 60min. each along X, Y, Z axes | | | | | | | | |
| SAFETY & EMC (Note 4) | SAFETY STANDARDS | UL62368-1, TUV EN62368-1, AS/NZS62368.1, EAC TP TC 004 approved | | | | | | | | |
| | WITHSTAND VOLTAGE | I/P-O/P:3KVAC | | 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 EN55032 (CISPR32) Class B, EN61000-3-2,-3, EAC TP TC 020 | | | | | | | | |
| | EMC IMMUNITY | Compliance to EN61000-4-2,3,4,5,6,8,11, EN55024, heavy industry level, criteria A, EAC TP TC 020 | | | | | | | | |
| OTHERS | MTBF | 209.4K hrs min. MIL-HDBK-217F (25°C) | | | | | | | | |
| | DIMENSION | 199*98*38mm (L*W*H) | | | | | | | | |
| | PACKING | 0.77Kg; 18pcs/14.9Kg/0.87CUFT | | | | | | | | |
| NOTE | <ol style="list-style-type: none"> All parameters NOT specially mentioned are measured at 230VAC input, rated load and 25°C of ambient temperature. Ripple & noise are measured at 20MHz of bandwidth by using a 12" twisted pair-wire terminated with a 0.1uF & 47uF parallel capacitor. Tolerance : includes set up tolerance, line regulation and load regulation. 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 360mm*360mm 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 http://www.meanwell.com) Derating may be needed under low input voltages. Please check the derating curve for more details. The ambient temperature derating of 3.5°C/1000m with fanless models and of 5°C/1000m with fan models for operating altitude higher than 2000m(6500ft). ※ Product Liability Disclaimer : For detailed information, please refer to https://www.meanwell.com/serviceDisclaimer.aspx | | | | | | | | | |

Mechanical Specification

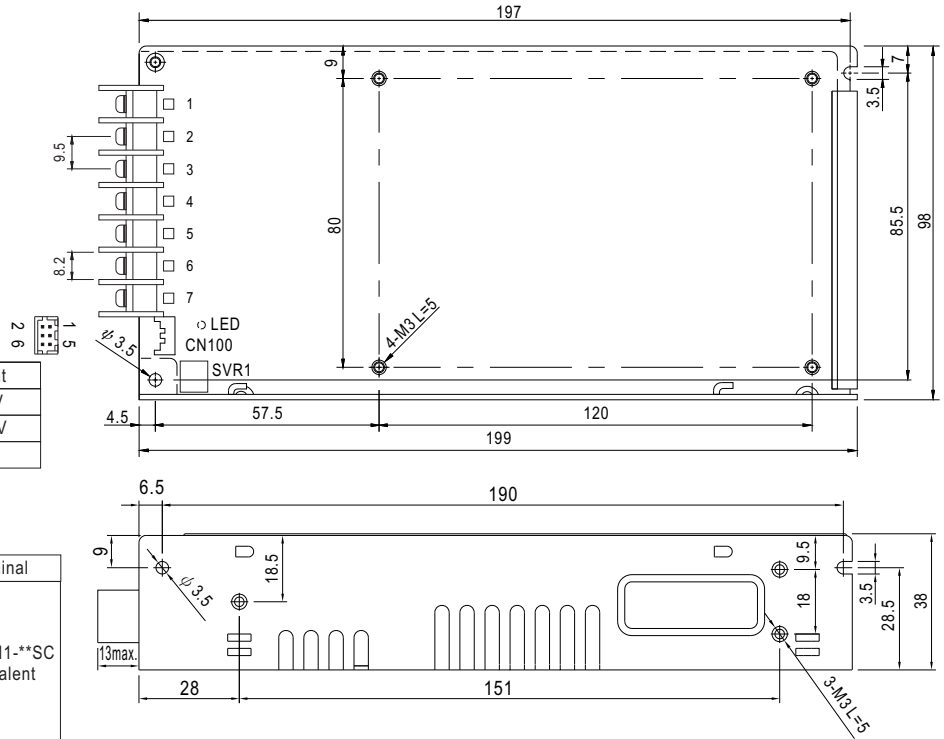
Case No.902E Unit:mm

Terminal Pin No. Assignment

| Pin No. | Assignment | Pin No. | Assignment |
|---------|-------------|---------|--------------|
| 1 | AC/L | 4,5 | DC OUTPUT -V |
| 2 | AC/N | 6,7 | DC OUTPUT +V |
| 3 | FG \oplus | | |

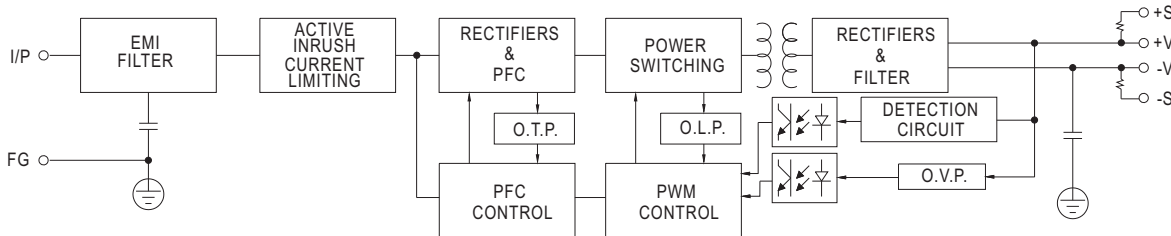
Connector Pin No. Assignment (CN100) : HRS DF11-6DP-2DS or equivalent

| Pin No. | Assignment | Mating Housing | Terminal |
|---------|------------|-------------------------------|---------------------------------|
| 1 | NC | HRS DF11-6DS or equivalent | HRS DF11-**-SC or equivalent |
| 2 | NC | | |
| 3 | NC | | |
| 4 | NC | | |
| 5 | +S | | |
| 6 | -S | | |

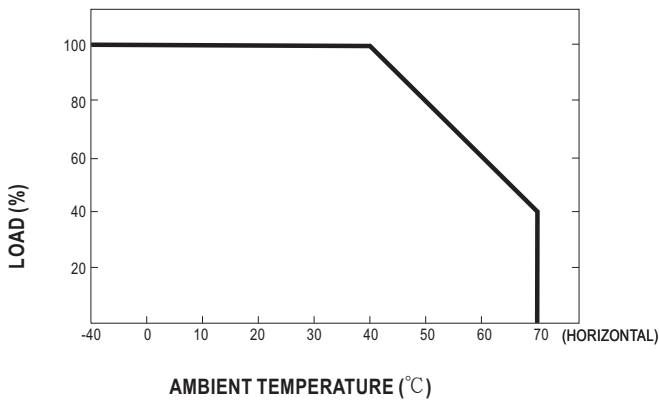


Block Diagram

PWM fosc :70KHz



Derating Curve



Output Derating VS Input Voltage

