



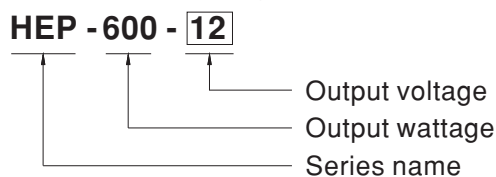
■ Features

- Universal AC input / Full range (up to 305VAC)
- Built-in active PFC function
- No load power consumption <0.5W at remote OFF
- High efficiency up to 96%
- Fanless design, cooling by free air convection
- -40 ~ +70°C wide operating range
- Aluminum case and filling with heat-conducted glue
- Withstand 10G vibration test
- Output voltage and output current can be adjusted through internal potentiometer
- Protections: Short circuit / Over current / Over voltage / Over temperature
- LED indicator for power on
- Operating altitude up to 5000 meters (Note.7)
- 6 years warranty

■ Description

HEP-600 is a 600W industrial AC/DC power supply featuring the outstanding capability to operate under highly humid, dusty, oily, and high-vibration harsh environment. The entire series is housed with the aluminum case and fully potted with heat-conducted silicone. Thanks to state-of-the-art design, the working efficiency is up to 96%, enabling HEP-600 perfectly work between -40°C and +70°C under free air convection.

■ Model Encoding

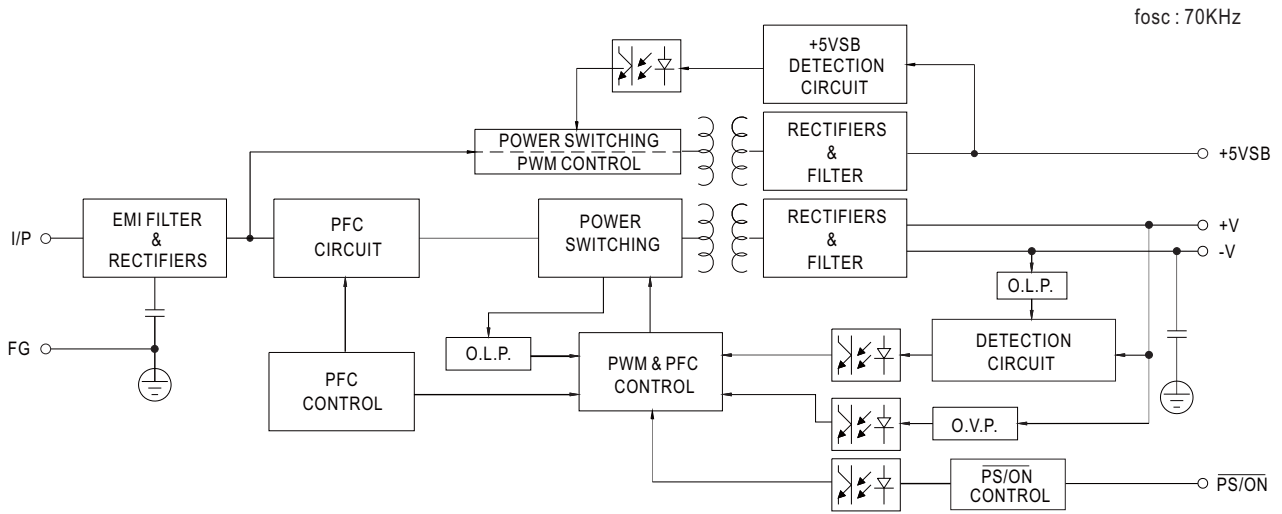




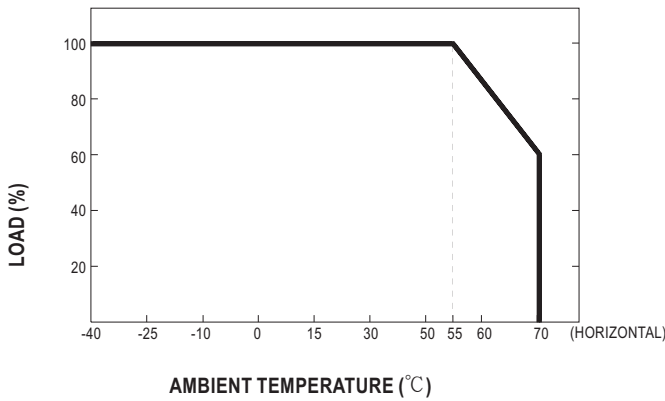
SPECIFICATION

| MODEL | HEP-600-12 | HEP-600-15 | HEP-600-20 | HEP-600-24 | HEP-600-30 | HEP-600-36 | HEP-600-42 | HEP-600-48 | HEP-600-54 | |
|-------------------------|--|--|--------------|---------------|--------------|---------------|--------------|--------------|--------------|--------------|
| OUTPUT | DC VOLTAGE | 12V | 15V | 20V | 24V | 30V | 36V | 42V | 48V | 54V |
| | RATED CURRENT | 40A | 36A | 28A | 25A | 20A | 16.7A | 14.3A | 12.5A | 11.2A |
| | RATED POWER | 480W | 540W | 560W | 600W | 600W | 601.2W | 600.6W | 600W | 604.8W |
| | RIPPLE & NOISE (max.) Note.2 | 150mVp-p | 150mVp-p | 150mVp-p | 150mVp-p | 200mVp-p | 250mVp-p | 250mVp-p | 250mVp-p | 350mVp-p |
| | VOLTAGE ADJ. RANGE | 10.2 ~ 12.6V | 12.7 ~ 15.8V | 17 ~ 21V | 20.4 ~ 25.2V | 25.5 ~ 31.5V | 30.6 ~ 37.8V | 35.7 ~ 44.1V | 40.8 ~ 50.4V | 45.9 ~ 56.7V |
| | CURRENT ADJ. RANGE | Can be adjusted by internal potentiometer | | | | | | | | |
| | | 20 ~ 40A | 18 ~ 36A | 14 ~ 28A | 12.5 ~ 25A | 10 ~ 20A | 8.3 ~ 16.7A | 7.1 ~ 14.3A | 6.2 ~ 12.5A | 5.6 ~ 11.2A |
| | VOLTAGE TOLERANCE Note.3 | ±3.0% | ±2.0% | ±1.5% | ±1.0% | ±1.0% | ±1.0% | ±1.0% | ±1.0% | ±1.0% |
| | LINE REGULATION | ±0.5% | ±0.5% | ±0.5% | ±0.5% | ±0.5% | ±0.5% | ±0.5% | ±0.5% | ±0.5% |
| | LOAD REGULATION | ±2.0% | ±1.5% | ±1.0% | ±0.5% | ±0.5% | ±0.5% | ±0.5% | ±0.5% | ±0.5% |
| SETUP, RISE TIME Note.5 | 500ms, 80ms at full load 230VAC /115VAC | | | | | | | | | |
| HOLD UP TIME (Typ.) | 15ms at full load 230VAC /115VAC | | | | | | | | | |
| INPUT | VOLTAGE RANGE Note.4 | 90 ~ 305VAC | | 127 ~ 431VDC | | | | | | |
| | FREQUENCY RANGE | 47 ~ 63Hz | | | | | | | | |
| | POWER FACTOR (Typ.) | PF>0.98/115VAC, PF>0.95/230VAC, PF>0.93/277VAC at full load | | | | | | | | |
| | EFFICIENCY (Typ.) | 93% | 94% | 95% | 95% | 95.5% | 95.5% | 96% | 96% | 96% |
| | AC CURRENT (Typ.) | 7A / 115VAC | | 3.3A / 230VAC | | 2.9A / 277VAC | | | | |
| | INRUSH CURRENT(Typ.) | COLD START 70A(twidth=1000µs measured at 50% Ipeak) at 230VAC | | | | | | | | |
| LEAKAGE CURRENT | <0.75mA / 277VAC | | | | | | | | | |
| PROTECTION | OVER CURRENT | 105 ~ 125% | | | | | | | | |
| | | Protection type : Constant current limiting, recovers automatically after fault condition is removed | | | | | | | | |
| | SHORT CIRCUIT | Constant current limiting, recovers automatically after fault condition is removed | | | | | | | | |
| | OVER VOLTAGE | 13 ~ 16V | 16.5 ~ 20.5V | 22 ~ 26V | 26 ~ 30V | 32.5 ~ 36.5V | 39.5 ~ 43.5V | 46 ~ 50V | 52.5 ~ 56.5V | 59 ~ 63V |
| | Protection type : Shut down o/p voltage, re-power on to recover | | | | | | | | | |
| OVER TEMPERATURE | Shut down o/p voltage, re-power on to recover | | | | | | | | | |
| FUNCTION | REMOTE ON/OFF CONTROL | Power on : "Hi" >2 ~ 5V or Open circuit Power off : "Low" <0 ~ 0.5V or Short circuit | | | | | | | | |
| | 5V STANDBY | 5V _{SB} : 5V@0.5A ; tolerance ±5%, ripple : 100mVp-p(max.) | | | | | | | | |
| ENVIRONMENT | WORKING TEMP. | -40 ~ +70°C (Refer to "Derating Curve") | | | | | | | | |
| | WORKING HUMIDITY | 20 ~ 95% RH non-condensing | | | | | | | | |
| | STORAGE TEMP., HUMIDITY | -40 ~ +85°C, 10 ~ 95% RH | | | | | | | | |
| | TEMP. COEFFICIENT | ±0.03%/°C (0 ~ 60°C) | | | | | | | | |
| | VIBRATION | 20 ~ 500Hz, 10G 12min./1cycle, period for 72min. each along X, Y, Z axes | | | | | | | | |
| SAFETY & EMC (Note.6) | SAFETY STANDARDS | UL60950-1, TUV EN60950-1 approved | | | | | | | | |
| | WITHSTAND VOLTAGE | I/P-O/P:3.75KVAC I/P-FG:2KVAC O/P-FG:1.5KVAC | | | | | | | | |
| | ISOLATION RESISTANCE | I/P-O/P, I/P-FG, O/P-FG:100M Ohms / 500VDC / 25°C / 70% RH | | | | | | | | |
| | EMC EMISSION | Compliance to EN55022 (CISPR22) Class B, EN61000-3-2,-3 | | | | | | | | |
| | EMC IMMUNITY | Compliance to EN61000-4-2,3,4,5,6,8,11, EN55024, heavy industry level, criteria A | | | | | | | | |
| OTHERS | MTBF | 76.9K hrs min. MIL-HDBK-217F (25°C) | | | | | | | | |
| | DIMENSION | 280*144*48.5mm (L*W*H) | | | | | | | | |
| | PACKING | 3.9Kg; 4pcs/16.6Kg/0.9CUFT | | | | | | | | |
| 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. Derating may be needed under low input voltages. Please check the static characteristics for more details. 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. 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) The ambient temperature derating of 3.5°C/1000m is needed for operating altitude greater than 2000m(6500ft). | | | | | | | | | |

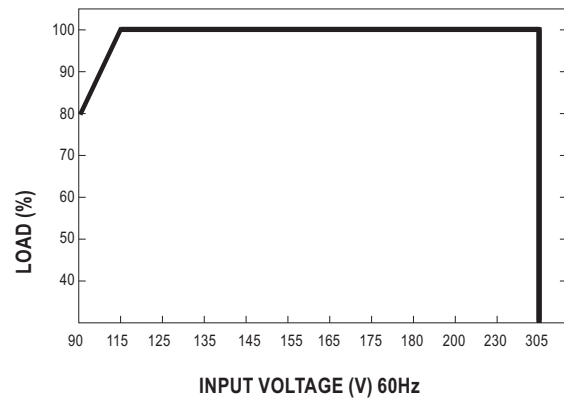
■ Block Diagram



■ Derating Curve

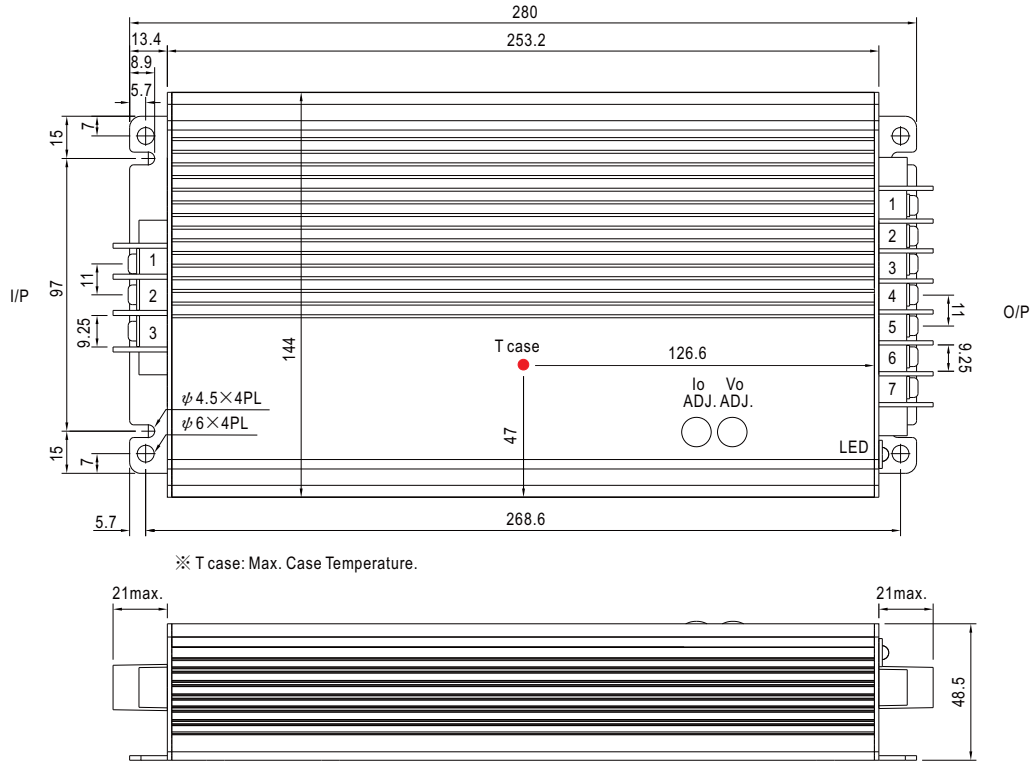


■ Static Characteristics



■ Mechanical Specification

Case No. 228A Unit:mm



※ T case: Max. Case Temperature.

※ Output voltage and constant current level can be adjusted through internal potentiometer.
(Can access by removing the rubber stopper on the case.)

AC Input Terminal Pin No. Assignment

| Pin No. | Assignment |
|---------|------------|
| 1 | FG (⊖) |
| 2 | AC/L |
| 3 | AC/N |

DC Output Terminal Pin No. Assignment

| Pin No. | Assignment | Pin No. | Assignment |
|---------|-------------------|---------|------------|
| 1 | RC+ | 4,5 | -V |
| 2 | RC- & GND | 6,7 | +V |
| 3 | +5V _{SB} | | |

■ Installation Manual

Please refer to : <http://www.meanwell.com/webnet/search/InstallationSearch.html>