



IP65 IP68 (optional)

■ Features

- Universal AC input / Full range(up to 305VAC)
- Built-in active PFC function
- High efficiency up to 95%
- Fanless design, cooling by free air convection
- -55~+65°C wide operating range
- Aluminum case and filling with heat-conducted silicone
- IP65 design, optional IP68 rated model available
- Meet 6KV surge immunity level
- Withstand 10G vibration test
- Operating altitude up to 5000 meters (Note.7)
- Protections: Short circuit / Overload / Over voltage / Over temperature
- 6 years warranty (Note.10)

■ Applications

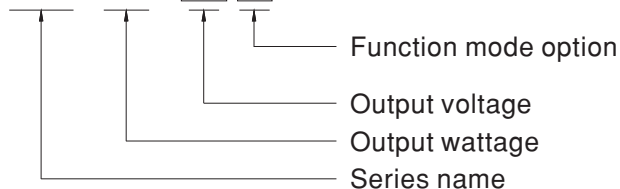
- Outdoor telecommunication equipment
- Outdoor electronic signage and billboard
- Petroleum plant or mine shaft facility

■ Description

HEP-480 is a 480W 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 95%, enabling HEP-480 perfectly work between -55°C and +65°C under free air convection.

■ Model Encoding

HEP - 480 - 24 A



- A : Standard model, IP65, Vo and Io level can be adjusted through internal potentiometer.
- Blank : Optional model, IP68, with fixed Vo and Io level.



SPECIFICATION

| MODEL | HEP-480-24□ | HEP-480-36□ | HEP-480-48□ | HEP-480-54□ | |
|-------------------------|--|---|----------------|--------------|--------------|
| OUTPUT | DC VOLTAGE | 24V | 36V | 48V | 54V |
| | RATED CURRENT | 20A | 13.3A | 10A | 8.9A |
| | RATED POWER | 480W | 478.8W | 480W | 480.6W |
| | RIPPLE & NOISE (max.) Note.2 | 200mVp-p | 250mVp-p | 250mVp-p | 350mVp-p |
| | VOLTAGE ADJ. RANGE Note.5 | Adjusted for A-type only (via built-in potentiometer) | | | |
| | | 20.4 ~ 25.2V | 30.6 ~ 37.8V | 40.8 ~ 50.4V | 45.9 ~ 56.7V |
| | CURRENT ADJ. RANGE | Adjusted for A-type only (via built-in potentiometer) | | | |
| | | 10 ~ 20A | 6.6 ~ 13.3A | 5 ~ 10A | 4.4 ~ 8.9A |
| | VOLTAGE TOLERANCE Note.3 | ± 1.0% | ± 1.0% | ± 1.0% | ± 1.0% |
| | LINE REGULATION | ± 0.5% | ± 0.5% | ± 0.5% | ± 0.5% |
| LOAD REGULATION | ± 0.5% | ± 0.5% | ± 0.5% | ± 0.5% | |
| SETUP, RISE TIME Note.4 | 500ms, 80ms 115VAC/230VAC | | | | |
| HOLD UP TIME (Typ.) | 16ms 115VAC/230VAC | | | | |
| INPUT | VOLTAGE RANGE Note.5 | 90 ~ 305VAC 127 ~ 431VDC | | | |
| | FREQUENCY RANGE | 47 ~ 63Hz | | | |
| | POWER FACTOR (Typ.) | PF ≥ 0.98/115VAC, PF ≥ 0.97/230VAC, PF ≥ 0.95/277VAC at full load | | | |
| | EFFICIENCY (Typ.) | 94% | 95% | 94.5% | 95% |
| | AC CURRENT (Typ.) | 5A / 115VAC | 2.45A / 230VAC | 2A/277VAC | |
| | INRUSH CURRENT(Typ.) | COLD START 35A at 230VAC | | | |
| LEAKAGE CURRENT | <0.75mA / 277VAC | | | | |
| PROTECTION | OVER CURRENT | 105 ~ 125% | | | |
| | SHORT CIRCUIT | Constant current limiting, recovers automatically after fault condition is removed | | | |
| | OVER VOLTAGE | 27 ~ 33V | 40 ~ 50V | 53 ~ 63V | 60 ~ 70V |
| | OVER TEMPERATURE | Shut down output voltage, re-power on to recover | | | |
| ENVIRONMENT | WORKING TEMP. | -55 ~ +65°C (Refer to "Derating Curve") | | | |
| | WORKING HUMIDITY | 20 ~ 95% RH non-condensing | | | |
| | STORAGE TEMP., HUMIDITY | -60 ~ +80°C, 10 ~ 95% RH | | | |
| | TEMP. COEFFICIENT | ± 0.02%/°C (0 ~ 60°C) | | | |
| | VIBRATION | 20 ~ 500Hz, 10G 12min./1cycle, period for 72min. each along X, Y, Z axes | | | |
| SAFETY & EMC | SAFETY STANDARDS | UL60950-1, IP65 (or IP68 for HEP-480 Blank-Type) approved ; design refer to TUV EN60950-1 | | | |
| | WITHSTAND VOLTAGE | I/P-O/P:3.75KVAC I/P-FG:2.0KVAC 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, light industry level (surge 6KV), criteria A | | | |
| OTHERS | MTBF | 89.8K hrs min. MIL-HDBK-217F (25°C) | | | |
| | DIMENSION | 262*125*43.8mm (L*W*H) | | | |
| | PACKING | 2.8Kg;4pcs/12.2Kg/0.58CUFT | | | |
| 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. Length of set up time is measured at cold first start. Turning ON/OFF the power supply may lead to increase of the setup time. Derating may be needed under low input voltages. Please refer to the "STATIC CHARACTERISTICS" for more details. The power supply shall be regarded as one component of the final system. The EMC performance will be affected by the complete system installation and/or configuration, the final system manufacturers must re-verify overall EMC directive with the complete installation and/or configuration. The ambient temperature derating of 3.5°C/1000m is needed for operating altitude greater than 2000m(6500ft). The water protection level test for the IP68 rating is performed 1000mm below the surface of the water for 1 month. Please refer to the warranty statement on MEAN WELL's website at http://www.meanwell.com | | | | |