EPP-300-12



SPECIFICATION

MODEL



Features:

- Universal AC input / Full range
- Built-in active PFC function
- High efficiency up to 93%
- Withstand 300VAC surge input for 5 seconds
- Protections: Short circuit / Overload / Over voltage / Over temperature
- Built-in 12V/0.5A auxiliary output
- 5"x3" compact size
- Free air convection for 200W and 300W with 20.5 CFM forced air

EPP-300-27

- With power good and fail signal output
- Built-in remote sense function
- No load power consumption under 0.5W by PS-ON control
- Standby 5V@1A with fan, @ 0.6A without fan
- Operating altitude up to 5000 meters
- · 3 years warranty

EPP-300-24

EPP-300-15







EPP-300-48

DC VOLTAGE 12V 15V 24V 27V 48V RATED CURRENT (20.5CFM) 25A 20A 12.5A 11.12A 6.25A CURRENT RANGE (convection) 0 ~ 16.67A 0 ~ 13.33A 0 ~ 8.33A 0 ~ 7.4A 0 ~ 4.17A CURRENT RANGE (20.5CFM) 0 ~ 25A 0 ~ 20A 0 ~ 12.5A 0 ~ 11.12A 0 ~ 6.25A RATED POWER (convection) 200W 200W 199.9W 199.8W 200.2W RATED POWER (20.5CFM) 300W 300W 300W 300.24W 300W OUTPUT RIPPLE & NOISE (max.) Note.2 120mVp-p 120mVp-p 150mVp-p 200mVp-p 250mVp-p **VOLTAGE ADJ. RANGE** Main output:11.4 ~ 12.6V Main output:14.25 ~ 15.75V | Main output:22.8 ~ 25.2V | Main output:25.65 ~ 28.35V | Main output:45.6 ~ 50.4V **VOLTAGE TOLERANCE Note,3** +3.0% $\pm 3.0\%$ +2.0%+2.0% +2.0%LINE REGULATION $\pm 0.5\%$ +0.5% $\pm 0.5\%$ $\pm 0.5\%$ $\pm 0.5\%$ LOAD REGULATION $\pm 1.0\%$ $\pm 1.0\%$ $\pm 1.0\%$ $\pm 1.0\%$ $\pm 1.0\%$ SETUP, RISE TIME 2500ms, 30ms/230VAC 3000ms, 30ms/115VAC at full load HOLD UP TIME (Typ.) 13ms/230VAC/115VAC at full load 90 ~ 264VAC 127 ~ 370VDC **VOLTAGE RANGE** Note.5 **FREQUENCY RANGE** 47 ~ 63Hz POWER FACTOR (Typ.) PF>0.93/230VAC PF>0.98/115VAC at full load INPUT EFFICIENCY (Typ.) 90% 90% 92.5% 93% 93% AC CURRENT (Typ.) 3.5A/115VAC 1.8A/230VAC COLD START 40A/115VAC **INRUSH CURRENT (Typ.)** 80A/230VAC LEAKAGE CURRENT <2mA/240VAC 105 ~ 135% rated output power **OVERLOAD** Protection type: Hiccup mode, recovers automatically after fault condition is removed 16.2 ~ 18.5V 26 ~ 30V 29.5 ~ 33.5V 52 ~ 59.5V **OVER VOLTAGE** Protection type: Shut down o/p voltage, re-power on to recover **PROTECTION** $110^{\circ}C \pm 5^{\circ}C$ (TSW1) detect on heatsink of power transistor $115\pm5^{\circ}\text{C}$ (12V,15V),85 $\pm5^{\circ}\text{C}$ (24V,27V,48V) (TSW2) detect on heatsink of output diode **OVER TEMPERATURE** Protection type: (TSW1)Shut down o/p voltage, recovers automatically after temperature goes down Protection type: (TSW2)Shut down o/p voltage, re-power on to recover **5V STANDBY** 5VSB: 5V@0.6A without fan, 1A with fan 20.5CFM; tolerance \pm 2%, ripple: 150mVp-p(max.) **AUXILIARY POWER (AUX)** 12V@0.5A for driving a fan ; tolerance -15% ~ +10% FUNCTION **PS-ON INPUT SIGNAL** Power on: PS-ON = "Hi" or " > $2 \sim 5V$ "; Power off: PS-ON = "Low" or " < $0 \sim 0.5V$ " 500ms>PG>10ms; The TTL signal goes high with 10ms to 500ms delay after power set up; The TTL signal goes low at least 1ms before Vo below 90% of rated value POWER GOOD / POWER FAIL -30 ~ +70°C (Refer to "Derating Curve") WORKING TEMP. 20 ~ 90% RH non-condensing WORKING HUMIDITY -40 ~ +85°C , 10 ~ 95% RH STORAGE TEMP., HUMIDITY ENVIRONMENT TEMP. COEFFICIENT ±0.03%/°C (0~50°C) **OPERATING ALTITUDE Note.7** 5000 meters **VIBRATION** 10 ~ 500Hz, 2G 10min./1cycle, 60min. each along X, Y, Z axes **SAFETY STANDARDS** UL60950-1, TUV EN60950-1, EAC TP TC 004 approved WITHSTAND VOLTAGE I/P-O/P:3KVAC I/P-FG:2KVAC O/P-FG:0.5KVAC **SAFETY &** ISOLATION RESISTANCE I/P-O/P. I/P-FG. O/P-FG:100M Ohms / 500VDC / 25°C / 70% RH **EMC** (Note 4) **EMC EMISSION** Compliance to EN55011 (CISPR11), EN55032 (CISPR32), Conduction Class B, Radiation Class B; EN61000-3-2,3; EAC TP TC 020 Compliance to EN61000-4-2,3,4,5,6,8,11, EN55024, EN60601-1-2, criteria A, EAC TP TC 020 **EMC IMMUNITY**

NOTE

OTHERS

MTBF

DIMENSION

PACKING

0.37 Kg; 36pcs/14.3Kg/1.03CUFT; 1. All parameters NOT specially mentioned are measured at 230VAC input, rated load and 25°C of ambient temperature.

MIL-HDBK-217F (25°C)

- 2. Ripple & noise are measured at 20MHz of bandwidth by using a 12" twisted pair-wire terminated with a 0.1uf & 47uf parallel capacitor.
- 3. Tolerance: includes set up tolerance, line regulation and load regulation.

160Khrs min.

127*76.2*35mm (L*W*H)

- 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. 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)
- 5. Derating may be needed under low input voltages. Please check the derating curve for more details.
- Heat Sink HS1.HS2 can not be shorted.
- 7. 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).



