



65W Single Output Switching Power Supply

EPS-65 series



- Features :
 - Universal AC input / Full range
 - Optional L-Bracket and cover
 - High efficiency up to 90%
 - Protections: Short circuit / Overload / Over voltage
 - Cooling by free air convection
 - 4"×2" compact size
 - LED indicator for power on
 - No load power consumption<0.3W
 - Operating altitude up to 4000 meters
 - 3 years warranty



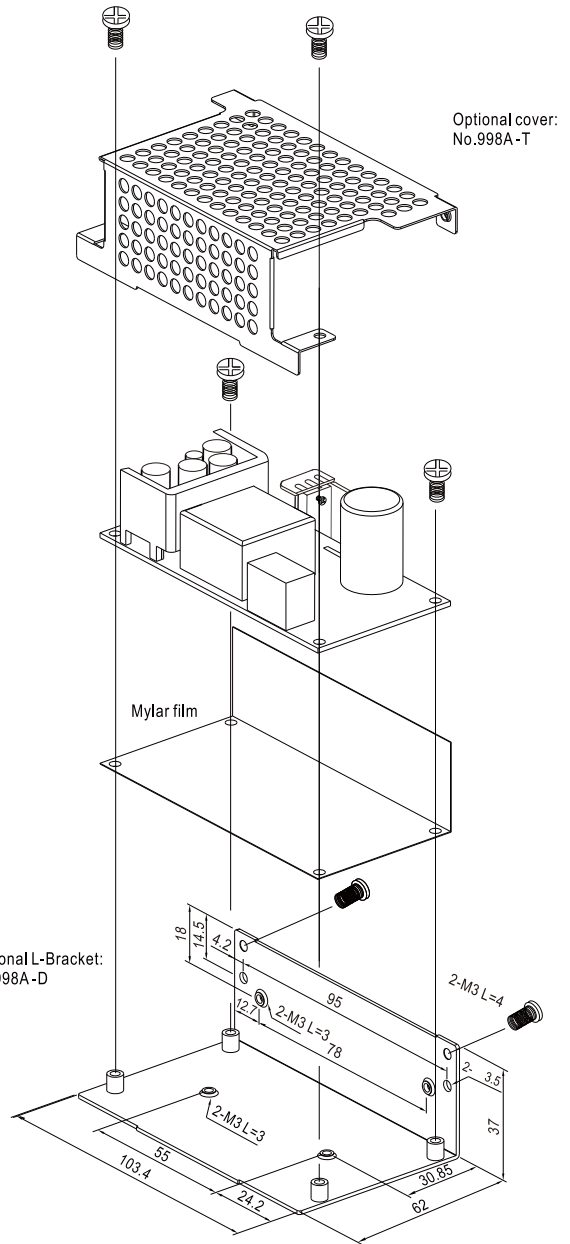
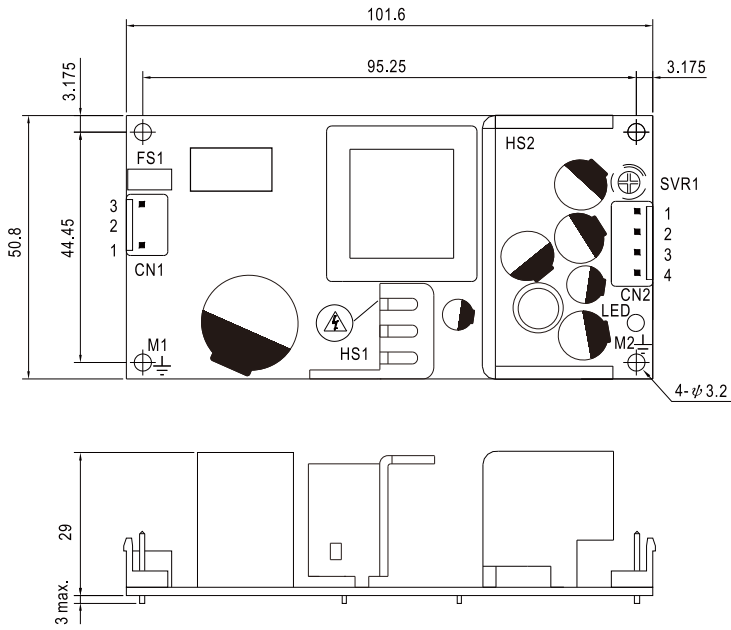
EPS-65-3.3 -C =Blank, -C ; Blank=PCB only, -C=Enclosed type

SPECIFICATION

| MODEL | | EPS-65-3.3 <input type="checkbox"/> | EPS-65-5 <input type="checkbox"/> | EPS-65-7.5 <input type="checkbox"/> | EPS-65-12 <input type="checkbox"/> | EPS-65-15 <input type="checkbox"/> | EPS-65-24 <input type="checkbox"/> | EPS-65-36 <input type="checkbox"/> | EPS-65-48 <input type="checkbox"/> | |
|--------------------------------------|--|---|-----------------------------------|-------------------------------------|------------------------------------|------------------------------------|------------------------------------|------------------------------------|------------------------------------|--|
| OUTPUT | DC VOLTAGE | 3.3V | 5V | 7.5V | 12V | 15V | 24V | 36V | 48V | |
| | RATED CURRENT | 11A | 11A | 8A | 5.42A | 4.34A | 2.71A | 1.81A | 1.36A | |
| | CURRENT RANGE | 0 ~ 12A | 0 ~ 12A | 0 ~ 8.8A | 0 ~ 6A | 0 ~ 4.8A | 0 ~ 3A | 0 ~ 2A | 0 ~ 1.5A | |
| | RATED POWER | 36.3W | 55W | 60W | 65.04W | 65.1W | 65.04W | 65.16W | 65.28W | |
| | PEAK LOAD(10sec.) <small>Note.6</small> | 39.6W | 60W | 66W | 72W | 72W | 72W | 72W | 72W | |
| | RIPPLE & NOISE (max.) <small>Note.2</small> | 80mVp-p | 80mVp-p | 100mVp-p | 120mVp-p | 150mVp-p | 240mVp-p | 280mVp-p | 300mVp-p | |
| | VOLTAGE ADJ. RANGE | 3.1 ~ 3.6V | 4.75 ~ 5.5V | 7.13 ~ 8.25V | 10.8 ~ 13.5V | 13.5 ~ 16.5V | 21.6 ~ 27V | 32.4 ~ 39.6V | 43.2 ~ 52.8V | |
| | VOLTAGE TOLERANCE <small>Note.3</small> | ±3.0% | ±2.0% | ±2.0% | ±2.0% | ±2.0% | ±1.0% | ±1.0% | ±1.0% | |
| | LINE REGULATION | ±0.5% | ±0.5% | ±0.5% | ±0.5% | ±0.5% | ±0.5% | ±0.5% | ±0.5% | |
| | LOAD REGULATION | ±2.0% | ±1.0% | ±1.0% | ±1.0% | ±1.0% | ±1.0% | ±1.0% | ±1.0% | |
| | SETUP, RISE TIME | 1000ms, 50ms/230VAC 2000ms, 50ms/115VAC at full load | | | | | | | | |
| HOLD UP TIME (Typ.) | 50ms/230VAC 12ms/115VAC at full load | | | | | | | | | |
| INPUT | VOLTAGE RANGE <small>Note.5</small> | 90 ~ 264VAC 127 ~ 370VDC [DC input operation possible by connecting AC/N(+), AC/L(-)] | | | | | | | | |
| | FREQUENCY RANGE | 47 ~ 63Hz | | | | | | | | |
| | EFFICIENCY (Typ.) | 80% | 82% | 84% | 86% | 87% | 88% | 89% | 90% | |
| | AC CURRENT (Typ.) | 1.8A/115VAC 1 A/230VAC | | | | | | | | |
| | INRUSH CURRENT (Typ.) | COLD START 60A/230VAC | | | | | | | | |
| LEAKAGE CURRENT | <2mA/240VAC | | | | | | | | | |
| PROTECTION | OVER LOAD | 115 ~ 160% rated output power Protection type : Hiccup mode, recovers automatically after fault condition is removed | | | | | | | | |
| | OVER VOLTAGE | 3.7 ~ 4.45V | 5.6 ~ 6.75V | 8.63 ~ 10.1V | 13.8 ~ 16.2V | 17.25 ~ 20.25V | 27.6 ~ 32.4V | 39.7 ~ 46.8V | 53.3 ~ 64.8V | |
| ENVIRONMENT | WORKING TEMP. | -30 ~ +70°C (Refer to output load 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) | | | | | | | | |
| | OPERATING ALTITUDE <small>Note.7</small> | 4000 meters | | | | | | | | |
| SAFETY & EMC <small>(Note 4)</small> | VIBRATION | 10 ~ 500Hz, 2G 10min./1cycle, period for 60min. each along X, Y, Z axes | | | | | | | | |
| | SAFETY STANDARDS | UL62368-1, TUV EN62368-1, 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 | | | | | | | | |
| OTHERS | 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 | | | | | | | | |
| NOTE | MTBF | 563Khrs min. MIL-HDBK-217F (25°C) | | | | | | | | |
| | DIMENSION | PCB:101.6*50.8*29mm (L*W*H) ; with optional CASE:103.4*62*37mm (L*W*H) | | | | | | | | |
| | PACKING | PCB: 0.15Kg; 96pcs/ 15.4 Kg/0.89CUFT ; with optional CASE: 0.3Kg; 45pcs/ 14.5Kg/0.67CUFT | | | | | | | | |
| NOTE | 1. All parameters NOT specially mentioned are measured at 230VAC input, rated load and 25°C of ambient temperature. 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. 4. Derating may be needed under low input voltage. Please check the static characteristics for more details. 5. 33% Duty cycle maximum within every 30 seconds. Average output power should not exceed the rated power. 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 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) 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). | | | | | | | | | |

Mechanical Specification

Unit:mm



- 1.HS1,HS2 cannot be shorted.
- 2.HS1 must have safety isolation distance with system case.

AC Input Connector (CN1) : JST B3P-VH or equivalent

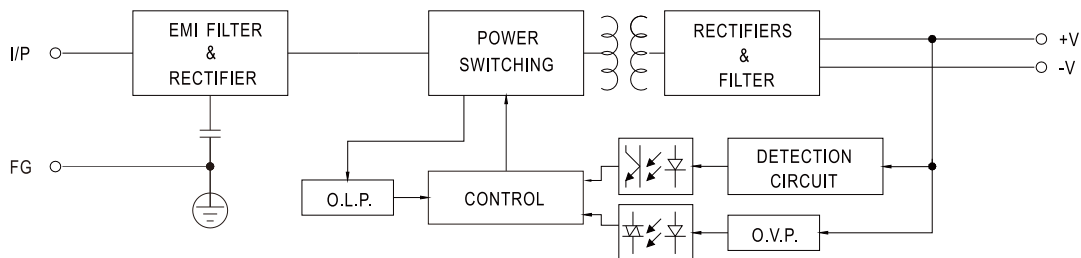
| Pin No. | Assignment | Mating Housing | Terminal |
|---------|------------|-----------------------|--------------------------------|
| 1 | AC/N | JST VHR or equivalent | JST SVH-21T-P1.1 or equivalent |
| 2 | No Pin | | |
| 3 | AC/L | | |

DC Output Connector (CN2) : JST B4P-VH or equivalent

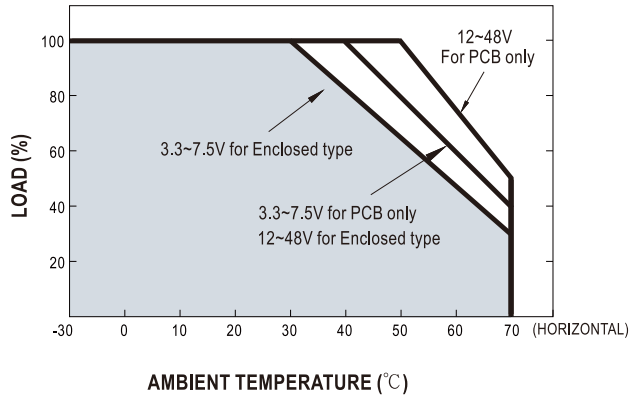
| Pin No. | Assignment | Mating Housing | Terminal |
|---------|------------|-----------------------|--------------------------------|
| 1,2 | +V | JST VHR or equivalent | JST SVH-21T-P1.1 or equivalent |
| 3,4 | -V | | |

⊥ : Grounding Required ;M1 and M2 are Safety ground and should all be grounded

Block Diagram



■ Output Derating



■ Static Characteristics

