



■ Features :

- Universal AC input / Full range
- Protections: Short circuit / Overload / Over voltage
- Cooling by free air convection
- 1.8"x2.5" compact size
- No load power consumption<0.3W
- Operating altitude up to 3000 meters
- 3 years warranty

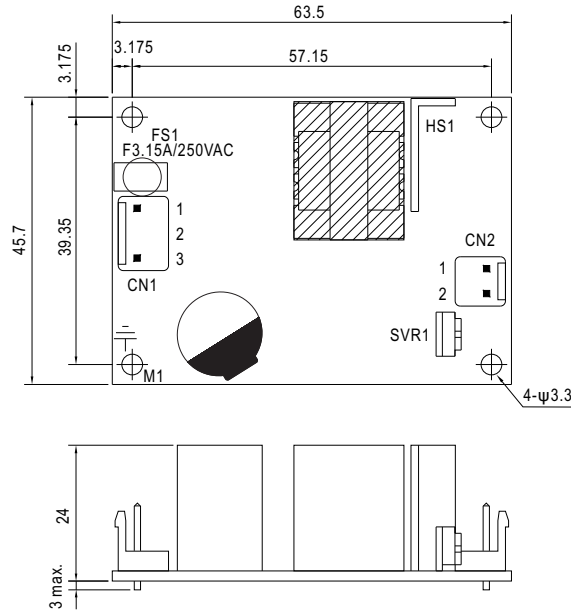


SPECIFICATION

| MODEL | | EPS-15-3.3 | EPS-15-5 | EPS-15-7.5 | EPS-15-12 | EPS-15-15 | EPS-15-24 | EPS-15-27 | EPS-15-36 | EPS-15-48 | |
|-----------------------|---|--|-------------|--------------|--------------|--|------------|----------------|--------------|--------------|--|
| OUTPUT | DC VOLTAGE | 3.3V | 5V | 7.5V | 12V | 15V | 24V | 27V | 36V | 48V | |
| | RATED CURRENT | 3A | 3A | 2A | 1.25A | 1A | 0.625A | 0.56A | 0.42A | 0.313A | |
| | CURRENT RANGE | 0 ~ 3.3A | 0 ~ 3.3A | 0 ~ 2.2A | 0 ~ 1.38A | 0 ~ 1.1A | 0 ~ 0.69A | 0 ~ 0.615A | 0 ~ 0.46A | 0 ~ 0.344A | |
| | RATED POWER | 9.9W | 15W | 15W | 15W | 15W | 15W | 15.12W | 15.12W | 15.02W | |
| | PEAK LOAD(10sec.) Note.6 | 10.89W | 16.5W | 16.5W | 16.56W | 16.5W | 16.56W | 16.6W | 16.56W | 16.51W | |
| | RIPPLE & NOISE (max.) Note.2 | 50mVp-p | 50mVp-p | 80mVp-p | 80mVp-p | 100mVp-p | 150mVp-p | 180mVp-p | 200mVp-p | 200mVp-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 | 24.3 ~ 29.7V | 32.4 ~ 39.6V | 43.2 ~ 52.8V | |
| | VOLTAGE TOLERANCE Note.3 | ±2.0% | ±2.0% | ±2.0% | ±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 | ±1.0% | ±1.0% | ±1.0% | ±0.5% | ±0.5% | ±0.5% | ±0.5% | ±0.5% | ±0.5% | |
| SETUP, RISE TIME | 1000ms, 30ms/230VAC 2000ms, 30ms/115VAC at full load | | | | | | | | | | |
| HOLD UP TIME (Typ.) | 50ms/230VAC 16ms/115VAC at full load | | | | | | | | | | |
| INPUT | VOLTAGE RANGE Note.5 | 85 ~ 264VAC | | 120 ~ 370VDC | | [DC input operation possible by connecting AC/L(+), AC/N(-)] | | | | | |
| | FREQUENCY RANGE | 47 ~ 63Hz | | | | | | | | | |
| | EFFICIENCY (Typ.) | 75% | 78% | 81% | 82% | 83% | 83% | 84% | 85% | 85% | |
| | AC CURRENT (Typ.) | 0.4A/115VAC | | 0.2A/230VAC | | | | | | | |
| | INRUSH CURRENT (Typ.) | COLD START 45A/230VAC | | | | | | | | | |
| LEAKAGE CURRENT | <1mA/240VAC | | | | | | | | | | |
| PROTECTION | OVER LOAD | 115 ~ 150% rated output power Protection type : Hiccup mode, recovers automatically after fault condition is removed | | | | | | | | | |
| | OVER VOLTAGE | 3.8 ~ 4.85V | 5.6 ~ 6.75V | 8.63 ~ 10.1V | 13.8 ~ 16.2V | 17.25 ~ 20.25V | 27.6 ~ 33V | 31.05 ~ 36.45V | 39.7 ~ 46.8V | 55.2 ~ 65.8V | |
| ENVIRONMENT | WORKING TEMP. | -30 ~ +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) | | | | | | | | | |
| | OPERATING ALTITUDE Note.7 | 3000 meters | | | | | | | | | |
| SAFETY & EMC (Note 4) | 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, CCC GB4943.1 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, GB9254 Class B, GB17625.1 | | | | | | | | | |
| OTHERS | EMC IMMUNITY | Compliance to EN61000-4-2,3,4,5,6,8,11, EN55024, heavy industry level, criteria A, EAC TP TC 020 | | | | | | | | | |
| | MTBF | 824.6Khrs min. MIL-HDBK-217F (25°C) | | | | | | | | | |
| | DIMENSION | 63.5*45.7*24mm (L*W*H) | | | | | | | | | |
| NOTE | PACKING | 0.057Kg; 120pcs/ 7.84Kg/0.97CUFT | | | | | | | | | |
| | | <ol style="list-style-type: none"> 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. 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. 5. Derating may be needed under low input voltage. Please check the static characteristics for more details. 6. 33% Duty cycle maximum within every 30 seconds. Average output power should not exceed the rated power. 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



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

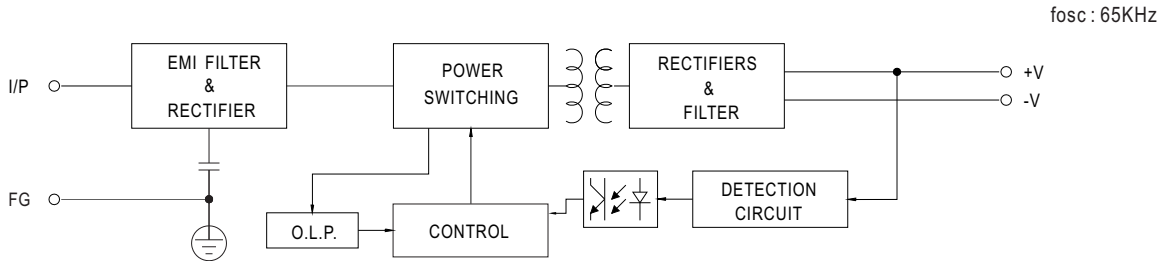
| Pin No. | Assignment | Mating Housing | Terminal |
|---------|------------|-----------------------|--------------------------------|
| 1 | AC/L(+) | JST VHR or equivalent | JST SVH-21T-P1.1 or equivalent |
| 2 | No Pin | | |
| 3 | AC/N(-) | | |

DC Output Connector (CN2) : JST B2P-VH or equivalent

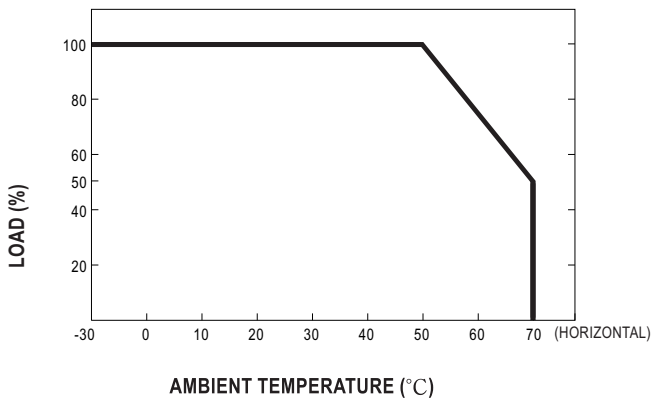
| Pin No. | Assignment | Mating Housing | Terminal |
|---------|------------|-----------------------|--------------------------------|
| 1 | +V | JST VHR or equivalent | JST SVH-21T-P1.1 or equivalent |
| 2 | -V | | |

⊥ : Grounding Required
M1 is safety ground

Block Diagram



Output Derating



Static Characteristics

