



■ Features :

- Universal AC input/Full range
- Protections: Short circuit / Overload / Over voltage / Battery polarity protections (by fuse)
- Built-in temperature compensation function
- Output voltage detection signal
- Cooling by free air convection
- LED indicator for power on
- No load power consumption <0.75W
- Suitable for installation in metallic or non-metallic system enclosure
- 100% full load burn-in test
- 2 years warranty

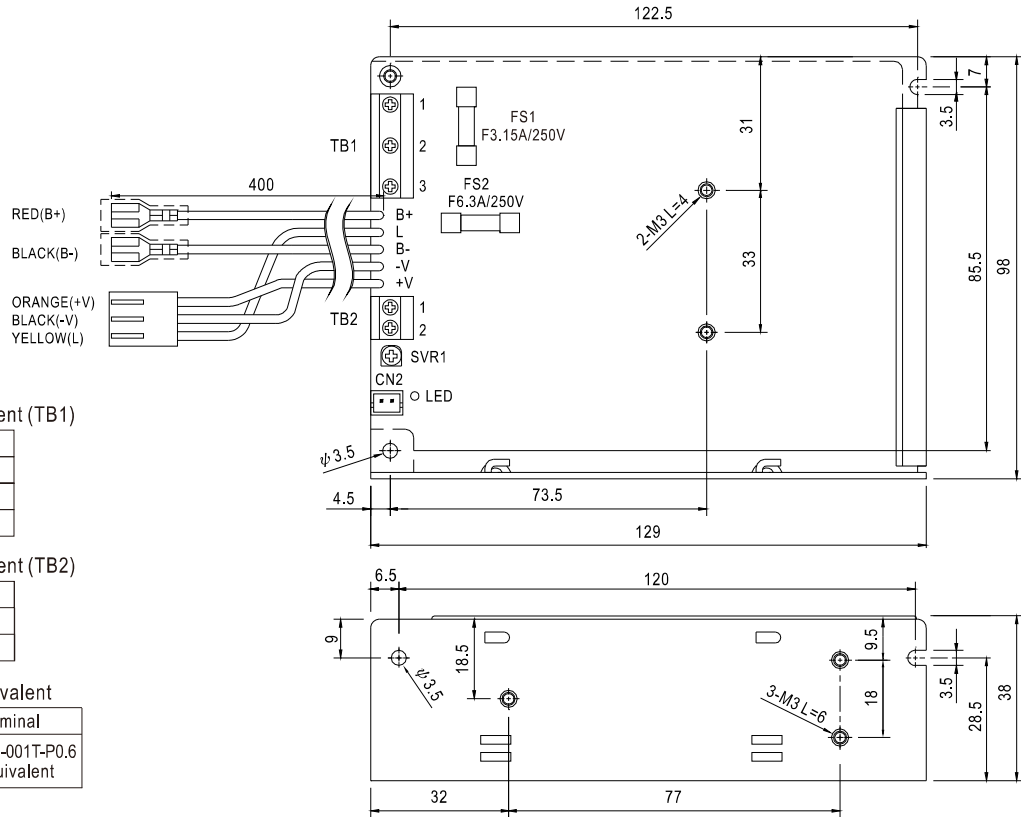


SPECIFICATION

| MODEL | SCP-50-12 | SCP-50-24 | |
|--------------------------|---|--|-------------------------------|
| OUTPUT | DC VOLTAGE | 13.8V | 27.6V |
| | RATED CURRENT | 3.6A | 1.8A |
| | CURRENT RANGE | 0 ~ 3.6A | 0 ~ 1.8A |
| | PEAK 5S Note.6 | 4.3A | 2.2A |
| | RATED POWER | 49.7W | 49.7W |
| | RIPPLE & NOISE (max.) Note.2 | 120mVp-p | 200mVp-p |
| | VOLTAGE ADJ. RANGE | +15,-5% | +15,-5% |
| | VOLTAGE TOLERANCE Note.3 | ±2.0% | ±1.0% |
| | LINE REGULATION Note.4 | ±1.0% | ±1.0% |
| | LOAD REGULATION Note.5 | ±2.0% | ±1.0% |
| | SETUP, RISE TIME | 500ms, 30ms/230VAC 1200ms, 30ms/115VAC at full load | |
| HOLD UP TIME (Typ.) | 50ms/230VAC 16ms/115VAC at full load | | |
| INPUT | VOLTAGE RANGE | 85 ~ 264VAC 120 ~ 370VDC | |
| | FREQUENCY RANGE | 47 ~ 63Hz | |
| | EFFICIENCY(Typ.) | 81% | 85% |
| | AC CURRENT (Typ.) | 1.1A/115VAC 0.65A/230VAC | |
| | INRUSH CURRENT (Typ.) | COLD START 45A | |
| | LEAKAGE CURRENT | <2mA / 240VAC | |
| FUNCTION | TEMP. COMPENSATION | By NTC (not provide with the power supply) | |
| | OUTPUT VOLTAGE SENSOR | L=output voltage +0.2 ~ 0.7V(AC OK); L=0V(AC Fail) | |
| PROTECTION | OVERLOAD | 4.3 ~ 5.8A rated output power | 2.2 ~ 2.9A rated output power |
| | | Protection type : Hiccup mode, recovers automatically after fault condition is removed | |
| | OVER VOLTAGE | 16.6 ~ 19.3V | 33.1 ~ 38.5V |
| | | Protection type : Shut down o/p voltage, re-power on to recover | |
| ENVIRONMENT | WORKING TEMP. | -20 ~ +60°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 ~ 45°C) | |
| | VIBRATION | 10 ~ 500Hz, 2G 10min./1cycle, period for 60min. each along X, Y, Z axes | |
| SAFETY & EMC (Note 7) | SAFETY STANDARDS | UL60950-1, CB(IEC60950-1) approved | |
| | WITHSTAND VOLTAGE | I/P-O/P:3KVAC I/P-FG:1.5KVAC 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 EN55022 (CISPR22) Class B, EN61000-3-2,3 | |
| | EMC IMMUNITY | Compliance to EN61000-4-2, 3, 4, 5, 6, 8, 11, ENV50204, EN55024, EN61000-6-1, light industry level, criteria A | |
| OTHERS | MTBF | 495.7K hrs min. MIL-HDBK-217F (25°C) | |
| | DIMENSION | 129*98*38mm (L*W*H) | |
| | PACKING | 0.45Kg; 30pcs/14.5Kg/0.95CUFT | |
| NOTE | <p>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. Line regulation is measured from low line to high line at rated load. 5. Load regulation is measured from 0% to 100% rated load. 6. 33% Duty cycle maximum within every 15 seconds. Average output power should not exceed the rated power. 7. 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. (As available on http://www.meanwell.com)</p> | | |

■ Mechanical Specification

Case No. 903 Unit:mm



Terminal Pin No. Assignment (TB1)

| Pin No. | Assignment |
|---------|------------|
| 1 | AC/L |
| 2 | AC/N |
| 3 | FG \perp |

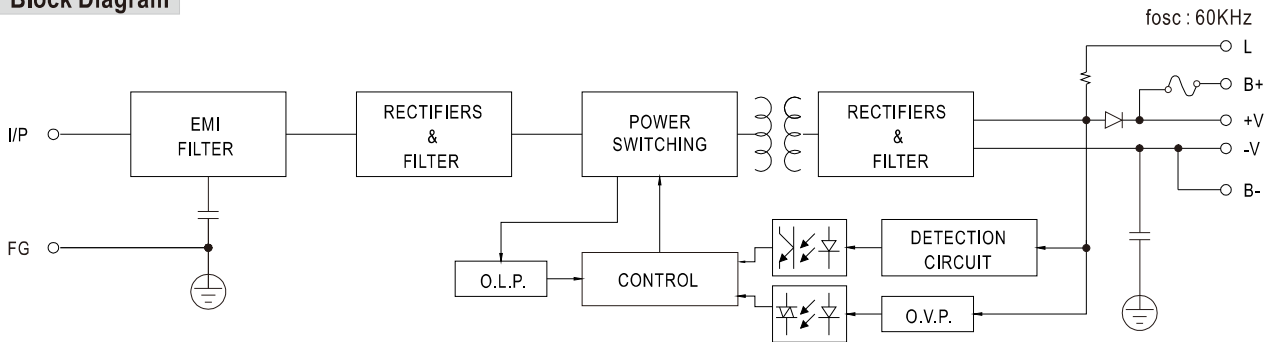
Terminal Pin No. Assignment (TB2)

| Pin No. | Assignment |
|---------|--------------|
| 1 | DC OUTPUT +V |
| 2 | DC OUTPUT -V |

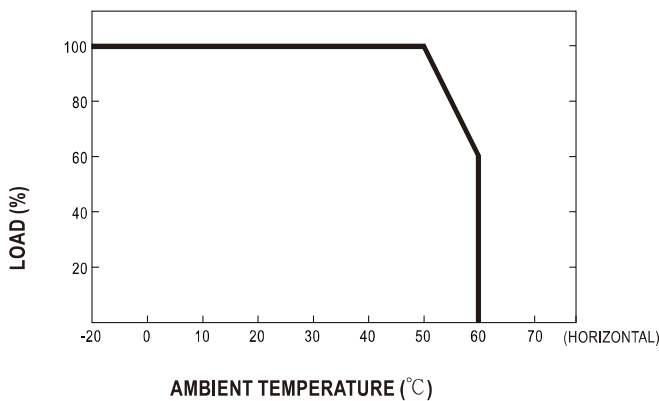
CN2 : JST B2B-XH or equivalent

| Mating Housing | Terminal |
|-----------------------|---------------------------------|
| JST XHP or equivalent | JST SXH-001T-P0.6 or equivalent |

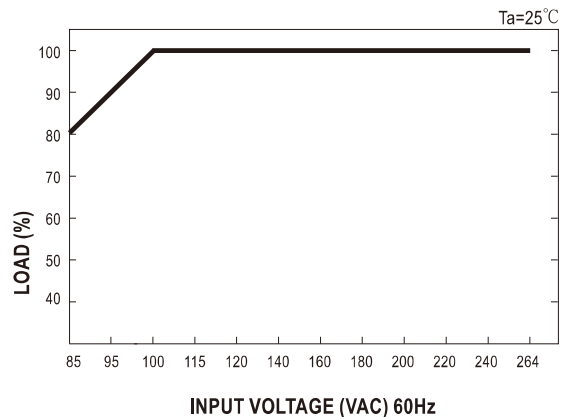
■ Block Diagram



■ Derating Curve



■ Output Derating VS Input Voltage



Function Description

1.B+,B-

Connect the battery : B+ connected to battery positive.
B- connected to battery negative.

2.L

Output voltage detection, detect output voltage or battery voltage (if battery is used).

| Voltage of L Pin | |
|------------------|--|
| AC OK | Output voltage +0.2~0.7V(depends on Vf of diode) |
| AC Fail | 0V |

3.+V,-V

Output voltage. Can't connect the battery.

4.CN2

Temperature sensor can be connected to the unit to allow temperature compensation of the charging voltage.

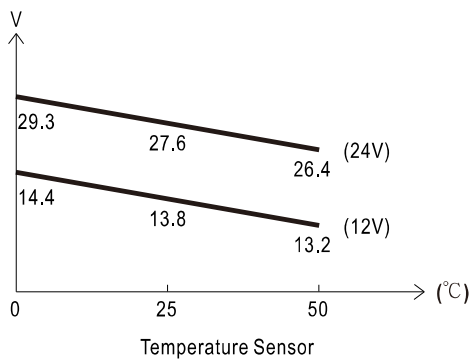
If the sensor is not used, the charger still works normally.

Reference example: (Under rated DC output voltage)

Connect 100KΩ Thermistor(THINKING) on NTC. The output voltage will change along

with the temperature change. If the output voltage is adjusted other than the rated value by internal potential meter, please consult Meanwell for suitable value of Thermistor.

| | Ta :0°C | Ta :25°C | Ta :50°C |
|-----------|-----------|-----------|-----------|
| SCP-50-12 | 14.4±0.2V | 13.8±0.1V | 13.2±0.2V |
| SCP-50-24 | 29.3±0.4V | 27.6±0.2V | 26.4±0.4V |



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