



## ■ Features :

- Universal AC input/Full range
- Protections: Short circuit / Overload / Over voltage / Battery polarity protections (by fuse)
- Cooling by free air convection
- LED indicator for power on
- No load power consumption <0.75W
- 100% full load burn-in test
- 2 years warranty

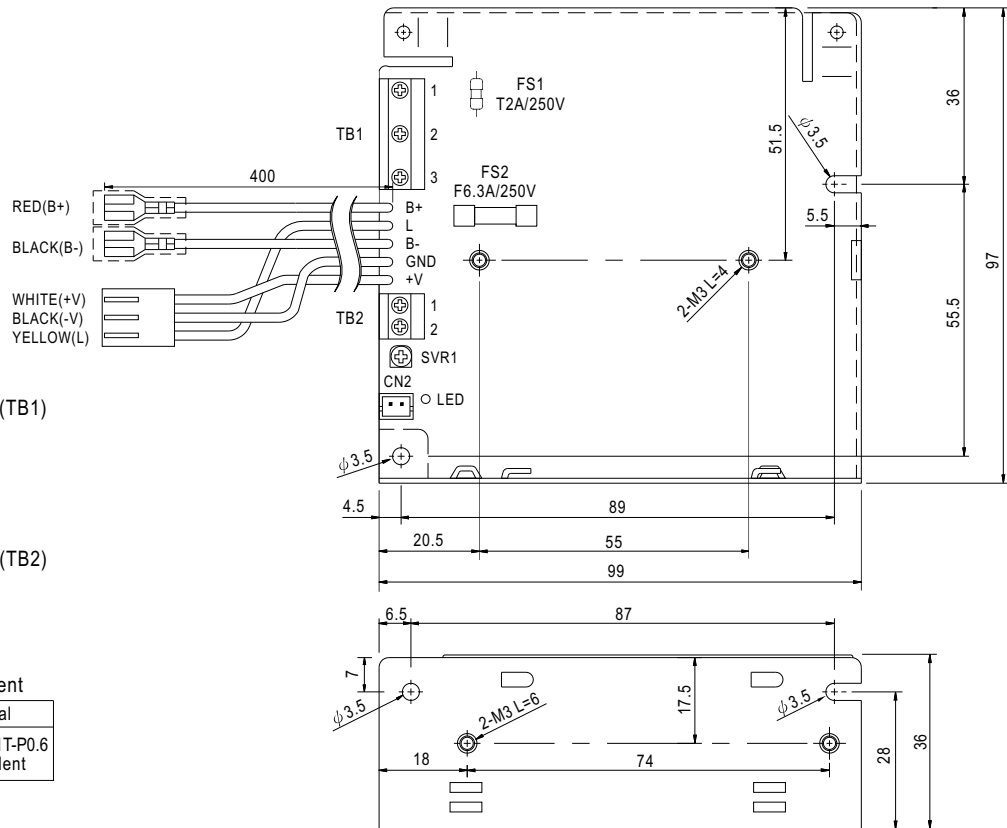


## SPECIFICATION

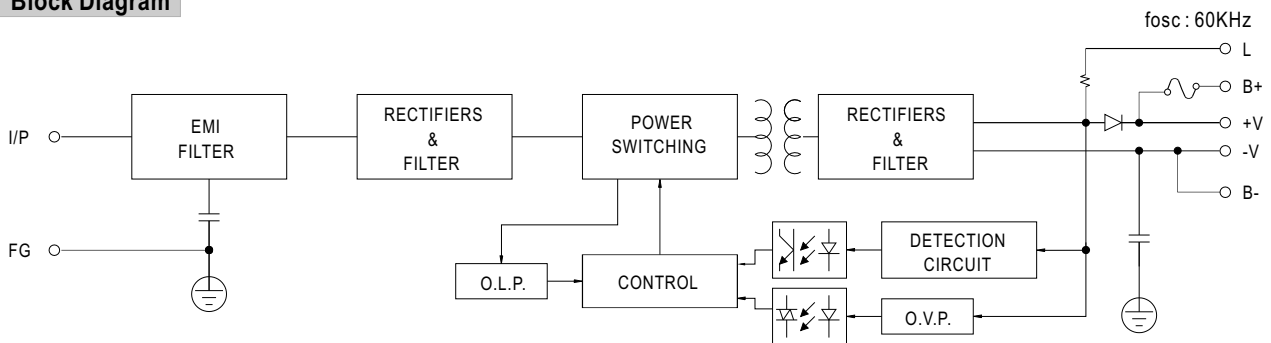
MODEL		SCP-35-12		SCP-35-24		
OUTPUT	DC VOLTAGE	13.8V		27.6V		
	RATED CURRENT	2.6A		1.4A		
	CURRENT RANGE	0 ~ 2.6A		0 ~ 1.4A		
	PEAK 5S	Note.6	3.1A	1.7A		
	RATED POWER	35.9W		38.6W		
	RIPPLE & NOISE (max.)	Note.2	120mVp-p	200mVp-p		
	VOLTAGE ADJ. RANGE	+15,-5%		+15,-5%		
	VOLTAGE TOLERANCE	Note.3	±2.0%	±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.)	83%		86%		
	AC CURRENT (Typ.)	0.75A/115VAC      0.5 A/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 <sup>+0.7</sup> <sub>-0</sub> V				
PROTECTION	OVERLOAD	3.1 ~ 4.2A rated output power		1.7 ~ 2.3A 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℃ (Refer to output load derating curve)				
	WORKING HUMIDITY	20 ~ 90% RH non-condensing				
	STORAGE TEMP., HUMIDITY	-40 ~ +85℃, 10 ~ 95% RH				
	TEMP. COEFFICIENT	±0.03%/℃ (0 ~ 45℃)				
	VIBRATION	10 ~ 500Hz, 2G 10min./1cycle, period for 60min. each along X, Y, Z axes				
SAFETY & EMC (Note 6)	SAFETY STANDARDS	UL60950-1, CB(IEC60950-1),CCC GB4943 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℃ / 70% RH				
	EMI CONDUCTION & RADIATION	Compliance to EN55022 (CISPR22) Class B				
	HARMONIC CURRENT	Compliance to EN61000-3-2,-3				
	EMS IMMUNITY	Compliance to EN61000-4-2, 3, 4, 5, 6, 8,11, ENV50204, EN55024, EN61000-6-1, light industry level, criteria A				
OTHERS	MTBF	523.3Khrs min.    MIL-HDBK-217F (25℃)				
	DIMENSION	99*97*36mm (L*W*H)				
	PACKING	0.37Kg; 45pcs/17.7Kg/1CUFT				
NOTE	1. All parameters NOT specially mentioned are measured at 230VAC input, rated load and 25℃ 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.					

## Mechanical Specification

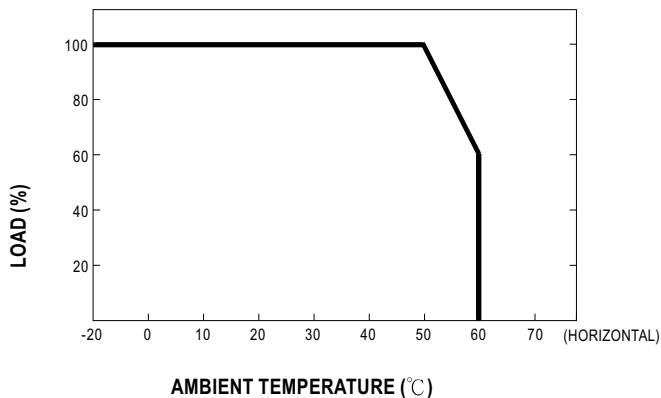
Case No. 905 Unit:mm



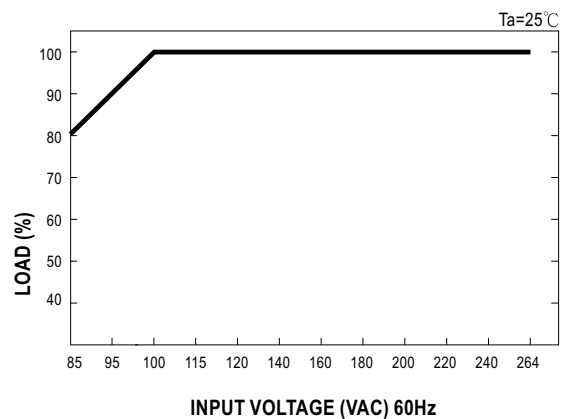
## Block Diagram



## 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, detection output voltage or battery voltage ( if battery is used).  
L=output voltage  $^{+0.7}_{-0}$  V.

### 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:

Connect 100K $\Omega$  Thermistor(THINKING) on NTC. Adjust VR to cause the output voltage is normally voltage. The output voltage will change along with the temperature change.

	Ta :0℃	Ta :25℃	Ta :50℃
SCP-35-12	14.4 $\pm$ 0.2V	13.8 $\pm$ 0.1V	13.2 $\pm$ 0.2V
SCP-35-24	29.3 $\pm$ 0.4V	27.6 $\pm$ 0.2V	26.4 $\pm$ 0.4V

