



## ■ 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

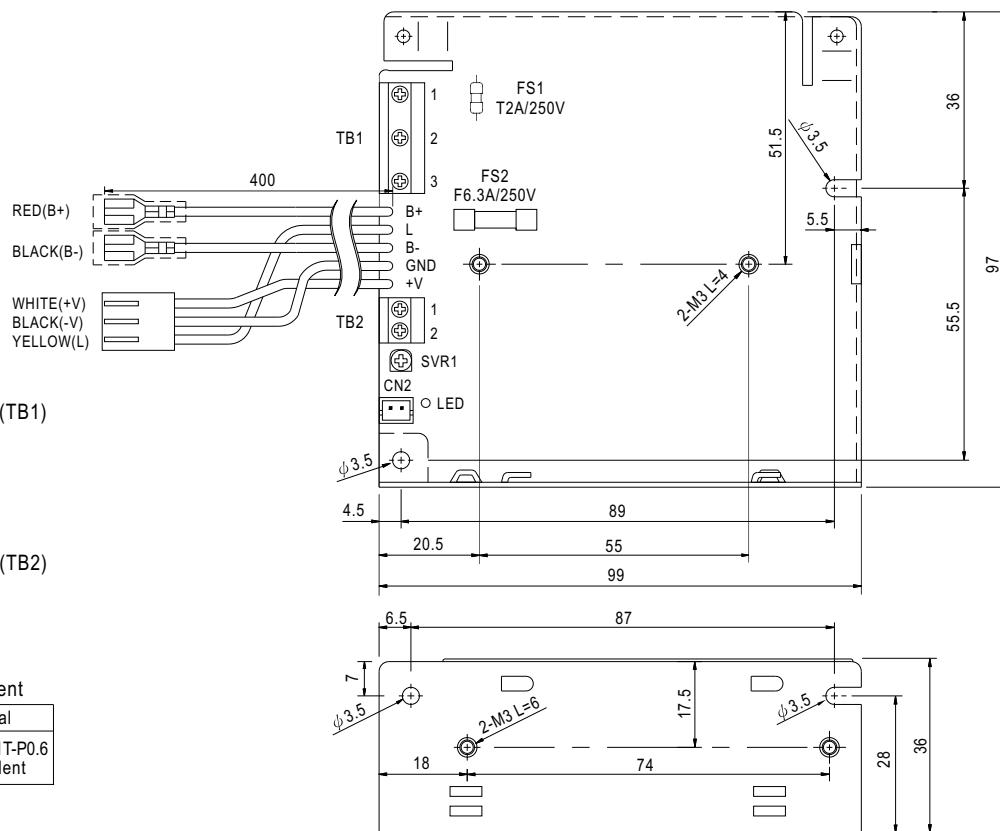


## SPECIFICATION

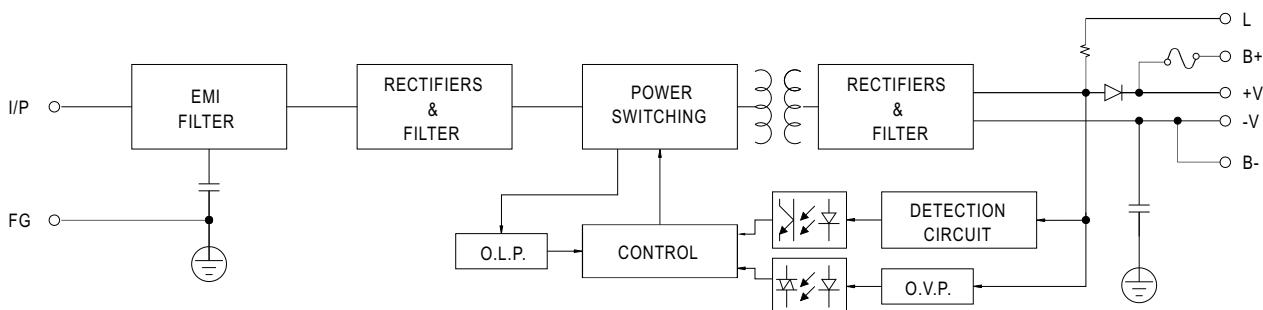
MODEL	SCP-35-12	SCP-35-24
OUTPUT	DC VOLTAGE	13.8V
	RATED CURRENT	2.6A
	CURRENT RANGE	0 ~ 2.6A
	PEAK 5S Note.6	3.1A
	RATED POWER	35.9W
	RIPPLE & NOISE (max.) Note.2	120mVp-p
	VOLTAGE ADJ. RANGE	+15,-5%
	VOLTAGE TOLERANCE Note.3	±2.0%
	LINE REGULATION Note.4	±1.0%
	LOAD REGULATION Note.5	±2.0%
SETUP, RISE 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 0.5A/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 $^{+0.7}_{-0}$ V
PROTECTION	OVERLOAD	3.1 ~ 4.2A rated output power
		Protection type : Hiccup mode, recovers automatically after fault condition is removed
	OVER VOLTAGE	16.6 ~ 19.3V 33.1 ~ 38.5V
ENVIRONMENT	Protection type : Shut down o/p voltage, re-power on to recover	
	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 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°C / 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°C)
	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°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.	

## ■ Mechanical Specification

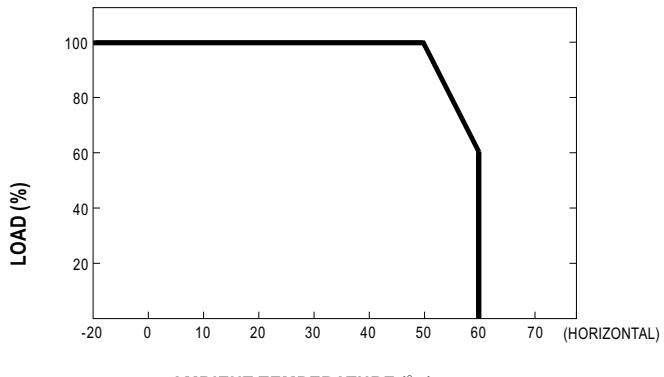
Case No. 905 Unit:mm



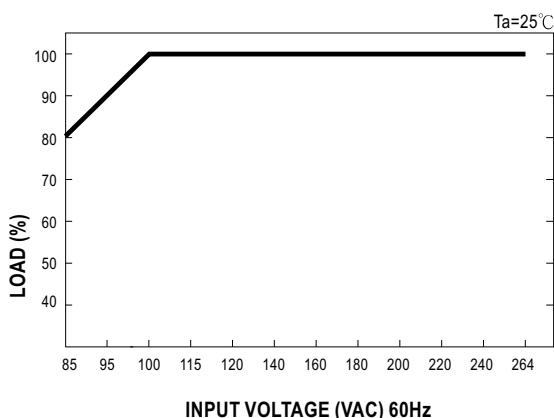
## ■ Block Diagram



## ■ 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°C	Ta :25°C	Ta :50°C
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

