

Professionally approved products.

Datasheet

Embedded Linear Power Supply Encapsulated, 120 → 370 V dc, 85 → 264 V ac Input, 27.6V dc Output, 1.8A

RS Stock number 740-5008



■ 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

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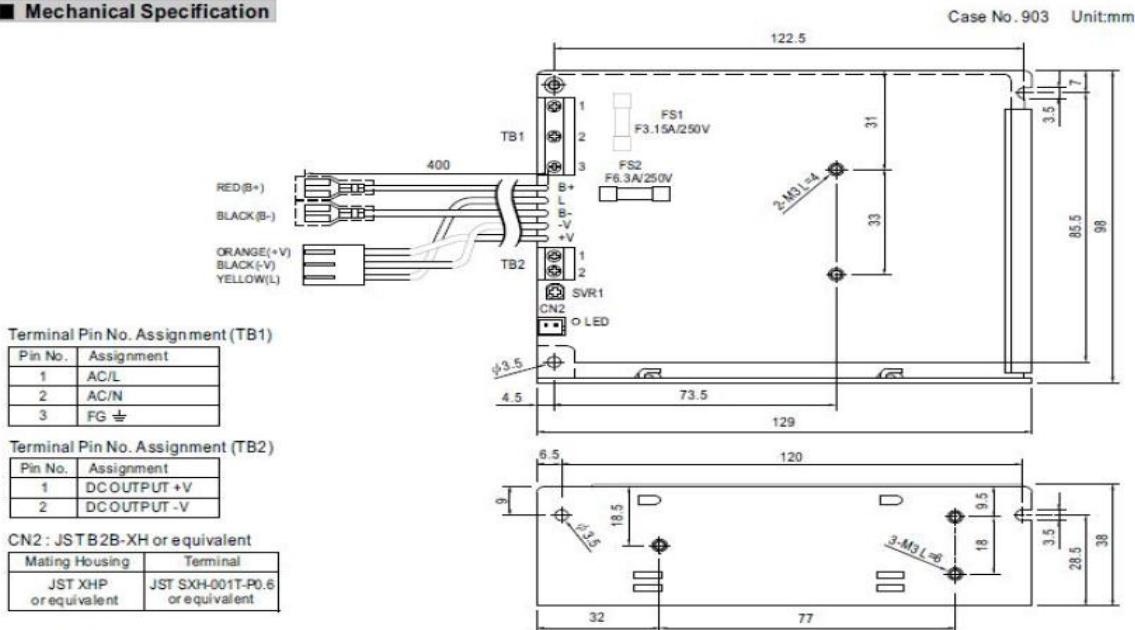
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MODEL	740-4995		740-5008
OUTPUT	DC VOLTAGE	13.8V	27.6V
	RATED CURRENT	3.6A	1.8A
	CURRENT RANGE	0 ~ 3.6A	0 ~ 1.8A
	PEAK 5S Note.6	4.3A	2.2A
	RATED POWER	49.7W	49.7W
	RIPPLE & NOISE (max.) Note.2	120mVp-p	200mVp-p
	VOLTAGE ADJ. RANGE	+15,-5%	+15,-5%
	VOLTAGE TOLERANCE Note.3	±2.0%	±1.0%
	LINE REGULATION Note.4	±1.0%	±1.0%
	LOAD REGULATION Note.5	±2.0%	±1.0%
INPUT	SETUP, RISE TIME	500ms, 30ms/230VAC	1200ms, 30ms/115VAC at full load
	HOLD UP TIME (Typ.)	50ms/230VAC	16ms/115VAC at full load
FUNCTION	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	
PROTECTION	LEAKAGE CURRENT	<2mA/ 240VAC	
	TEMP. COMPENSATION	By NTC (not provide with the power supply)	
	OUTPUT VOLTAGE SENSOR	L= output voltage $\frac{40.7}{40} V$	
ENVIRONMENT	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	
SAFETY & EMC (Note 7)	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	
OTHERS	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	
	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	495.7K hrs min. MIL-HDBK-217F (25°C)	
	DIMENSION	129*98*38mm (L*W*H)	
	PACKING	0.45Kg; 30pcs/14.5Kg/0.95CUFT	

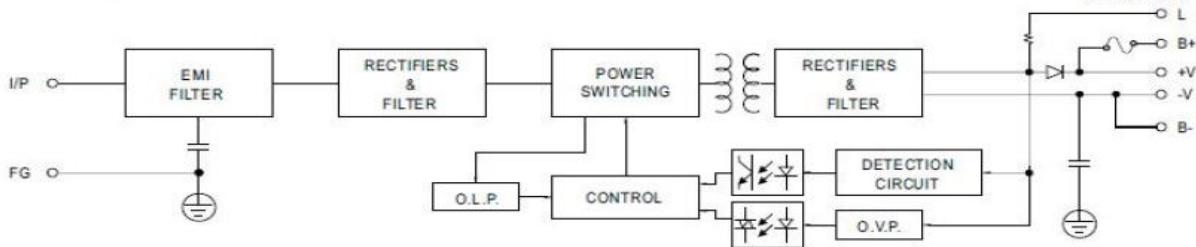
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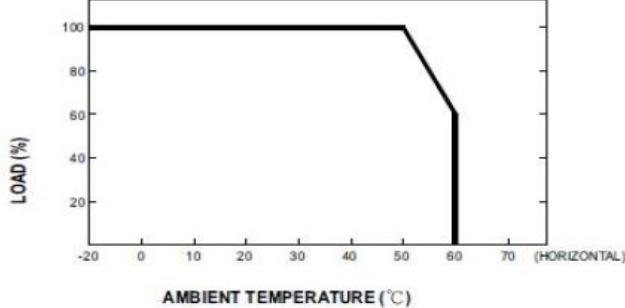
■ Mechanical Specification



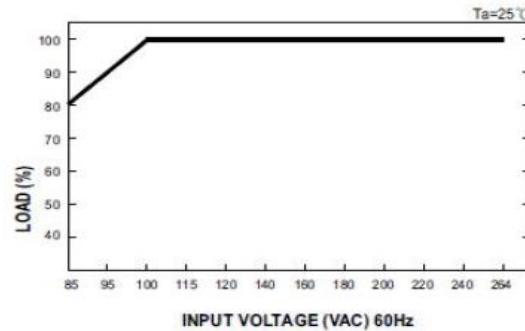
■ Block Diagram



■ Derating Curve



■ Output Derating VS Input Voltage



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■ 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 Ω 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-50-12	14.4 \pm 0.2V	13.8 \pm 0.1V	13.2 \pm 0.2V
SCP-50-24	29.3 \pm 0.4V	27.6 \pm 0.2V	26.4 \pm 0.4V

