



Zecks Power Co., Ltd.

7F, NO.1-1, Ln.530, Zhongzheng N. Rd., Sanchong City, Taipei, Taiwan, R.O.C.

Tel : 886-2-29836088 Fax : 886-2-29838388 E-mail : zecks@seed.net.tw

Specification of AT Switching Power Supply

Model No. ZKS-915T
【Total Wattage 150W】

| Prepared By | Designed By | Approved By | Issued By |
|-------------|-------------|-------------|-----------|
| | | | |

1. INPUT

1.1 AC Input Voltage : 115V (90V ~ 135V) ; 230V (180V ~ 265V)

Voltage selector by slide switches

1.2 AC Input Frequency : 47Hz ~ 63Hz Single Phase.

1.3 AC Input Current : 115Vrms / 4A ; 230Vrms / 2A

(@ without AC Outlet)

1.4 Brown Out Voltage : 95V ~ max. @60Hz.

1.5 Max. Inrush Current : 30A @ cold start.

2. OUTPUT

| ◆ ◆ ◆ ◆ | V1 | V2 | V3 | V4 |
|-----------------|------|------|-------|-------|
| DC Output | +5V | +12V | -5V | -12V |
| Max. Current | 16A | 5.5A | 0.3A | 0.3A |
| Min. Current | 1.6A | 0.5A | 0A | 0A |
| Load Regulation | 5% | 5% | 10% | 10% |
| Line Regulation | 1% | 1% | 2% | 2% |
| Ripple & Noise | 50mV | 50mV | 150mV | 150mV |

** Note : A low pass filter shall be added to outputs during measurement.(EXP.: 0.47uF Tan-cap. & 0.1uF Ceramic-cap)

3. OVERALL PERFORMANCE

3.1 Total Output Power : 150W

3.2 Efficiency : 70% min.

3.3 Power Up Time : < 20ms for +5V output voltage.

3.4 Hold Up Time : 16 ms min.

3.5 Power Good Time : The PWR-GOOD signal will not be higher than 100 - 500 ms after the +5V output stabilizes at its operating value when the unit is turn on.

3.6 Power Fail Signal : The TTL compatible signal will go down at least 1 ms before +5V below 4.75V

3.7 Switching Frequency : 30KHz Typical.

3.8 Temperature coefficient : +0.05% per°C

4. PROTECTION FEATURES

4.1 Over Voltage Protection : DC +5V output from 5.5V ~ 6.9V

DC +12V output from 13.8V ~ 15.6V

4.2 Over Load Protection : Total output from 110% Min. to 150% Max.

All output equipped w/short circuit protection. The outputs shall

shutdown if shorted to zero volts output.

5. ENVIRONMENTAL

- 5.1 Operation Temperature : 0°C ~ 50°C
- 5.2 Cooling : Forced air ventilation by DC fan.
- 5.3 Fan type : Ball Bearing FAN.
- 5.4 Humidity : 20 % ~ 90 % RH
- 5.5 Storage Temperature : -10°C ~ 70°C
- 5.6 Storage Humidity : 10 % ~ 98 % RH
- 5.7 Altitude : 10,000 ft max.

6. SAFETY APPROVAL

Meet : UL 1950 , TUV EN60950, Nemko

7. ELECTROMAGNETIC COMPATIBILITY

Meet : FCC Part 15, subjecting, class B ; CISPR-22, class B

8. DIELECTRIC WITHSTAND (HI-POT) TEST

- 8.1 Primary to Secondary : 3000VAC ~ 3 Sec. (5mA cut - off)
- 8.2 Primary to Ground : 1800VAC ~ 3 Sec. (5mA cut - Off)
- 8.3 Leakage Current < 3.5mA at input 230VAC 60Hz

9. INSULATION RESISTANCE

Input to Output : 100M Ω min. ; Input to Ground : 100M Ω min.

10. RELIABILITY : MTBF 100,000 hours @ 25°C ambient.

11. SHOCK AND VIBRATION :

The power supply will withstand the following imposed conditions without experiencing non-recoverable failure or deviation from specified output characteristics.

Storage -40G, 11mSec. half-sine wave pulse in both directions on three mutually perpendicular axes.

Operating -10G, 11mSec. half-sine wave pulse in both directions on three

mutually perpendicular axes.

Vibration Operation-Sine wave excited, 0.25G maximum acceleration, 10 - 250Hz, swept at one octave/minute. Fifteen minute dwell at all frequencies at which the device under test experience excursions two times large than non-resonant excursions.

12. MECHANICAL : L175*W105*H55 mm (See drawing)