

Features :

- Green design, No-load power consumption < 0.7W
- Universal AC input with active PFC
- Protections: Short circuit / Over load / Over voltage **Brown-out (Low AC Input Voltage)**
- Cooling by free air convection
- Power ON with LED indicator
- All using 105°C long life electrolytic capacitors
- High operation temperature up to 70°C
- Withstand 2G vibration test
- 100% full load burn-in test
- High efficiency, long life and high reliability
- 3 years warranty

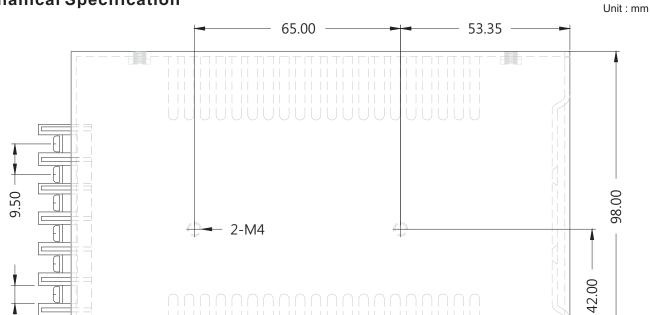


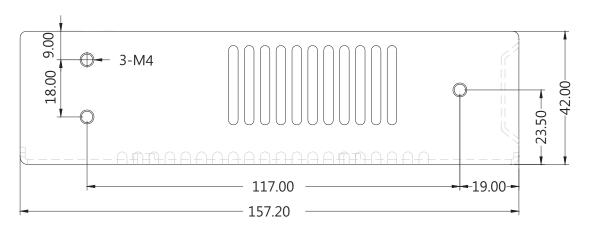


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|------------------------|--|--|-----------------|----------------|--------------|------------|------------|------------|------------|--|
| MODEL | | AK-100-05 | AK-100-7.5 | AK-100-12 | AK-100-13.5 | AK-100-15 | AK-100-24 | AK-100-27 | AK-100-48 | |
| | DC Voltage Range | 5V | 7.5V | 12V | 13.5V | 15V | 24V | 27V | 48V | |
| Output | Rated Current | 20A | 13.5A | 8.5A | 7.5A | 6.7A | 4.2A | 3.8A | 1.95A | |
| | Current Range | 0 ~ 20A | 0 ~ 13.5A | 0 ~ 8.5A | 0 ~ 7.5A | 0 ~ 6.7A | 0 ~ 4.2A | 0 ~ 3.8A | 0 ~ 1.95A | |
| | Rated Power | 100W | 101.2W | 102W | 101.2W | 100.5W | 100.8W | 102.6W | 93.6W | |
| | Ripple & Noise (max.) Note.2 | 100 mVp-p | 100 mVp-p | 100 mVp-p | 100 mVp-p | 100 mVp-p | 120 mVp-p | 120 mVp-p | 200 mVp-p | |
| | Voltage Adj. Range | 4.5~5.5V | 6.75~8.25V | 10.8~13.2V | 12.15~14.9V | 13.5~16.5V | 21.6~26.4V | 24.3~29.7V | 43.2~52.8V | |
| | Voltage Tolerance Note.3 | ±2% | ±1.5% | ±1% | ±1% | ±1% | ±1% | ±1% | ±1% | |
| | Line Regulation | ±1% | ±1% | ±0.5% | ±0.5% | ±0.5% | ±0.5% | ±0.5% | ±0.5% | |
| | Load Regulation | ±1% | ±1% | ±0.5% | ±0.5% | ±0.5% | ±0.5% | ±0.5% | ±0.5% | |
| | Setup, Rise Time | 1300ms, 100 | ms at full load | | | | | | | |
| | Hold Up Time (Typ.) | > 32ms / 230VAC, >10ms / 115VAC at full load | | | | | | | | |
| Input | Voltage Range Note.4 | | | | | | | | | |
| | Frequency Range | 50 / 60Hz | | | | | | | | |
| | Power Factor (Typ.) | >0.9 / 230VA | C >0.98/ | 115VAC at ful | lload | | | | | |
| | Efficiency (Typ.) | 83% | 85% | 85% | 86% | 88% | 89% | 89% | 89% | |
| | AC Current (Typ.) | 1.2 A / 115VA | C 0.6A/ | 230VAC | | | | | | |
| | Inrush Current (Typ.) | 27A / 115VAC 55A / 230VAC | | | | | | | | |
| | Leakage Current | < 2mA / 230VAC | | | | | | | | |
| Protection | Over Load | > 105% rated output power | | | | | | | | |
| | | Protection type: Hiccup mode, recovers automatically after fault condition is removed | | | | | | | | |
| | Over Voltage | 115% ~ 150% rated output voltage | | | | | | | | |
| | | Protection type: latch-off mode | | | | | | | | |
| | Over Temperature | 90°C ±5°C detect on Air | | | | | | | | |
| | | Protection type: shut down o/p voltage, after temperature goes down ang re-power ON to recover | | | | | | | | |
| Environment | Working Temp. | -20°C ~ +70° | C (Refer to ou | tput load de-r | ating curve) | | | | | |
| | Working Humidity | 20 ~ 90% R.H non-condensing | | | | | | | | |
| | Storage Temp., Humidity | -40 ~ +85°C 10 ~95% R.H | | | | | | | | |
| | Temp.Coefficient | ±0.03%/°C (0~50°C) | | | | | | | | |
| | Vibration | 10 ~ 500Hz, 5G 10min./1 cycle, period for 60 min. Each along X,Y,Z axes | | | | | | | | |
| | Safety Standards | | | | | | | | | |
| Safety & EMC Note.5 | Withstand Voltage | I/P - O/P : 3KVAC(4242 DC) I/P - FG : 1.5KVAC(2121 DC) O/P-FG : 0.5KVAC(707DC), 1 min | | | | | | | | |
| | Isolation Resistance | I/P - O/P, I/P - | - FG, O/P - FG | : 100M Ω / 500 | OVDC | | | | | |
| | EMI Conduction & Radiation | EN55022: 20 | 06 Class B | | | | | | | |
| | Harmonic Current | EN61000-3-2: 2006 Class A, EN61000-3-3: 1995+A1: 2001+A2: 2005 | | | | | | | | |
| | EMS Immunity | EN61204-3: 2000, EN55024: 1998+A1: 2001+A2: 2003 light industry level, criteria A | | | | | | | | |
| Others | MTBF | 691.8K HRS Compliance : MIL-HDBK-217F | | | | | | | | |
| | Cooling | Air Cooling | | | | | | | | |
| | | 157x98x42mm / 6.18x3.86x1.65 inch | | | | | | | | |
| | Packing | 0.65kg ; 24Pc | | | | | | | | |
| 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 & 47 uf parallel capacitor. 3. Tolerance: includes set up tolerance, line regulation and load regulation. 4. De-rating may be needed under low input voltages. Please check the de-rating curve for more details. 5. 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





De-rating Curve

