

KEY FEATURES

- Switching Power Module for PCB Mountable
- Fully Encapsulated Plastic Case
- Universal Input Range 90-305VAC, 47-63 Hz
- Isolation Class II
- Maximum No-Load Watts < 0.3W
- CE, CB and UL Approval
- 3-Year Product Warranty



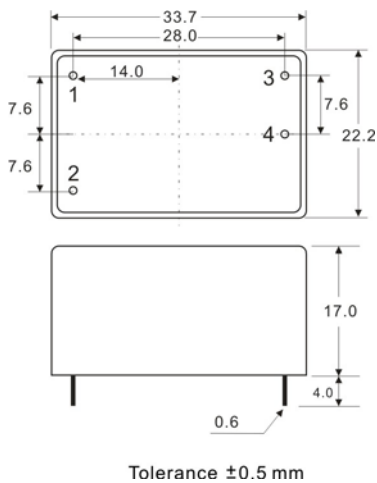
ELECTRICAL SPECIFICATIONS

All specifications valid at normal input voltage, full load and +25°C after warm-up time unless otherwise stated.

| Model No. (Single Output) | AYC-3.3S | AYC-5S | AYC-9S | AYC-12S | AYC-15S | AYC-24S | |
|-----------------------------|-------------------------------------|-----------------------------------------------------------------------|--------|---------|---------|---------|-------|
| Max Output Wattage (W) | 2W | | | | | | |
| Input | Voltage | 90-305 VAC or 120-430 VDC | | | | | |
| | Frequency (Hz) | 47-63 Hz | | | | | |
| | Current (Full load) | 75 mA max. (115 VAC) / 55 mA max. (230 VAC) | | | | | |
| | Inrush Current (<2ms) | 30 A max. (115 VAC) / 50 A max. (230 VAC) | | | | | |
| | Leakage Current (<240 VAC) | 0.25 mA max. | | | | | |
| | External Fuse (mandatory) | 3.15 A slow blow type | | | | | |
| | External Varistor | 14S561K | | | | | |
| Output | Voltage (V.DC.) | 3.3V | 5V | 9V | 12V | 15V | 24V |
| | Voltage Accuracy | ±6% | | | | | |
| | Current (mA) max | 600 | 400 | 222 | 167 | 133 | 83 |
| | Line Regulation (LL-HL) (typ.) | ±5% | | | | | |
| | Load Regulation (10-100%) (typ.) | ±6% | | | | | |
| | Minimum Load | 0% | | | | | |
| | Maximum Capacitive Load | 7000uF | 4000uF | 1200uF | 500uF | 350uF | 110uF |
| | Ripple & Noise (Vp-p) | 300mV | | | | | |
| | Efficiency (at 115 VAC) | 66% | 70% | 73% | 73% | 73% | 75% |
| Hold-up Time (at 230 VAC) | 15 ms min. | | | | | | |
| Protection | Over Power Protection | Hiccup technique, auto-recovery | | | | | |
| | Over Voltage Protection | Zener diode clamp | | | | | |
| | Short Circuit Protection | Hiccup mode, indefinite (automatic recovery) | | | | | |
| Isolation | Input-Output (V.AC) | 3000V | | | | | |
| Environment | Operating Temperature | -40°C...+80°C (with derating) | | | | | |
| | Storage Temperature | -40°C...+85°C | | | | | |
| | Temperature Coefficient | ±0.02%/°C | | | | | |
| | Humidity | 95% RH | | | | | |
| | MTBF | >350,000 h @ 25°C (MIL-HDBK-217F) | | | | | |
| Physical | Dimension (L x W x H) | 1.33 x 0.87 x 0.67 Inches (33.7 x 22.2 x 17.0 mm) Tolerance ±0.5 mm | | | | | |
| | Case Material | Plastic resin with Fiberglass (flammability to UL 94V-0) | | | | | |
| | Weight | 20.1 g | | | | | |
| | Cooling Method | Free air convection | | | | | |
| Safety | Agency Approvals | UL, cUL, CE, CB | | | | | |
| EMC | EMI (Conducted & Radiated Emission) | EN 55022 class B | | | | | |
| | EMS (Noise Immunity) | EN 55024 | | | | | |

NOTE

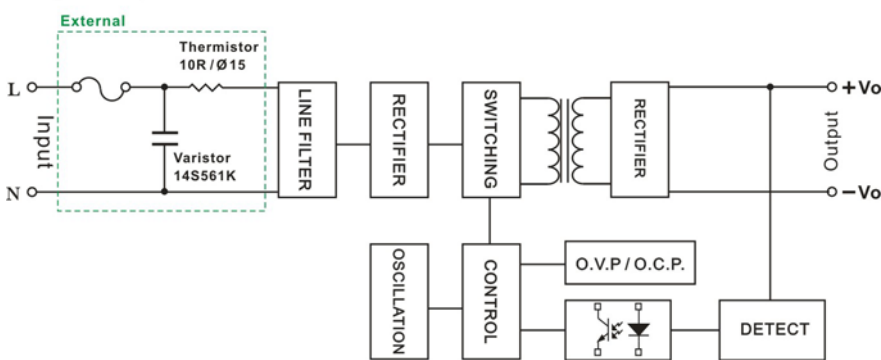
1. Ripple & Noise are measured at 20MHz of bandwidth with 0.1uF & 47uF parallel capacitor.
2. Hold-up Time measured at 90% Vout.
3. It's necessary Varistor 14S561K at L / N input side in parallel.
4. It's necessary 10R / 15φ thermistor at L input side in series connection.

MECHANICAL DIMENSION (Top View)


| PIN# | Single |
|------|-----------|
| 1 | AC IN (N) |
| 2 | AC IN (L) |
| 3 | -DC OUT |
| 4 | +DC OUT |

BLOCK DIAGRAM

Single Output


DERATING
