

## KEY FEATURES

- Switching Power Module for PCB Mountable
- Fully Encapsulated Plastic Case
- Universal Input Range 90-264VAC, 50 / 60 Hz
- No-Load Watts < 0.1W
- Ultra Compact Size: 1.08" x 1.08" x 0.736" Inches
- Isolation Class II
- CE, CB, 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.

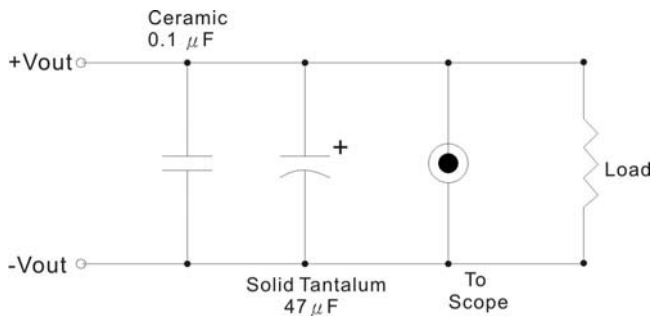
| Model No. (Single Output) | AUC-5S   | AUC-12S | AUC-15S | AUC-24S |
|---------------------------|--|---------|---------|---------|
| Max Output Wattage (W)    | 6.3W   | 7W      |         |         |
| Input                     | Voltage  |         |         |         |
|                           | 90-264 VAC or 120-370 VDC, "N" to DC "+"; "L" to DC "-"              |         |         |         |
|                           | Frequency (Hz)   |         |         |         |
|                           | 50 / 60 Hz   |         |         |         |
|                           | Current (Full load)  |         |         |         |
|                           | 180 mA max. (115 VAC) / 110 mA max. (230 VAC)                        |         |         |         |
| Output                    | Inrush Current (Note 4.)   |         |         |         |
|                           | 20 A max. (115 VAC) / 40 A max. (230 VAC)                            |         |         |         |
|                           | Leakage Current  |         |         |         |
|                           | 0.25 mA max. (at <240 VAC).  |         |         |         |
|                           | External Fuse (mandatory)  |         |         |         |
|                           | 2 A slow blow type   |         |         |         |
| Output                    | Voltage (V.DC.)  |         |         |         |
|                           | 5V   |         |         |         |
|                           | Voltage Accuracy   |         |         |         |
|                           | ±2%  |         |         |         |
|                           | Current (mA) max   |         |         |         |
|                           | 1260   |         |         |         |
|                           | Line Regulation (LL-HL) (typ.)                                       |         |         |         |
|                           | ±0.5%  |         |         |         |
|                           | Load Regulation (10-100%) (typ.)                                     |         |         |         |
|                           | ±1%.   |         |         |         |
| Output                    | Minimum Load   |         |         |         |
|                           | 0%   |         |         |         |
|                           | Maximum Capacitive Load  |         |         |         |
|                           | 3300uF   |         |         |         |
|                           | Ripple   |         |         |         |
|                           | <100mV (Vp-p)  |         |         |         |
|                           | Noise  |         |         |         |
|                           | <150mV (Vp-p)  |         |         |         |
|                           | Efficiency (at 230 VAC)  |         |         |         |
|                           | 77%  |         |         |         |
| Protection                | Hold-up Time (at 230 VAC)  |         |         |         |
|                           | 30 ms min.   |         |         |         |
|                           | Over Power Protection  |         |         |         |
| Isolation                 | Hiccup technique, auto-recovery                                      |         |         |         |
|                           | Short Circuit Protection   |         |         |         |
| Environment               | Hiccup mode, indefinite (automatic recovery)                         |         |         |         |
|                           | Input-Output (V.AC)  |         |         |         |
|                           | 3000V  |         |         |         |
|                           | Operating Temperature  |         |         |         |
|                           | -40°C...+70°C (with derating)  |         |         |         |
| Physical                  | Storage Temperature  |         |         |         |
|                           | -40°C...+85°C  |         |         |         |
|                           | Temperature Coefficient  |         |         |         |
|                           | ±0.02%/°C  |         |         |         |
| Safety                    | Humidity   |         |         |         |
|                           | 95% RH   |         |         |         |
|                           | MTBF   |         |         |         |
|                           | >500,000 h @ 25°C (MIL-HDBK-217F)                                    |         |         |         |
| EMC                       | Dimension (L x W x H)  |         |         |         |
|                           | 1.08 x 1.08 x 0.736 Inches (27.4 x 27.4 x 18.7 mm) Tolerance ±0.5 mm |         |         |         |
|                           | Case Material  |         |         |         |
|                           | Plastic resin (flammability to UL 94V-0)                             |         |         |         |
| Safety                    | Weight   |         |         |         |
|                           | 26 g   |         |         |         |
| EMC                       | Cooling Method   |         |         |         |
|                           | Free air convection  |         |         |         |
| EMC                       | Agency Approvals   |         |         |         |
|                           | CE, UL, cUL  |         |         |         |
| EMC                       | EMI (Conducted & Radiated Emission)                                  |         |         |         |
|                           | EN 55022 class B   |         |         |         |
| EMC                       | EMS (Noise Immunity)   |         |         |         |
|                           | EN 55024   |         |         |         |

**NOTE**

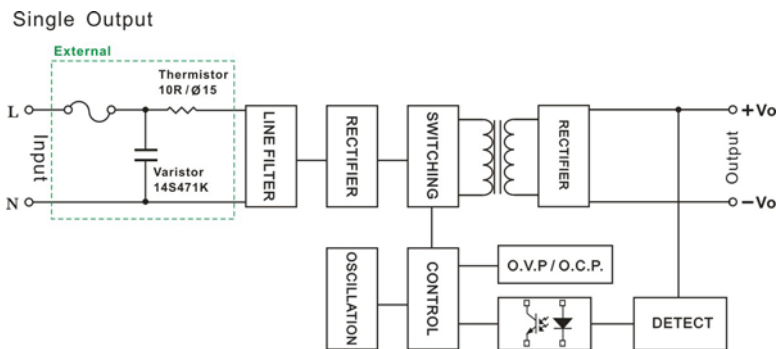
1. All specifications valid at normal input voltage, full load and +25°C after warm-up time unless otherwise stated.
2. Ripple & Noise are measured at 20MHz of bandwidth with 0.1uF & 47uF parallel capacitor.
3. It's necessary Varistor 14S471K at L / N input side in parallel.
4. It's necessary 10R / 15φ thermistor at L input side in series connection.
5. Please refer to our PDF file "AC-DC Application" on our website: [www.archcorp.com.tw](http://www.archcorp.com.tw)

**OUTPUT NOISE**

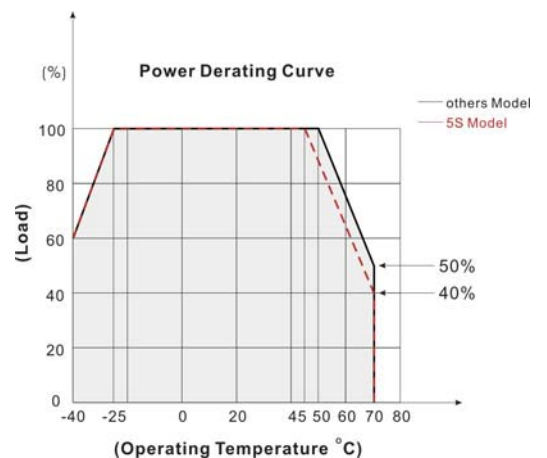
The output noise is measured with 47μF tantalum capacitor and 0.1μF ceramic capacitor across output.



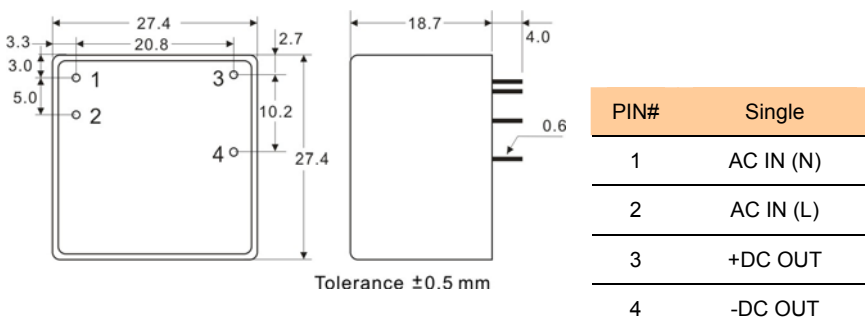
**BLOCK DIAGRAM**



**DERATING**



**MECHANICAL DIMENSION ( Top View )**



Customer is recommended to reserve pad points of 1.0mm in diameter for AC IN (L) and AC IN (N)

