

## KEY FEATURES

- Open Frame Switching Power Supply
- Universal Input: 90-264 VAC
- Single Output
- 5 VDC to 48 VDC Output
- 3-Year Product Warranty



## ELECTRICAL SPECIFICATIONS

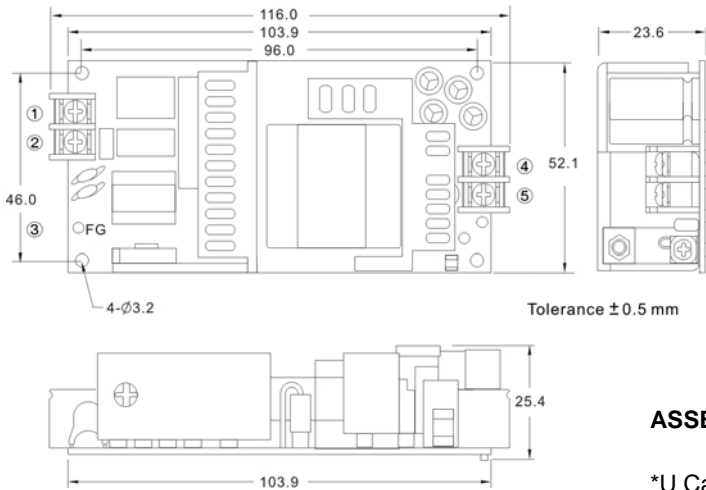
All specifications valid at normal input voltage, full load and +25°C after warm-up time unless otherwise stated.

| Model No.              | AES600-5S                           | AES600-9S | AES600-12S | AES600-15S | AES600-24S | AES600-48S |  |       |       |       |       |       |
|------------------------|-------------------------------------|-----------|------------|------------|------------|------------|--|-------|-------|-------|-------|-------|
| Max Output Wattage (W) | 50W                                 | 60W       | 60W        | 60W        | 60W        | 60W        |  |       |       |       |       |       |
| Input                  | Voltage                             |           |            |            |            |            | 90-264 VAC or 120-370 VDC  |       |       |       |       |       |
|                        | Frequency (Hz)                      |           |            |            |            |            | 47-63 Hz   |       |       |       |       |       |
|                        | Current (Full load)                 |           |            |            |            |            | 2 A max. (115 VAC) / 1 A max. (230 VAC)                              |       |       |       |       |       |
|                        | Inrush Current (<2ms)               |           |            |            |            |            | 30 A max. (115 VAC) / 50 A max. (230 VAC)                            |       |       |       |       |       |
|                        | Leakage Current                     |           |            |            |            |            | 0.5 mA max.  |       |       |       |       |       |
| Output                 | Voltage (V.DC.)                     | 5V        | 9V         | 12V        | 15V        | 24V        | 48V  |       |       |       |       |       |
|                        | Voltage Accuracy                    |           |            |            |            |            | ±2%  |       |       |       |       |       |
|                        | Current (mA) max                    |           |            |            |            |            | 10,000   | 6,660 | 5,000 | 4,000 | 2,500 | 1,250 |
|                        | Line Regulation (LL-HL) (typ.)      |           |            |            |            |            | ±1%  |       |       |       |       |       |
|                        | Load Regulation (5-100%) (typ.)     |           |            |            |            |            | ±1%  |       |       |       |       |       |
|                        | Minimum Load                        |           |            |            |            |            | 1%   |       |       |       |       |       |
|                        | Maximum Capacitive Load (at 230VAC) |           |            |            |            |            | 470-23,000µF depending on model                                      |       |       |       |       |       |
|                        | Ripple                              |           |            |            |            |            | <0.2% Vout +40mV max (Vp-p)  |       |       |       |       |       |
|                        | Noise                               |           |            |            |            |            | <0.5% Vout +50mV max (Vp-p)  |       |       |       |       |       |
|                        | Efficiency (at 230V)                |           |            |            |            |            | 82%  | 84%   | 86%   | 86%   | 86%   | 86%   |
|                        | Trim                                |           |            |            |            |            | ±10%   |       |       |       |       |       |
|                        | Hold-up Time                        |           |            |            |            |            | 10 ms min.   |       |       |       |       |       |
| Protection             | Over Power Protection               |           |            |            |            |            | Auto recovery  |       |       |       |       |       |
|                        | Over Voltage Protection             |           |            |            |            |            | Zener diode clamp  |       |       |       |       |       |
|                        | Short Circuit Protection            |           |            |            |            |            | Auto recovery  |       |       |       |       |       |
| Isolation              | Input-Output (V.AC)                 |           |            |            |            |            | 3000VAC or 4242VDC   |       |       |       |       |       |
|                        | Input-FG (V.AC)                     |           |            |            |            |            | 1500V  |       |       |       |       |       |
|                        | Output-FG (V.AC)                    |           |            |            |            |            | 500V   |       |       |       |       |       |
| Environment            | Operating Temperature               |           |            |            |            |            | -40°C...+70°C (with derating)  |       |       |       |       |       |
|                        | Storage Temperature                 |           |            |            |            |            | -50°C...+85°C  |       |       |       |       |       |
|                        | Temperature coefficient             |           |            |            |            |            | ±0.02%/°C  |       |       |       |       |       |
|                        | Humidity                            |           |            |            |            |            | 95% RH   |       |       |       |       |       |
|                        | MTBF                                |           |            |            |            |            | >130,000 h @ 25°C (MIL-HDBK-217F)                                    |       |       |       |       |       |
|                        | Vibration                           |           |            |            |            |            | 10~500Hz, 2G 10min./1cycle, 60min. each along X, Y, Z axes.          |       |       |       |       |       |
| Physical               | Dimension (L x W x H)               |           |            |            |            |            | 4.1 x 2.05 x 1.0 Inches ( 103.9 x 52.1 x 25.4 mm ) Tolerance ±0.5 mm |       |       |       |       |       |
|                        | Weight                              |           |            |            |            |            | 150 g  |       |       |       |       |       |
|                        | Cooling Method                      |           |            |            |            |            | Free air convection  |       |       |       |       |       |
| Safety                 | Agency Approvals                    |           |            |            |            |            | CE, UL60950  |       |       |       |       |       |
| 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. Strongly recommend to conduct this test with DC Voltage. If customer wishes to test with AC Voltage, please disconnect all Y-Capacitors within Arch power supply.

**MECHANICAL DIMENSION ( Top View )**



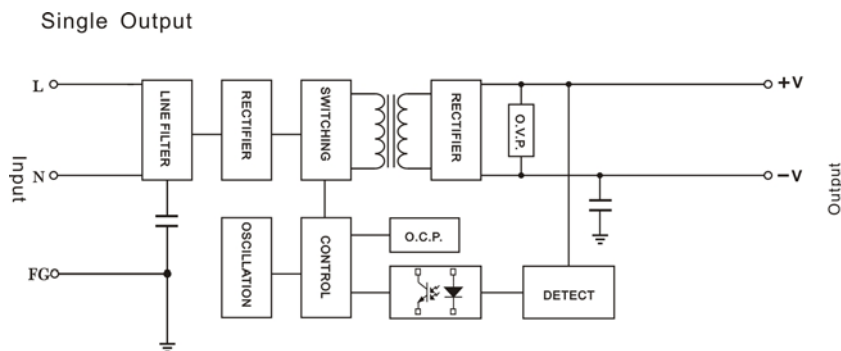
| PIN# | Single    |
|------|-----------|
| 1    | AC IN (N) |
| 2    | AC IN (L) |
| 3    | FG        |
| 4    | +DC OUT   |
| 5    | -DC OUT   |

**ASSEMBLY INSTRUCTIONS**

\*U Case T=2.5mm

Customer is advised to screw into the threads no more than 2.5mm

**BLOCK DIAGRAM**



**DERATING**

