

## KEY FEATURES

- U Bracket Switching Power Supply
- Universal Input: 85-265 VAC
- Single Output
- 5 VDC to 48 VDC Output
- 3000 VAC Input to Output Isolation
- 2-Years Product Warranty



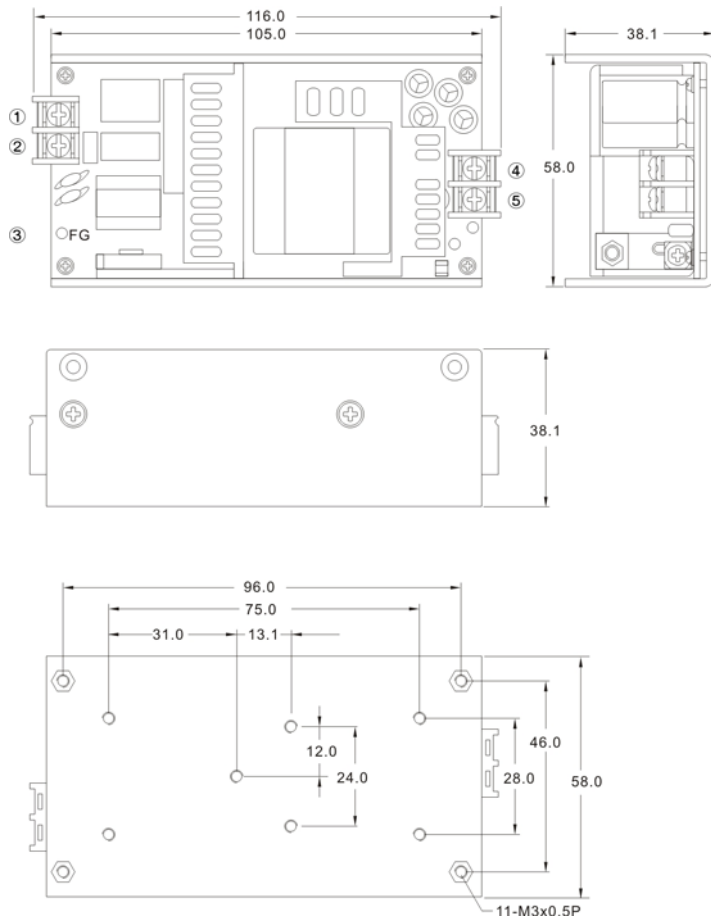
## ELECTRICAL SPECIFICATIONS

| Model No.              |                                     | AES60U-5S                                                             | AES60U-9S | AES60U-12S | AES60U-15S | AES60U-24S | AES60U-48S |
|------------------------|-------------------------------------|-----------------------------------------------------------------------|-----------|------------|------------|------------|------------|
| Max Output Wattage (W) |                                     | 50W                                                                   | 60W       | 60W        | 60W        | 60W        | 60W        |
| Input                  | Voltage                             | 85-265 VAC or 100-370 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             | 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.                                                            |           |            |            |            |            |
|                        | Switching Frequency                 | 100 kHz                                                               |           |            |            |            |            |
| Protection             | Over Power Protection               | Auto recovery                                                         |           |            |            |            |            |
|                        | Over Voltage Protection             | Zener diode clamp                                                     |           |            |            |            |            |
|                        | Short Circuit Protection            | Auto recovery                                                         |           |            |            |            |            |
| Isolation              | Input-Output (V.AC)                 | 3000V                                                                 |           |            |            |            |            |
|                        | 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)                                     |           |            |            |            |            |
| Physical               | Dimension (L x W x H)               | 4.13 x 2.28 x 1.5 Inches ( 105.0 x 58.0 x 38.1 mm ) Tolerance ±0.5 mm |           |            |            |            |            |
|                        | Weight                              | 240 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                                                              |           |            |            |            |            |

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

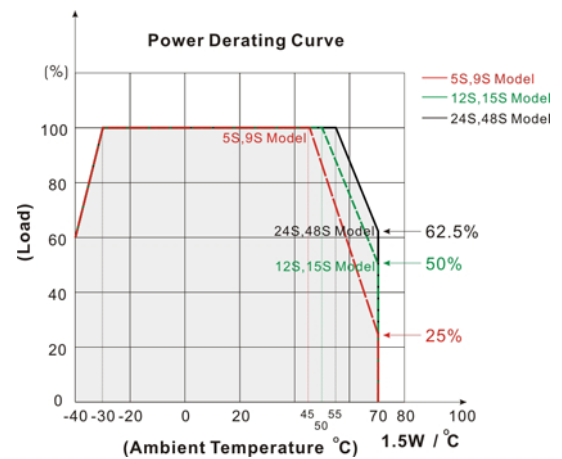
Measured with 0.1µ 50V // 47µ 50V Ceramic Cap. Cross to output

## MECHANICAL DIMENSION ( Top View )



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

## DERATING



## BLOCK DIAGRAM

