

**AQF240U SERIES**
**240 Watts**
**KEY FEATURES**

- U Bracket Switching Power Supply
- Universal Input: 90-264 VAC
- With P.F.C. Function, PF>0.95
- Free Air Convection
- High Efficiency up to 93%
- RoHS Compliant Design
- Ultra Compact Size: 6.0 x 4.18 x 1.38 Inches
- 3-Years Product Warranty

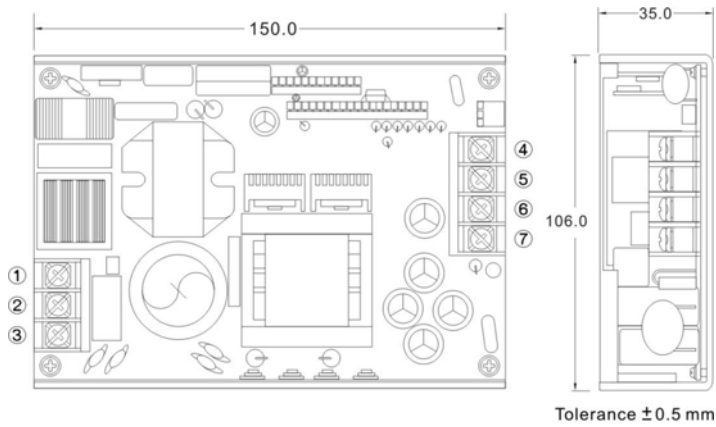

**ELECTRICAL SPECIFICATIONS**

| Model No.              |                                     | AQF240U-3.8S                                                          | AQF240U-5S | AQF240U-12S | AQF240U-15S | AQF240U-24S | AQF240U-28S | AQF240U-32S | AQF240U-48S |
|------------------------|-------------------------------------|-----------------------------------------------------------------------|------------|-------------|-------------|-------------|-------------|-------------|-------------|
|                        |                                     | (Preliminary)                                                         |            |             |             |             |             |             |             |
| Max Output Wattage (W) |                                     | 152W                                                                  | 200W       | 240W        |             |             |             |             |             |
| Input                  | Voltage                             | 90-264 VAC or 120-370 VDC                                             |            |             |             |             |             |             |             |
|                        | Frequency (Hz)                      | 47-63 Hz                                                              |            |             |             |             |             |             |             |
|                        | Current (Full load)                 | <3.0 A max. (115 VAC) / <1.5 A max. (230 VAC)                         |            |             |             |             |             |             |             |
|                        | Inrush Current (<2ms)               | < 30 A max. (115 VAC) / < 60 A max. (230 VAC)                         |            |             |             |             |             |             |             |
|                        | Leakage Current                     | < 0.5 mA max.                                                         |            |             |             |             |             |             |             |
|                        | Power Factor                        | PF>0.98 (115 VAC) / PF>0.95 (230 VAC) at Full Load                    |            |             |             |             |             |             |             |
| Output                 | Voltage (V.DC.)                     | 3.8V                                                                  | 5V         | 12V         | 15V         | 24V         | 28V         | 32V         | 48V         |
|                        | Voltage Accuracy                    | ±2%                                                                   |            |             |             |             |             |             |             |
|                        | Current (Convection) (A) max        | 40                                                                    | 40         | 20          | 16          | 10          | 8.57        | 7.5         | 5           |
|                        | Line Regulation                     | ±1%                                                                   |            |             |             |             |             |             |             |
|                        | Load Regulation                     | ±1%                                                                   |            |             |             |             |             |             |             |
|                        | Minimum Load                        | 1%                                                                    |            |             |             |             |             |             |             |
|                        | Maximum Capacitive Load             | 470-23,000μF depending on model                                       |            |             |             |             |             |             |             |
|                        | Ripple & Noise (max.)               | 100mVp-p                                                              |            |             | 120mVp-p    | 200mVp-p    |             |             |             |
|                        | Efficiency (typ.)                   | 84%                                                                   | 88%        | 90%         | 90%         | 92%         | 92%         | 92%         | 93%         |
|                        | Hold-up Time                        | 13 ms min.                                                            |            |             |             |             |             |             |             |
|                        | Switching Frequency                 | 100 kHz                                                               |            |             |             |             |             |             |             |
| Protection             | Over Power Protection               | Auto recovery                                                         |            |             |             |             |             |             |             |
|                        | Over Voltage Protection             | Latch Off                                                             |            |             |             |             |             |             |             |
|                        | Short Circuit Protection            | Latch Off                                                             |            |             |             |             |             |             |             |
| Isolation              | Input-Output (V.AC)                 | 4000V                                                                 |            |             |             |             |             |             |             |
|                        | Input-FG (V.AC)                     | 2000V                                                                 |            |             |             |             |             |             |             |
|                        | Output-FG (V.AC)                    | 500V                                                                  |            |             |             |             |             |             |             |
| Environment            | Operating Temperature               | -10°C...+70°C (with derating)                                         |            |             |             |             |             |             |             |
|                        | Storage Temperature                 | -25°C...+85°C                                                         |            |             |             |             |             |             |             |
|                        | Temperature Coefficient             | ±0.03%/°C ( 0~50°C )                                                  |            |             |             |             |             |             |             |
|                        | Humidity                            | 95% RH                                                                |            |             |             |             |             |             |             |
|                        | MTBF                                | >50,000 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)               | 6.0 x 4.18 x 1.38 Inches (150.0 x 106.0 x 35.0 mm ) Tolerance ±0.5 mm |            |             |             |             |             |             |             |
|                        | Weight                              | 580 g                                                                 |            |             |             |             |             |             |             |
|                        | Cooling Method                      | Free convection                                                       |            |             |             |             |             |             |             |
| Safety                 | Agency Approvals                    | CE, UL60950(except 3.8S and 5S)                                       |            |             |             |             |             |             |             |
| EMC                    | EMI (Conducted & Radiated Emission) | EN 55022 class B                                                      |            |             |             |             |             |             |             |
|                        | EMS (Noise Immunity)                | EN 55024                                                              |            |             |             |             |             |             |             |

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

2. Ripple &amp; Noise are measured at 20MHz of bandwidth with 01.µF &amp; 47µF parallel capacitor.

## MECHANICAL DIMENSION ( Top View )



| PIN# | SINGLE    |
|------|-----------|
| 1    | AC IN (L) |
| 2    | AC IN (N) |
| 3    | FG        |
| 4    | +DC OUT   |
| 5    | +DC OUT   |
| 6    | -DC OUT   |
| 7    | -DC OUT   |

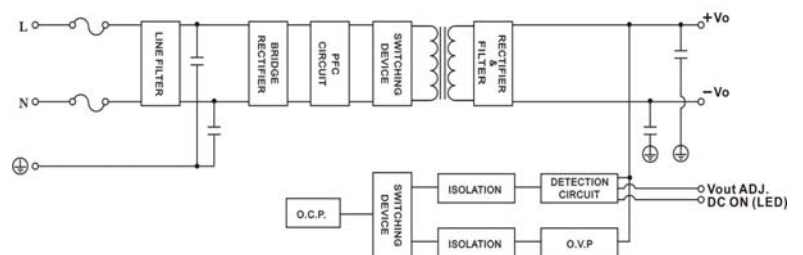
## ASSEMBLY INSTRUCTIONS

\*U Case T=2.0mm

Customer screws into the length of the case no higher than 0.5mm  
(Namely screw length for load plate thickness plus 2.5mm)

## BLOCK DIAGRAM

Single Output



## DERATING

