

## KEY FEATURES

- Enclosed Switching Power Supply
- With PFC Function
- 3.3 VDC to 48 VDC Single Output
- 3000 VAC Input to Output Isolation
- 125 Watt with 18CFM FAN
- Ultra Compact Size: 5.0 x 3.24 x 1.5 Inches
- 2-Years Product Warranty

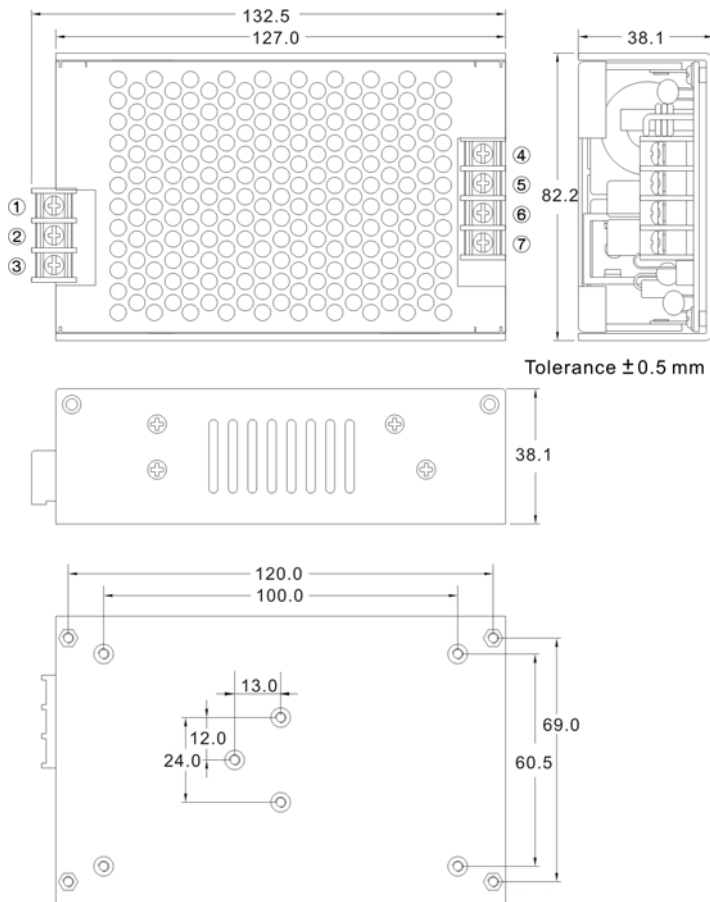


## ELECTRICAL SPECIFICATIONS

| Model No.                           |                                     | AQF150E-3.3S                                                         | AQF150E-5S | AQF150E-12S | AQF150E-15S | AQF150E-24S | AQF150E-48S |
|-------------------------------------|-------------------------------------|----------------------------------------------------------------------|------------|-------------|-------------|-------------|-------------|
| Max Output Wattage (Convection) (W) |                                     | 52W                                                                  | 80W        | 95W         | 95W         | 95W         | 95W         |
| Max Output Wattage (18CFM FAN) (W)  |                                     | 82.5W                                                                | 125W       | 125W        | 125W        | 125W        | 125W        |
| Input                               | Voltage                             | 90-264 VAC or 120-370 VDC                                            |            |             |             |             |             |
|                                     | Frequency (Hz)                      | 47-63 Hz                                                             |            |             |             |             |             |
|                                     | Current (Full load)                 | 3 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                     | 3.5 mA max.                                                          |            |             |             |             |             |
|                                     | Power Factor                        | PF>0.97 (115 VAC) / PF>0.93 (230 VAC) at Full Load                   |            |             |             |             |             |
| Output                              | Voltage (V.DC.)                     | 3.3V                                                                 | 5V         | 12V         | 15V         | 24V         | 48V         |
|                                     | Voltage Accuracy                    | ±2%                                                                  |            |             |             |             |             |
|                                     | Current (Convection) (A) max        | 16                                                                   | 16         | 7.9         | 6.33        | 3.95        | 1.98        |
|                                     | Current (18CFM FAN) (A) max         | 25                                                                   | 25         | 10.4        | 8.33        | 5.2         | 2.6         |
|                                     | Line Regulation (LL-HL) (typ.)      | ±1%                                                                  |            |             |             |             |             |
|                                     | Load Regulation (5-100%) (typ.)     | ±1%                                                                  |            |             |             |             |             |
|                                     | Minimum Load                        | 0%                                                                   |            |             |             |             |             |
|                                     | Maximum Capacitive Load             | 470-23,000μF depending on model                                      |            |             |             |             |             |
|                                     | Ripple & Noise                      | 100 mV max.                                                          |            | 1% max..    |             |             |             |
|                                     | Efficiency                          | 73%                                                                  | 78%        | 81%         | 81%         | 82%         | 83%         |
|                                     | Hold-up Time                        | 18 ms min.                                                           |            |             |             |             |             |
|                                     | Switching Frequency                 | 67 kHz                                                               |            |             |             |             |             |
| Protection                          | Over Power Protection               | Auto recovery                                                        |            |             |             |             |             |
|                                     | Over Voltage Protection             | Auto recovery                                                        |            |             |             |             |             |
|                                     | Short Circuit Protection            | Auto recovery                                                        |            |             |             |             |             |
| Isolation                           | Input-Output (V.AC)                 | 3000V                                                                |            |             |             |             |             |
|                                     | Input-FG (V.AC)                     | 1500V                                                                |            |             |             |             |             |
|                                     | Output-FG (V.AC)                    | 500V                                                                 |            |             |             |             |             |
| Environment                         | Operating Temperature               | -25°C...+70°C (with derating)                                        |            |             |             |             |             |
|                                     | Storage Temperature                 | -40°C...+85°C                                                        |            |             |             |             |             |
|                                     | Temperature Coefficient             | ±0.02%/°C ( 0~50°C )                                                 |            |             |             |             |             |
|                                     | Humidity                            | 95% RH                                                               |            |             |             |             |             |
|                                     | MTBF                                | >100,000 h @ 25°C (MIL-HDBK-217F)                                    |            |             |             |             |             |
|                                     | Vibration                           | 10~500Hz, 5G 10min./1cycle, 60min. each along X, Y, Z axes.          |            |             |             |             |             |
| Physical                            | Dimension (L x W x H)               | 5.0 x 3.24 x 1.5 Inches ( 127.0 x 82.2 x 38.1 mm ) Tolerance ±0.5 mm |            |             |             |             |             |
|                                     | Weight                              | 470 g                                                                |            |             |             |             |             |
|                                     | Cooling Method                      | Free air convection / 18CFM Forced Air                               |            |             |             |             |             |
| Safety                              | Agency Approvals                    | CE, UL                                                               |            |             |             |             |             |
| EMC                                 | EMI (Conducted & Radiated Emission) | EN 55022 class B                                                     |            |             |             |             |             |
|                                     | EMS (Noise Immunity)                | EN 55024                                                             |            |             |             |             |             |

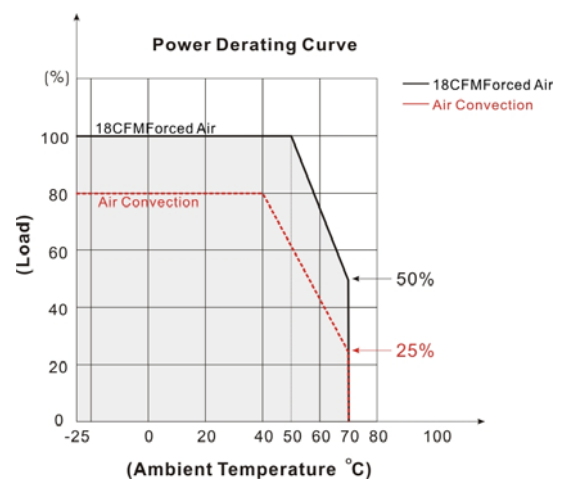
All specifications valid at nominal input voltage, full load and +25°C after warm-up time unless otherwise stated.

## 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   |

## DERATING



## BLOCK DIAGRAM

