480 Watt, AQFV480F Series, Enclosed Power Supply



- Universal AC Input
- Fully Enclosed with option of U-Channel chassis or enclosed case with top fan
- High Efficiency Up To 92%
- Short Circuit, Over Voltage, Over Load and Over Temperature Protected
- 3 Year Warranty
- Full Approvals: UL/CE
- Ultra Compact Case Size
- Remote on/off, Remote Sense
- DC OK Signal, 5 Volt Stand-By Output
- Variable Speed Temperature Controlled Fan



Specification

| ^ | | |
|---|-----------------------------|---|
| | | 90~264 VAC, 47~63 Hz (120-370 VDC) |
| | Inrush Current | .,.<50 A @ 115 VAC,<70 A @ 230 VAC |
| | Output Voltage | Single Outputs, See table below |
| | Load Regulation | +/-1%, (5 to 100% load) |
| | Line Regulation | +/-0.5%, (Full AC range) |
| | Over Voltage Protection | Auto Recovery |
| | Short Circuit Protection | Auto Recovery |
| | Overload Protection | Auto Recovery |
| | Over Temperature Protection | Auto Recovery |
| | Hold Up Time | 10 ms, minimum |
| | Ripple & Noise | 100mV (12 Volts), 200mV (24 & 36 Volts), 300mV (48 Volts) |
| | Input to Output Isolation | I/P-O/P: 3 kVAC, |
| | Operating Temperature | 20 to +70 °C, see derating curve |
| | Storage Temperature | 25 to +85 °C |
| | Switching Frequency | 62.5 kHz (±10%) |
| | Safety Standards | UL60950-1, CE (surge 4KV) |
| | EMC | EN55022 class B, EN55024 |
| | Mechanical | 202.8 x 106.5 x 45mm (total length including cooling fan) |
| | | Top fan version also available: 177.8 x 106.5 x 59 (inc fan) |
| | Connections Input & Output | Screw terminals for Input and Output (Optional Molex style plug in) |
| | Fixing positions | 7 on base plus 2 on each long side, all M3 Threads |

Models and Ratings

| Model | Output Voltage | Output Current | Efficiency |
|-----------------|-------------------|-------------------|------------|
| AQFV480F-12S-AP | 12.0 V | 40 A | 88 % |
| AQFV480F-24S-AP | 24.0 V | 20 A | 90 % |
| AQFV480F-36S-AP | 36.0 V | 13.3 A | 92 % |
| AQFV480F-48S-AP | 48.0 V | 10 A | 91 % |

*NOTEs (1) Efficiency is shown at nominal 230VAC Input

Please see next page for mechanical drawings, connections and temperature derating.

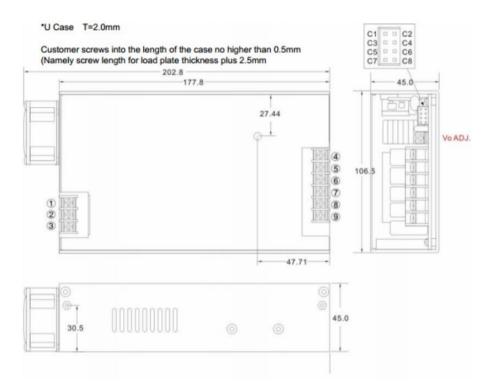
⁽²⁾ All models require 5% minimum load to ensure operation within full specification.
Units will operate with no load without problem.

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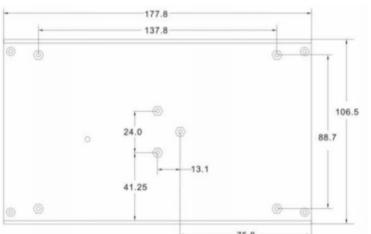
electronic power solutions

Mechanical Drawings.

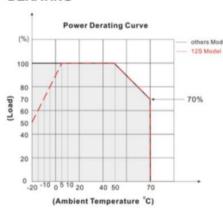
Standard Type – Screw Terminal Connections Please contact ALL PSU for Plug-In connection options



| Standard Type Connections - | | | | |
|-----------------------------|-----------------|--|--|--|
| Screw T | Screw Terminals | | | |
| Terminal | Function | | | |
| 1 | AC IN (N) | | | |
| 2 | AC IN (L) | | | |
| 3 | Input Earth | | | |
| 4 to 6 | +DC Out | | | |
| 7 to 9 | -DC Out | | | |



DERATING



| PIN | FUNCTION | DESCRIPTION |
|-----------|----------|---|
| C1 | +S | Positive sensing. The +S signal should be connected to the positive terminal of the load. The +S and -S leads should be twisted in pair to minimize noise pick-up effect. The maximum line drop compensation is 0.5V. |
| C2 | -S | Negative sensing. The -S signal should be connected to the negative terminal of the load. The -S and +S leads should be twisted in pair to minimize noise pick-up effect. The maximum line drop compensation is 0.5V. |
| C3 | +RC | Turns the output on and off by electrical or dry contact between pin C4 (-RC), Short = Power OFF, Open = Power ON |
| C4 | -RC | Remote control ground / return |
| C5 | DC-OK | DC-OK Signal is a DC output, referenced to pin C6 (DC-OK GND) |
| C6 | GND | |
| | | This pin internally connects to the negative terminals (-DC Out). Return for DC-OK signal output |
| C7 | +5V SB | Stand-by voltage output ground 4.5~5.5V, referenced to pin C8 (-5V SB). The maximum load current is 0.6A |
| C8 | -5V SB | Stand-by voltage output ground / return |