

ELPAC FSA150 SERIES CLASS I

150 Watt
ITE Open Frame Power Supply



- Safety Approval - EN60950-1 Class I
- High Efficiency: Level V
- Up to 180W with Forced Air
- High Power Density 9.8W/in³
- Lifetime Expectation >5 years
- Hold-up Time >25ms at full load
- Grounded Output
- 5-Year Limited Warranty



| INPUT | |
|---------------------------------|--|
| Input Voltage | 85 – 264VAC (100 – 240VAC Nominal) |
| Input Frequency | 47 – 63Hz (50-60Hz Rated) |
| Input Current | <2.0A rms |
| Inrush Current | <37A at 230VAC cold start |
| Power Factor | >0.97 |
| Zero Load Power | <0.5W |
| Earth Leakage Current (Typical) | N/A |
| Touch Leakage Current | <0.25mA@264Vac 60Hz (typical) --- Accessible parts and circuits not connected to PE |

| OUTPUT | |
|-----------------------------|--|
| Output Voltage | See Table |
| Total Regulation | ±5% |
| Minimum Load | No minimum load required |
| Start-Up Delay | <1.5s |
| Hold-Up Time | >25ms at any input voltage of full load |
| Ripple & Noise | <1% pk-pk ** |
| Over Voltage Protection | 110 – 135% |
| Over Temperature Protection | Active - Recoverable; Passive - Non recoverable |
| Over Current Protection | 120 – 180% |
| Short Circuit Protection | Shutdown, auto-restart (hiccup mode) |

Notes

**Ripple and noise measured with 20MHz bandwidth; 10µF tantalum capacitor in parallel with a 0.1µF ceramic capacitor.

| Model Number | Output Voltage | Output Current | Forced Air Current ¹ | Total Regulation ² | Typical Efficiency ³ |
|--------------|----------------|----------------|---------------------------------|-------------------------------|---------------------------------|
| FSA150012A | 12.0V | 12.5A | 15.0A | ±5% | 89% |
| FSA150015A | 15.0V | 10.0A | 12.0A | ±5% | 90% |
| FSA150018A | 18.0V | 8.3A | 10.0A | ±5% | 90% |
| FSA150024A | 24.0V | 6.3A | 7.5A | ±5% | 91% |
| FSA150048A | 48.0V | 3.2A | 3.75A | ±5% | 92% |

Notes

1) Maximum peak load (180W) lasting 500ms with a maximum 10% duty cycle, Sustained output current (180W) with minimum 100 LFM..

2) Includes initial setting, line regulation, load regulation, and thermal drift.

3) Typical at 115VAC.

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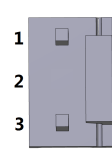
| General | |
|---------------|--|
| Efficiency | Avg. Efficiency 91.5% @ 115VAC; Avg. Efficiency 93.5% @ 230VAC; |
| MTBF | min. 200,000 hours, SR-332 issue 3 |
| Size | 5.00" (127mm) x 3.00" (76.2mm) x 1.22" (30.9mm) |
| Weight | 0.75 LBS (0.34 Kg) |
| Power Density | 9.8W/in ³ |

| Environmental | |
|-----------------------|---|
| Operating Temperature | 0–70°C (Full load to 50°C, derate linearly to 50% load at 70°C) |
| Storage Temperature | -40°C to +85°C |
| Relative Humidity | 5-93%, non-condensing |
| Cooling | Natural Convection (150W) or Forced Air (180W) |
| Vibration | Unites meet MIL-STD-810G Figure 514.6C-1 category 4 |

| EMC & Safety | |
|------------------------------------|--|
| Emissions | FCC class B, EN55022 class B EN61000-3-2, -3 |
| Immunity | EN61000-4-2, -3, -4, -5, -6, -11 |
| Certified by TUV to the following: | cTUVus / CCC |
| | UL60950-1:2007 R10.14 |
| | CB per IEC 60950-1:2005 (Second Edition) + Am 1:2009 + Am 2:2013 |
| | CAN/CSA-C22.2 No.60950-1-07+A1 +A2 |
| | CE marked to LVD and CE EMC |

| Input & Output Configuration | |
|---------------------------------|---|
| Standard Input Cable | Not Provided, input mating connector: AMP#6402503 or equivalent |
| Connection on Power Supply Body | AMP#6404453 or equivalent |
| Standard Output Cable | Not Provided |
| Output Cable Cord Size | N/A |
| Output Cable Connector | AMP#6404458 or equivalent |
| Output Cable Mating Connector | AMP#6402508 or equivalent |

| Input Pin Assignments | |
|-----------------------|---------------|
| Pin 1 | AC Neutral |
| Pin 2 | not assembled |
| Pin 3 | AC Line |
| | |
| | |
| | |
| | |
| | |
| | |



| Output Pin Assignments | |
|------------------------|--------|
| Pin 1 | +V1 |
| Pin 2 | +V1 |
| Pin 3 | +V1 |
| Pin 4 | +V1 |
| Pin 5 | Return |
| Pin 6 | Return |
| Pin 7 | Return |
| Pin 8 | Return |

