



# ELPAC FXA350 SERIES CLASS I

250 Watt  
ITE Open Frame Power Supply

- Safety Approval – IEC62368-1 Class I
- High Efficiency
- Up to 350W with Forced Air
- +5V Standby & Fan Power
- High Power Density 5.83W/in<sup>3</sup>
- Lifetime Expectation >5 years
- Grounded Output
- 5-Year Limited Warranty



| INPUT                 |                                    |
|-----------------------|------------------------------------|
| Input Voltage         | 85 – 264VAC (100 – 240VAC Nominal) |
| Input Frequency       | 47 – 63Hz (50-60Hz Rated)          |
| Input Current         | 5.0A-2.0A rms                      |
| Inrush Current        | <37A at 230VAC cold start          |
| Power Factor          | >0.97                              |
| Zero Load Power       | <0.75W                             |
| Touch Leakage Current | <200µA @ 132VAC @ 60Hz             |
|                       | <300µA @ 264VAC @ 60Hz             |

| OUTPUT                      |                                                    |
|-----------------------------|----------------------------------------------------|
| Output Voltage              | See Table                                          |
| Total Regulation            | ±5%                                                |
| Minimum Load                | No minimum load required                           |
| Start-Up Delay              | <1s                                                |
| Hold-Up Time                | >20ms at any input voltage of full load            |
| Ripple & Noise              | <1% pk-pk **                                       |
| Over Voltage Protection     | 110 – 135%                                         |
| Over Temperature Protection | Active - Recoverable;<br>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 | Peak Current <sup>1</sup> | Total Regulation <sup>2</sup> | Typical Efficiency <sup>3</sup> |
|--------------|----------------|----------------|---------------------------|-------------------------------|---------------------------------|
| FXA350012A   | 12.0V          | 20.8A          | 29.1A                     | ±5%                           | 88%                             |
| FXA350015A   | 15.0V          | 16.6A          | 23.2A                     | ±5%                           | 88%                             |
| FXA350024A   | 24.0V          | 10.4A          | 14.5A                     | ±5%                           | 88%                             |
| FXA350028A   | 28.0V          | 8.9A           | 12.5A                     | ±5%                           | 89%                             |

**Notes**

1) Maximum peak load (350W) lasting 500ms with a maximum 10% duty cycle, Sustained output current (350W) with minimum 150 LFM.

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

3) Typical Efficiency at Full Load 115 VAC.

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**inVENTUS**<sup>™</sup>  
POWER

## General

|                                           |                                                                    |
|-------------------------------------------|--------------------------------------------------------------------|
| Efficiency                                | Avg. Efficiency 88.0% @ 115VAC;<br>Avg. Efficiency 90.0% @ 230VAC; |
| MTBF                                      | min. 200,000 hours, SR-332 issue 3                                 |
| Size                                      | 8.00" (203.2mm) x 5.00"<br>(127mm) x 1.50" (38.1mm)                |
| Weight                                    | 2.1 LBS (0.95 Kg)                                                  |
| Power Density                             | 5.83W/in <sup>3</sup>                                              |
| Altitude<br>(Operating/<br>Non Operating) | 5000M                                                              |

## Environmental

|                       |                                                                 |
|-----------------------|-----------------------------------------------------------------|
| Operating Temperature | 0–50°C (Full load to 50°C, derate linearly to 50% load at 70°C) |
| Storage Temperature   | -40°C to +85°C                                                  |
| Relative Humidity     | 5-95%, non-condensing                                           |
| Cooling               | Natural Convection (250W) or Forced Air (350W)                  |
| Vibration             | Unites meet MIL-STD-810G Figure 514.6C-1 category 4             |

## EMC & Safety

|                                    |                                                                |
|------------------------------------|----------------------------------------------------------------|
| Emissions                          | FCC class B,<br>EN55035:2017+A11:2020<br>EN55032:2015+A11:2020 |
| Immunity                           | EN61000-4-2, -3, -4, -5, -6, -11                               |
| Certified by TUV to the following: | cTUVus                                                         |
|                                    | UL62368-1:2014                                                 |
|                                    | CAN/CSA-22.2 No.62368-1-14                                     |
|                                    | CB per IEC 62368-1:2014                                        |
|                                    | CE marked to LVD and CE EMC                                    |

## Input Configuration (H1)

|                                 |                                                 |
|---------------------------------|-------------------------------------------------|
| Connection on Power Supply Body | JITE P/N BTB5551003<br>Barrier Strip, M3 screws |
| Pin 1                           | AC Line                                         |
| Pin 2                           | AC neutral                                      |
| Pin 3                           | Ground                                          |

## Signal Configuration (H2)

|                  |                                                                                                                               |
|------------------|-------------------------------------------------------------------------------------------------------------------------------|
| Connector        | AMP P/N 6404568<br>or equivalent                                                                                              |
| Mating Connector | AMP P/N 6404408<br>or equivalent                                                                                              |
| Pin 1            | DC-Good (TTL high when DC is within regulation)                                                                               |
| Pin 2            | AC-Fail (TTL high when AC is present; min. 8ms warning before loss of DC output)                                              |
| Pin 3            | Remote On/Off (Connect to Pin 7 (Rtn) to enable power supply)                                                                 |
| Pin 4            | +Sense (Must be connected to output, either at H4 connector, or at point of load. Will compensate for up to 500mV cable drop) |
| Pin 5            | -Sense                                                                                                                        |
| Pin 6            | No connection                                                                                                                 |
| Pin 7            | Return for Remote on/off and +5V Standby                                                                                      |
| Pin 8            | Return to Pin 7 for +5V @ 1.0A Standby output                                                                                 |

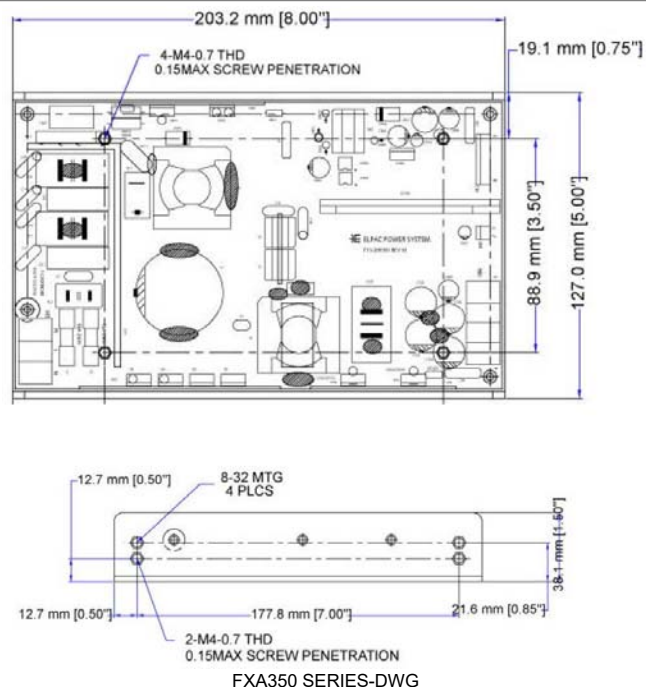
## Output Configuration (H4)

|                      |                                                 |
|----------------------|-------------------------------------------------|
| Connector (PSU side) | JITE P/N BTB5551004<br>Barrier Strip, M3 screws |
| Pin 1                | +V1                                             |
| Pin 2                | +V1                                             |
| Pin 3                | Return                                          |
| Pin 4                | Return                                          |

## Fan Configuration (H3)

|                      |                                                                                             |
|----------------------|---------------------------------------------------------------------------------------------|
| Connector (PSU side) | AMP P/N 6404568<br>or equivalent                                                            |
| Mating Connection    | AMP P/N 6404408<br>or equivalent                                                            |
| Pin 1                | +V (Fan output will adjust from +5V to +12V depending on ambient temperature) maximum 0.35A |
| Pin 2                | -V                                                                                          |

## Mechanical Drawing



# Mouser Electronics

Authorized Distributor

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