



# **FXA350 Series**

350 Watt ITE Open Frame Power Supply

- High Efficiency: Level V
- Wide Range AC Input
- Power Factor Correction
- +5V Standby & Fan Power
- Fully regulated DC output
- EISA and CEC Compliant
- Grounded Output
- ITE and Medical Grade Approval

Elpac Part Number	Output Voltage	Output Current <sup>1</sup>	Typical Efficiency <sup>2</sup>
FXA350012A	12.0V	20.0A	88%
FXA350015A	15.0V	16.5A	88%
FXA350024A	24.0V	10.5A	88%
FXA350028A	28.0V	9.0A	89%
FXA350048A	48.0V	5.3A	88%

#### Notes

<sup>1</sup> With convection cooling. Peak load (350W) lasting up to 500ms with a maximum 10% duty cycle.

<sup>2</sup> Typical at 115VAC.

Input

Input Voltage 85 - 264VAC 100 - 240VAC Nominal

Input Frequency 47 - 63Hz

Input Current <5A rms

Inrush Current <37A at 230VAC cold start

Power Factor >0.98

Zero Load Power Consumption 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 >24ms at any input voltage

Ripple & Noise <1% pk-pk \*\* \*

Over Voltage Protection 110-135%

Over Temperature Protection Active - Recoverable; plus Passive - Non Recoverable

Over Current Protetion 120 - 180%

Short Circuit Protection shutdown, auto-restart (hiccup mode)

#### Notes

### General

Efficiency Avg Efficiency 88.5% @ 115VAC; 90.6% @ 230VAC

MTBF min. 200,000 hours demonstrated

Size 8.00" x 5.00" x 1.50" | 203.2mm x 127mm x 38.1mm

Weight 2.1 lbs (0.95 kg)

 $<sup>^{\</sup>star}$  Ripple and noise measured with 20MHz bandwidth; 10 $\mu$ F tantalum capacitor in parallel with a 0.1 $\mu$ F ceramic capacitor.

#### **Environmental**

Operating Temperature  $0 - 70^{\circ}$ 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 All units production tested to 19.6m/s2

#### **EMC & Safety**

Emissions FCC class B, CISPR22 class B EN61000-3-2, -3

Immunity EN61000-4-2, -3, -4, -5, -6, -8, -11

Certified by TUV to the following: cTUVus

**L** 60950-1

CAN/CSA-22.2 No.60950-1

CB per IEC60950-1

CE marked to LVD

#### **Input Configuration (H1)**

Connection on Power Supply Body JITE p/n BTB555-10-03 Barrier Strip, M3 screws

Pin 1 AC Line

Pin 2 AC Neutral

Pin 3 Ground

#### **Input Configuration (H1)**

Connection on Power Supply Body JITE p/n BTB555-10-03 Barrier Strip, M3 screws

Pin 1 AC Line

Pin 2 AC Neutral

Pin 3 Ground

Output Configuration (H4)		
Connector (PSU side)	JITE p/n BTB555-10-04 Barrier Strip, M3 screws	
Pin 1	+V1	
Pin 2	+V1	
Pin 3	Return	
Pin 4	Return	

Output Configuration (H4)		
Connector (PSU side)	JITE p/n BTB555-10-04 Barrier Strip, M3 screws	
Pin 1	+V1	
Pin 2	+V1	
Pin 3	Return	
Pin 4	Return	

Signal Configuration (H2)		
Connector	AMP P/N 640456-8 or equivalent	
Mating Connector	AMP p/n 640440-8 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.
Pin 5	- Sense	Will compensate for up to 500mV cable drop.
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	

## **Signal Configuration (H2)**

Connector	AMP P/N 640456-8 or equivalent		
Mating Connector	AMP p/n 640440-8 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.	
Pin 5	- Sense	Will compensate for up to 500mV cable drop.	
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		

### Fan Configuration (H3)

	· · ·
Connector	AMP P/N 640456-8 or equivalent
Mating Connector	AMP p/n 640440-8 or equivalent
Pin 1	+V Fan output will adjust from +5V to +12V depending on ambient temperature.
Pin 2	-V

### Fan Configuration (H3)

Connector	AMP P/N 640456-8 or equivalent
Mating Connector	AMP p/n 640440-8 or equivalent
Pin 1	+V Fan output will adjust from +5V to +12V depending on ambient temperature.
Pin 2	-V



