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[1]	Typical Efficiency[2]
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

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

2 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

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

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)

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	5-95%, 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
	UL 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. 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	

Signal Configuration (H2)

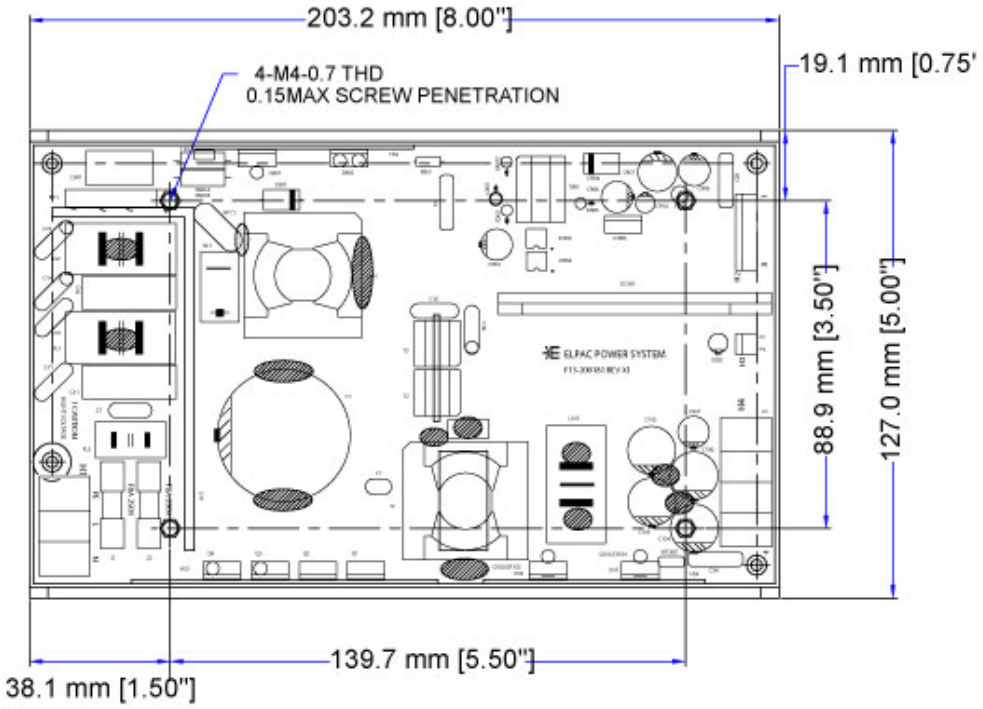
Connector	AMP P/N 640456-8 or equivalent	
Mating Connector	AMP p/n 640440-8 or equivalent	
Pin 1	DC-Good	TTL high when DC is within regulation
Pin 2	AC-Fail	TTL high when AC is present; min. 8ms warning before loss of DC output
Pin 3	Remote On/Off	Connect to Pin 7 (Rtn) to enable power supply
Pin 4	+ Sense	Must be connected to output, either at H4 connector, or at point of load. 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	

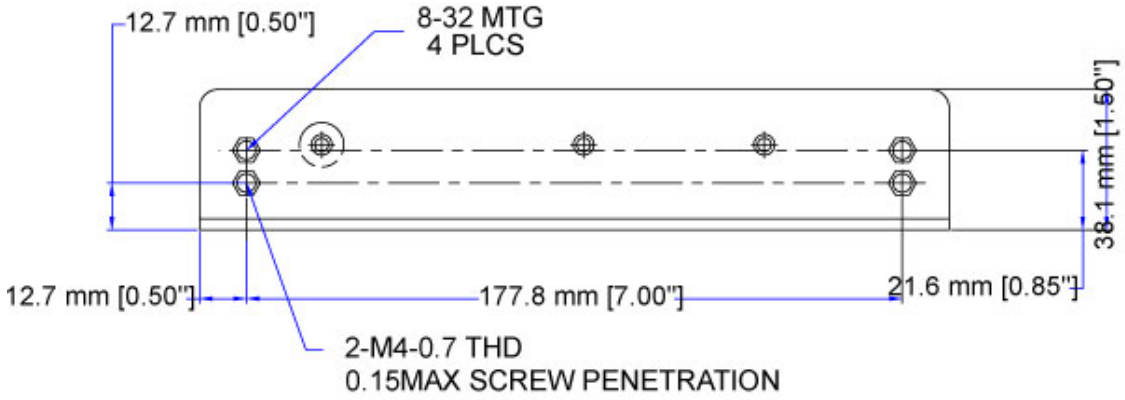
Fan Configuration (H3)

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


203.2 mm [8.00"]
4-M4-0.7 THD
0.15MAX SCREW PENETRATION
19.1 mm [0.75'
88.9 mm [3.50"]
127.0 mm [5.00"]
139.7 mm [5.50"]
38.1 mm [1.50"]


12.7 mm [0.50"]
8-32 MTG
4 PLCS
38.1 mm [1.50"]
12.7 mm [0.50"]
177.8 mm [7.00"]
21.6 mm [0.85"]
2-M4-0.7 THD
0.15MAX SCREW PENETRATION