



Elpac Power Systems™

HIGHER EFFICIENCY, HIGHER POWER DENSITY, UNCOMPROMISED RELIABILITY



TECHNICAL SUPPORT

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- High Efficiency
- Wide Range AC Input
- Fully Regulated DC Output
- Lifetime Expectation >5 years
- Hold-up Time >15ms at full load
- Output Floating
- Safety Approval - EN60601-1 Class I

5-YEAR LIMITED WARRANTY*

Input	
Input Voltage	85 – 264VAC 100 – 240VAC Nominal
Input Frequency	50 – 60Hz
Input Current	<0.55A rms
Inrush Current	<37A @ 230VAC Cold Start
Zero Load Power Consumption	<2.6W
Earth Leakage Current	<70µA @ 132VAC @ 60Hz
	<140µA @ 264VAC @ 60Hz

Output	
Output Voltage	See Table
Total Regulation	+/-5%
Minimum Load	No minimum load required
Start-Up Delay	<750ms
Hold-Up Time	>15ms
Ripple & Noise	<1% pk-pk **
Over Voltage Protection	113 – 135%
Over Temperature Protection	Active – Recoverable
Over Current Protection	120 – 180%
Short Circuit Protection	Shutdown, Auto Restart (Hiccup Mode)

Notes

*visit www.iccus.com for complete details

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






Model Number	Output Voltage	Output Current ¹	Total Regulation ²	Typical Efficiency ³
MSM2812	12.0V	2.30A	±5%	80%
MSM2824	24.0V	1.20A	±5%	80%

Notes
 1) Maximum peak load (33W) lasting 500ms with a maximum 10% duty cycle.
 2) Includes initial setting, line regulation, load regulation, and thermal drift.
 3) Typical at 115VAC at full load.

General	
Efficiency	Avg Efficiency 81.7% @ 115VAC; 82.1% @ 230VAC
MTBF	min. 200,000 hours demonstrated
Size	3.75" (45.3mm) x 2.60" (66.15mm) x 1.00" (25.4mm)
Weight	0.30 lbs (0.14 kg)
Power Density	2.7W/in ³

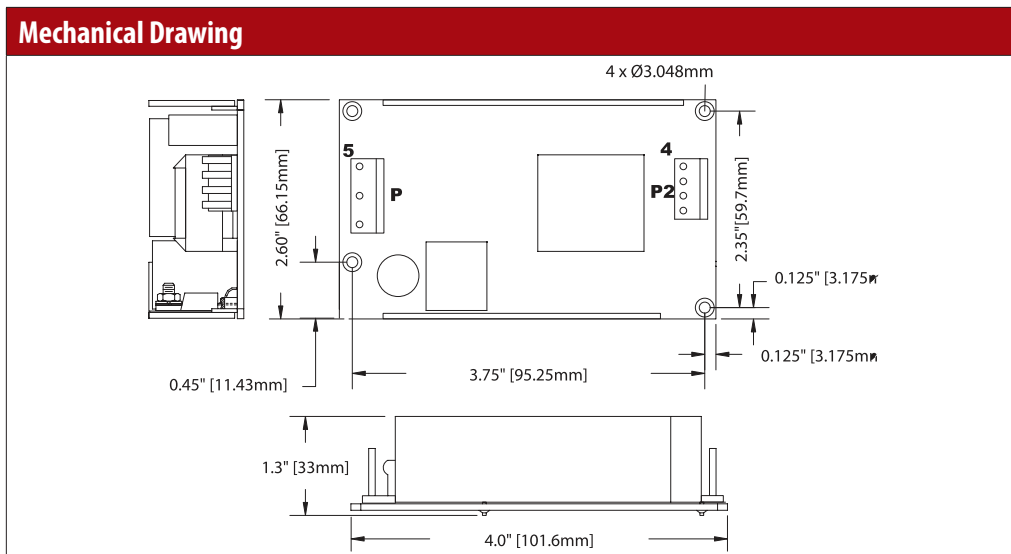
Environmental	
Operating Temperature	0 – 50°C (Full load to 50°C, derate linearly to 50% load at 70°C)
Storage Temperature	-40°C to +85°
Relative Humidity	5-95%, non-condensing
Cooling	Natural Convection
Vibration	All units production tested to 19.6m/s ²

EMC & Safety	
Emissions	FCC class B, CISPR 11 class B EN61000-3-2, -3
Immunity	EN61000-4-2, -3, -4, -5, -6, -8, -1
Certified by UL to the following:	UR/cUR
	UL60601.1
	CAN/CSA-22.2 No.601.1
	CB per IEC 60601-1
	
	CE marked to LVD

Input Configuration	
Connector (P1)	AMP p/n 640445-5
Mating Connector	AMP p/n 640250-5

Output Configuration	
Connector (P2)	AMP p/n 640445-4
Mating Connector	AMP p/n 640250-4
Mating Connector Contacts	AMP p/n 770476

Output Pin Assignments (CN2)	
Pin 1	Com
Pin 2	Com
Pin 3	+V1
Pin 4	+V1
Pin 5	<not assembled>



Input Pin Assignments (CN1)	
Pin 1	Earth Ground
Pin 2	<not assembled>
Pin 3	AC Neutral
Pin 4	<not assembled>
Pin 5	AC Line

Ordering Options Available (Contact Factory)
Grounded output