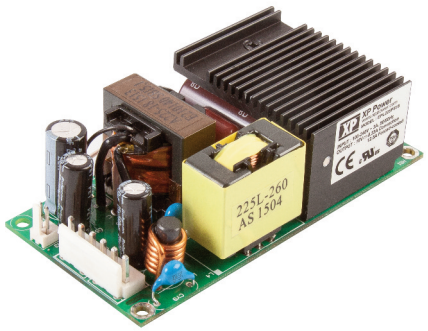
EPL225 Series

AC-DC Power Supplies

XP Power

225 Watts

- 150 W Convection/ 225 W Forced-cooled Ratings
- 2″ by 4″ Footprint
- Low 1.26″ Profile
- 12 V Fan Output
- High Efficiency, up to 95%
- ITE & Medical Approvals
- High Power Density
- Less than 0.5 W No Load Input Power
- Class I and II Operation
- 3 Year Warranty



Dimensions:

EPL225:
4.00 x 2.00 x 1.26″ (101.6 x 50.8 x 32.3 mm)

The EPL225 series maximises efficiency across the load range and minimises no load power consumption minimising heat dissipation, reducing running costs and enabling compliance with the latest environmental goals and legislation. Fully approved for ITE and Industrial applications the EPL225 provides up to 150W when convection cooled and up to 225 W when force cooled at just 10 CFM. A 12 V 0.5 A fan supply is included to support force cooled applications. The small footprint, low profile, low noise and comprehensive safety agency approvals allow this versatile product to be used in a wide range of ITE and industrial applications with either Class I or Class II earth arrangements.

Models & Ratings

Output Power	Output Voltage	Output Current		Fan Output[3,4]	Efficiency[2]	Model Number
		Convection-cooled	Forced-cooled[1]			
225 W	12.0 V	12.50 A	18.75 A	12 V/0.5 A	93%	EPL225PS12
225 W	15.0 V	10.00 A	15.00 A	12 V/0.5 A	93%	EPL225PS15
225 W	18.0 V	8.33 A	12.50 A	12 V/0.5 A	93%	EPL225PS18
225 W	24.0 V	6.25 A	9.38 A	12 V/0.5 A	93%	EPL225PS24
225 W	28.0 V	5.36 A	8.04 A	12 V/0.5 A	93%	EPL225PS28
225 W	36.0 V	4.16 A	6.25 A	12 V/0.5 A	93%	EPL225PS36
225 W	48.0 V	3.10 A	4.69 A	12 V/0.5 A	93%	EPL225PS48

Notes

1. Requires 10 CFM.
2. Minimum average efficiencies measured at 25%, 50%, 75% & 100% of 225 W load and 230 VAC input.
3. Typical voltage, actual regulated voltage will be in range of 9.8 to 13.1V
4. Regulation of the fan output requires a minimum load of 10W on the main output.

Summary

Characteristic	Minimum	Typical	Maximum	Units	Notes & Conditions
Input Range	85	115/230	264	VAC	Derate load from 100% at 90 VAC to 90% at 85 VAC
No Load Input Power			0.5	W	
Efficiency		95		%	230 VAC (see fig.1 & 2)
Operating Temperature	-20		+70	°C	See derating curve (fig.3)
EMC	Conducted: EN55011/32, Class B, Radiated: EN55011/22, Class A (Class B with external core, see EMC Emissions for details)				
Safety Approvals	IEC62368-1, EN62368-1, UL62368-1, CSA22.2 No. 234 per cUL, IEC60601: 2005 + A1, ES60601: 2005/(R)2012 CSA C22.2 No.60601-1: 2014, EN60601: 2006 + A12				

Input

Characteristic	Minimum	Typical	Maximum	Units	Notes & Conditions
Input Voltage - Operating	80	115/230	264	VAC	Derate output from 100% at 90 VAC to 90% at 85 VAC and 85% at 80 VAC
Input Frequency	47	50/60	63	Hz	
Power Factor		>0.9			230 VAC, 100% load EN61000-3-2 class A EN61000-3-2 class C > 145W
Input Current - Full Load		2.2/1.1		A	115/230 VAC
Inrush Current		120		A	230 VAC cold start, 25 °C
Earth Leakage Current		80/140	230	µA	115/230 VAC/50 Hz (Typ), 264 VAC/60 Hz (Max)
No load Input Power			0.5	W	
Input Protection	T4.0 A/250 V Internal fuse fitted in line and neutral.				

Output - Main Output

Characteristic	Minimum	Typical	Maximum	Units	Notes & Conditions
Output Voltage - V1	12		48	VDC	See Models and Ratings table
Initial Set Accuracy			±1	%	50% load, 115/230 VAC
Output Voltage Adjustment-V1				%	None
Minimum Load	0			A	
Start Up Delay			2	s	115/230 VAC full load.
Hold Up Time	10	20/13		ms	Min at full load, 115 VAC. Typical at 150W/ 225W
Drift			±0.02	%	After 20 min warm up
Line Regulation			±0.5	%	90-264 VAC
Load Regulation			±0.5	%	0-100% load.
Transient Response			4	%	Recovery within 1% in less than 500 µs for a 50-75% and 75-50% load step
Over/Undershoot			7	%	Full load
Ripple & Noise			1	% pk-pk	20 MHz bandwidth and 10 µF electrolytic capacitator in parallel with 0.1 µF ceramic capacitator.
Overvoltage Protection	110		140	%	Vnom, recycle input to reset
Overload Protection	110		170	% I nom	
Short Circuit Protection					Trip & Restart
Temperature Coefficient			0.02	%/°C	
Overtemperature Protection				°C	Measured internally, Auto Resetting