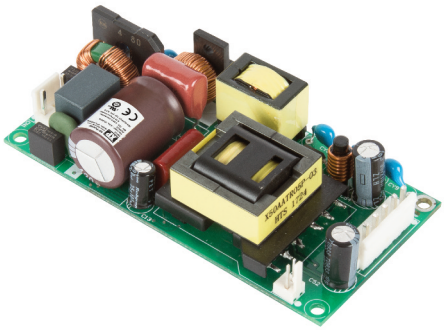
EPL150 Series

AC-DC Power Supplies

XP Power

150 Watts

- 100 W Convection/150 W Forced-cooled Ratings
- 2″ by 4″ Footprint
- Low 0.99″ Profile
- Class I & Class II Operation
- 12 V Fan Output
- High Efficiency, up to 94%
- ITE & Medical (BF) Approvals
- High Power Density
- Less than 0.5 W No Load Input Power
- 3 Year Warranty



GREEN XP POWER

Dimensions:

EPL150:
4.00 x 2.00 x 0.99″ (101.6 x 50.8 x 25.1 mm)

The EPL150 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 as Class I & Class II for ITE, Industrial and Medical applications the EPL150 provides up to 100 W when convection cooled and up to 150 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 enable this versatile product to be suitable for a wide range of Medical, ITE and industrial applications.

Models & Ratings

Output Power	Output Voltage	Output Current		Fan Output	Efficiency[2]	Model Number
		Convection-cooled	Forced-cooled[1]			
150 W	12.0 V	8.33 A[3]	12.50 A	12 V/0.5 A	93%	EPL150PS12
150 W	15.0 V	6.67 A	10.00 A	12 V/0.5 A	93%	EPL150PS15
150 W	18.0 V	5.56 A	8.33 A	12 V/0.5 A	93%	EPL150PS18
150 W	24.0 V	4.17 A	6.25 A	12 V/0.5 A	93%	EPL150PS24
150 W	28.0 V	3.50 A	5.40 A	12 V/0.5 A	93%	EPL150PS28
150 W	36.0 V	2.78 A	4.17 A	12 V/0.5 A	93%	EPL150PS36
150 W	48.0 V	2.08 A	3.10 A	12 V/0.5 A	93%	EPL150PS48

Notes

1. Requires 10 CFM.
2. Minimum average efficiencies measured at 25%, 50%, 75% & 100% of 150 W load and 230 VAC input.
3 Derate to 7.5 A below 100 VAC input.

Summary

Characteristic	Minimum	Typical	Maximum	Units	Notes & Conditions
Input Range	80	115/230	264	VAC	Derate load from 100% at 90 VAC to 90% at 85 VAC and 85% at 80 VAC. See note 3 above for 12 V model.
No Load Input Power			0.5	W	
Efficiency		93		%	230 VAC (see fig.1 & 2)
Operating Temperature	-20		+70	°C	See derating curve (fig.3)
EMC	Conducted: EN55011/32, Class B, Radiated: EN55011/32, Class A (Class B with external ferrite core, see EMC Emissions for details)				
Safety Approvals	CB/EN/UL/CSA for ITE and Medical				

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. 12 V models derate to 90% below 100 VAC.
Input Frequency	47	50/60	63	Hz	
Power Factor		>0.9			230 VAC, 100% load EN61000-3-2 class A
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		80/150	230	µA	115/230 VAC/50 Hz (Typ), 264 VAC/60 Hz (Max)
No load Input Power			0.5	W	
Input Protection	F3.15 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	No minimum load required
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 100W/150W
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	