

100 Watts

- Energy Efficiency Level VI
- European CoC Tier 2
- Active Power Factor Correction
- Single Outputs 12 V to 48 V
- <0.15 W Standby Power
- 0 °C to 65 °C Operation
- Universal Input
- 3 Year Warranty



Dimensions:

AEJ100:
5.59 x 2.28 x 1.48" (141.0 x 58.0 x 39.50 mm)

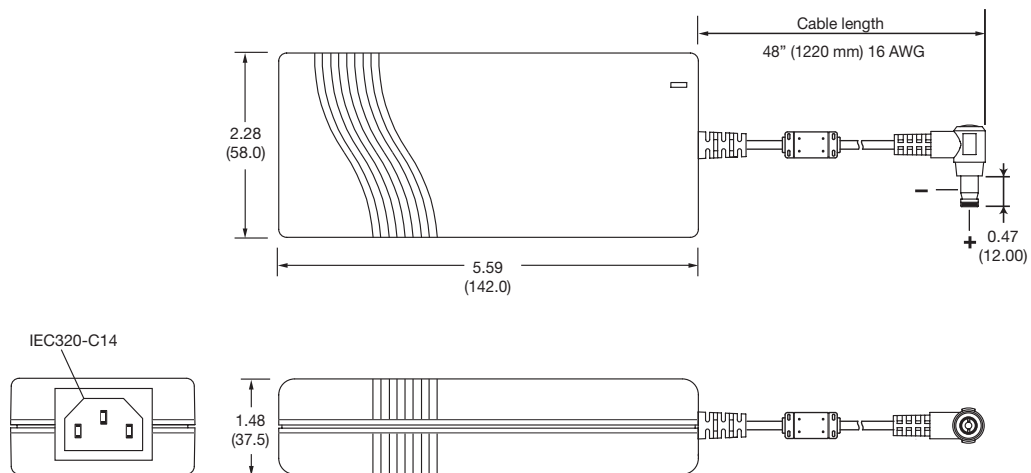
Models & Ratings

Output Power	Output Voltage	Output Current	Total Regulation	Efficiency ⁽¹⁾	Model Number
100 W	12.0 V	8.34 A	±5%	89%	AEJ100PS12
	15.0 V	6.67 A		89%	AEJ100PS15
	19.0 V	5.26 A		89%	AEJ100PS19
	24.0 V	4.17 A		89%	AEJ100PS24
	28.0 V	3.54 A		89%	AEJ100PS28
	36.0 V	2.78 A		89%	AEJ100PS36
	48.0 V	2.10 A		89%	AEJ100PS48

Notes

1. Typical average of efficiencies measured at 25%, 50%, 75% and 100% load and 230 VAC input.

Mechanical Details



Notes

1. All dimensions shown in inches (mm).
2. Weight: 1.07 lbs (485 g) approx.
3. Tolerance is ±0.02 (±0.5) maximum, except output cable length which is ±2" (±50 mm)
4. Output connector is 5.5 mm dia. outer barrel, inner dia. is 2.5 mm with a center + and outer shell - polarity.

Input

Characteristic	Minimum	Typical	Maximum	Units	Notes & Conditions
Input Voltage	90		264	VAC	
Input Frequency	47		63	Hz	
Input Current		1.2		A	Measured at 100VAC
Inrush Current			120	A	230 VAC, cold start at 25 °C
Power Factor		0.95			At 230 VAC, full load, EN61000-3-2 Class A
Earth Leakage Current			550	µA	264 VAC, 60 Hz
No Load Input Power			0.15	W	
Input Protection	T2.0A/250 VAC internal fuse in line				

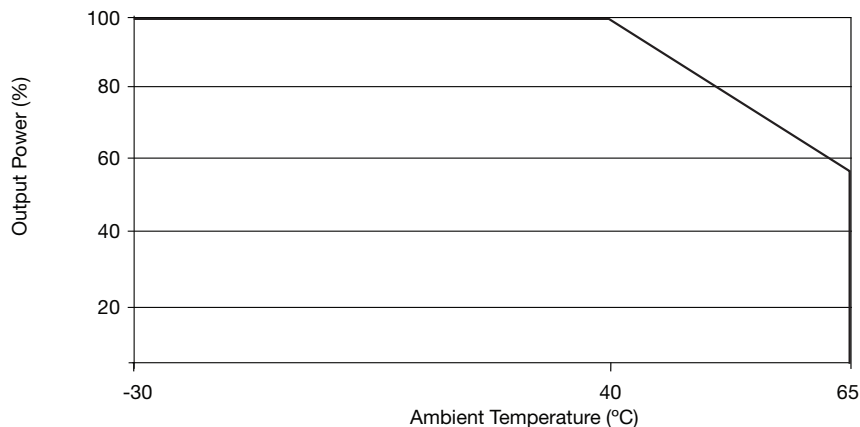
Output

Characteristic	Min.	Typ.	Max.	Units	Notes & Conditions
Output Voltage	12		48	VDC	See Models and Ratings table
Initial Set Accuracy			±2	%	At 60% load
Minimum Load					No minimum load required
Start Up Delay			3	s	
Start Up Rise Time			30	ms	
Hold Up Time		16		ms	Full load and 115 VAC
Line Regulation			±1	%	
Total Regulation			±4	%	
Transient Response			5	%	Maximum deviation, recovering to less than 1% within 500 µs for 25% step load
Ripple and Noise			1	% pk-pk	Measured with 20 MHz Bandwidth and 10 µF electrolytic in parallel with 0.1 µF ceramic capacitor.
Overshoot		5		%	At turn on / turn off
Overload Protection	115		175	%	
Overvoltage Protection	112		140	%	Auto recovery
Short Circuit Protection	Trip and restart (hiccup), auto resetting				
Temperature Coefficient		0.04		%/°C	

Environmental

Characteristic	Minimum	Typical	Maximum	Units	Notes & Conditions
Operating Temperature	-30		+65	°C	Derate from 100% load at 40 °C to 58% load at 65 °C
Cooling	Natural convection				
Operating Humidity	5		90	%RH	Non-condensing
Storage Temperature	-40		+85	°C	
Operating Altitude			5000	m	
Shock	IEC68-2-27, 30 g, 11 ms half sine, 3 times in each of 6 axes				
Vibration	IEC68-2-6, 10-500 Hz, 2 g 10 mins/sweep, 60 mins for each of 3 axes				

Derating Curve

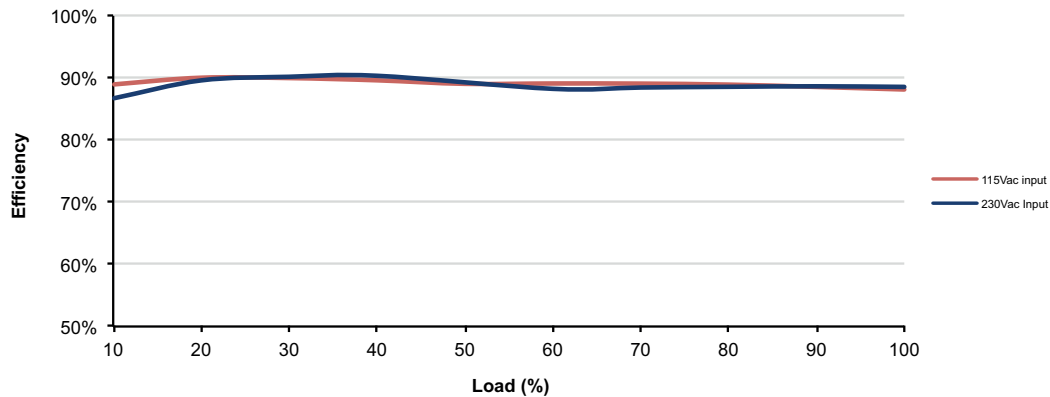


General

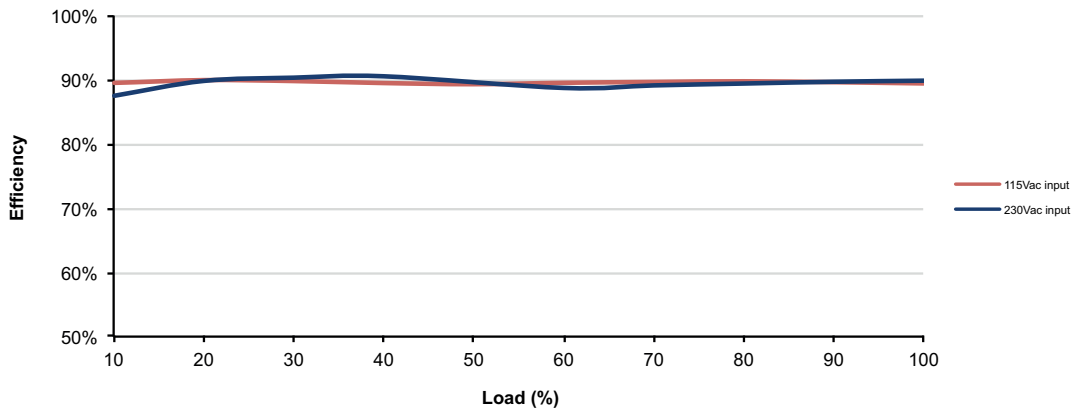
Characteristic	Minimum	Typical	Maximum	Units	Notes & Conditions
Efficiency		89		%	See Models and Ratings table and curves.
Isolation: Input to Output Input to Ground Output to Ground	3000			VAC	
	1500			VAC	
				VDC	Negative output is connected to ground.
Switching Frequency		65		kHz	For PFC and Main Converter
Power Density			4.6	W/in ³	
Mean Time Between Failure	255			kHrs	24 V Version MIL-HDBK-217F at 25 °C GB, 115 VAC
Weight		1.07 (485)		lb (g)	

Efficiency Curves

AEJ100PS12



AEJ100PS24



EMC: Emissions

Phenomenon	Standard	Test Level	Notes & Conditions
Emissions	EN55022	Level B	Conducted & Radiated
Harmonic Current	EN61000-3-2	Class A	
Voltage Flicker	EN61000-3-3		

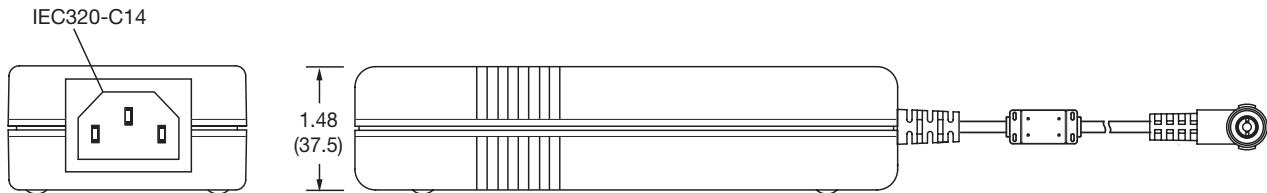
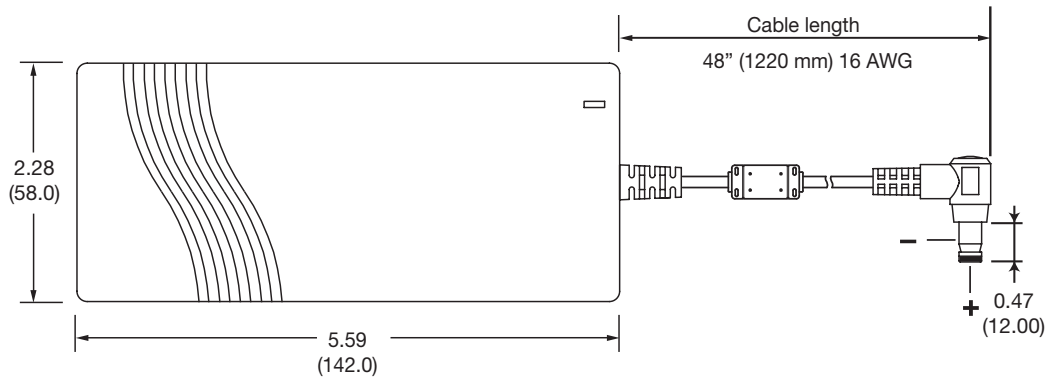
EMC: Immunity

Phenomenon	Standard	Test Level	Criteria	Notes & Conditions
ESD	EN61000-4-2	±8 kV Air, ±6 kV contact	A	
Radiated	EN61000-4-3	3 V/m	A	
EFT/Burst	EN61000-4-4	2	A	
Surge	EN61000-4-5	Installation Class 3	A	
Conducted	EN61000-4-6	3 V	A	
Magnetic Fields	EN61000-4-8	3 A/m	A	
Dips and Interruptions	EN61000-4-11	Dip: 30% 500 ms	A/B	High Line/Low Line
		Dip: 60% 100 ms	A/B	High Line/Low Line
		Int: 100% 5000 ms	B	
		Int: 100% 10 ms	A	

Safety Approvals

Safety Agency	Safety Standard	Notes & Conditions
UL	UL60950-1	
TUV	EN60950-1	
CB	IEC60950-1	

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