AEJ70 Series

AC-DC Power Supplies



70 Watts

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



Dimensions:

AEJ70:

4.72 × 2.05 × 1.22" (120.0 × 52.0 × 31.0 mm)

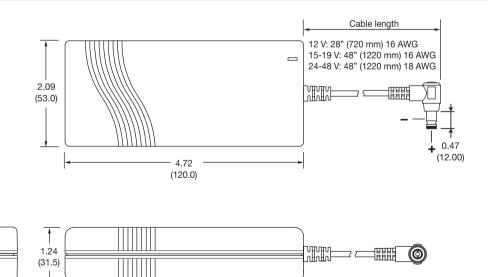
Models & Ratings

Output Power	Output Voltage	Output Voltage Output Current		Efficiency ⁽¹⁾	Model Number
	12.0 V	5.80 A		89%	AEJ70US12
	15.0 V	4.65 A		89%	AEJ70US15
70 W	19.0 V	3.70 A		89%	AEJ70US19
	24.0 V	3.00 A	±5%	89%	AEJ70US24
	28.0 V	2.50 A		89%	AEJ70US28
	36.0 V	2.00 A		89%	AEJ70US36
	48.0 V	1.50 A		89%	AEJ70US48

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: 0.6 lbs (300 g) approx.
- 3. Tolerance is $\pm 0.02~(\pm 0.5)$ maximum, except output cable length which is $\pm 2"~(\pm 50~\text{mm})$

IEC320-C14

4. Output connector is 5.5 mm dia. outer barrel, inner dia. is 2.5 mm with a center + and outer shell - polarity.

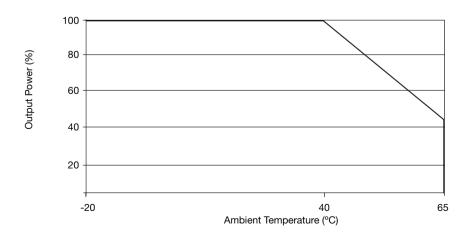


Input					
Characteristic	Minimum	Typical	Maximum	Units	Notes & Conditions
Input Voltage	90		264	VAC	
Input Frequency	47		63	Hz	
Input Current		1.5		А	Measured at 100VAC
Inrush Current			70	Α	230 VAC, cold start at 25 °C
Earth Leakage Current			350	μΑ	264 VAC, 60 Hz
No Load Input Power			0.15	W	
Input Protection	T2.0A/250 VAC internal fuse in line				

Output					
Characteristic	Min.	Тур.	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			20	ms	
Hold Up Time		8		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 μ F electrolytic in parallel with 0.1 μ F ceramic capacitor.
Overshoot			10	%	At turn on / turn off
Overload Protection	115		185	%	
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	-20 +65 °C Derate from 100% load at 40 °C to 42% load at 65C					
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

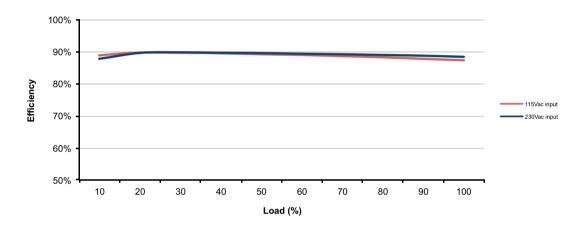




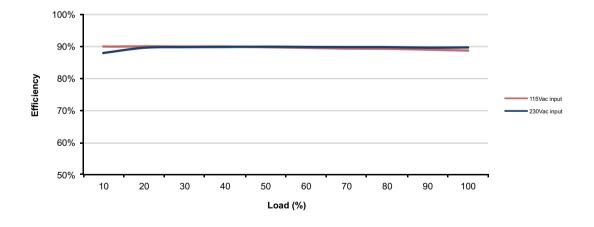
General					
Characteristic	Minimum	Typical	Maximum	Units	Notes & Conditions
Efficiency		89		%	See Models and Ratings table and curves.
Isolation: Input to Output	3000			VAC	
Input to Ground	1500			VAC	
Output to Ground					Negative output is connected to ground
Switching Frequency		65		kHz	
Power Density			5.9	W/in³	
Mean Time Between Failure	286			kHrs	MIL-HDBK-217F at 25 °C GB for 24 V version
Weight		0.6 (300)		lb (g)	

Efficiency Curves

AEJ70US12



AEJ70US24



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		

AEJ70 Series





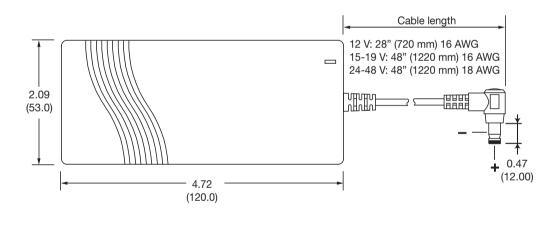
EMC: Immunity

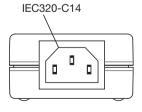
Phenomenon	Standard	Test Level	Criteria	Notes & Conditions
ESD	EN61000-4-2	±8 kV Air, ±6 kV contact	A	
Radiated	EN61000-4-3	3 V/m	A	
EFT/Burst	EN61000-4-4	2	A	
Surge	EN61000-4-5	Installation Class 3	A	
Conducted	EN61000-4-6	3 V	A	
Magnetic Fields	EN61000-4-8	3 A/m	A	
		Dip: 30% 500 ms	A/B	High Line/Low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

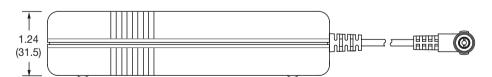
Safety Approvals

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

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