# **AEJ36 Series**

# **AC-DC Power Supplies**



## 36 Watts

- Energy Efficiency Level VI
- European CoC Tier 2
- < 0.075 W Standby Power
- Single Outputs 5 to 48 V
- Class II
- -20 °C to 60 °C Operation
- Universal Input
- 3 Year Warranty



#### **Dimensions:**

#### AEJ36:

4.37 x 2.01 x 0.78" (111.0 x 51.0 x 20.0 mm)

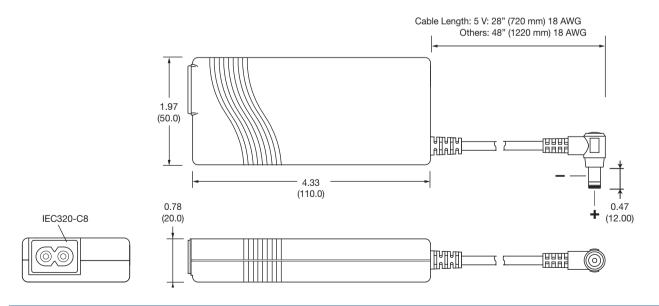
## **Models & Ratings**

Output Power	Output Voltage	Output Voltage Output Current Total		Efficiency <sup>(1)</sup>	Model Number
20 W	5.0 V	4.00 A	±7%	83.6%	AEJ36US05
27 W	9.0 V	3.00 A	±6%	87.3%	AEJ36US09
30 W	12.0 V	2.50 A	±6%	87.7%	AEJ36US12
	15.0 V	2.40 A	±4%	88.3%	AEJ36US15
36 W	18.0 V	2.00 A	±3%	88.3%	AEJ36US18
	24.0 V	1.50 A	±3%	88.3%	AEJ36US24
	48.0 V	0.75 A	±3%	88.3%	AEJ36US48

#### 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: 0.38 lbs (190 g) approx.
- 3. Tolerance is  $\pm 0.02~(\pm 0.5)$  maximum, except output cable length which is  $\pm 2"~(\pm 50~\text{mm})$
- 4. Output connector is 5.5 mm dia. outer barrel, inner dia. is 2.5 mm with a center + and outer shell polarity.

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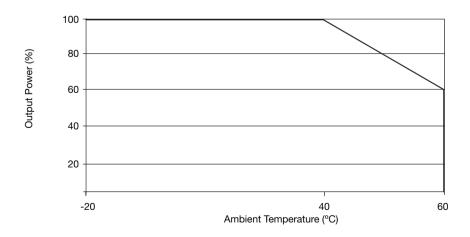


Input					
Characteristic	Minimum	Typical	Maximum	Units	Notes & Conditions
Input Voltage	90		264	VAC	
Input Frequency	47		63	Hz	
Input Current		1.0		А	Measured at 100VAC
Inrush Current			60	А	230 VAC, cold start at 25 °C
No Load Input Power			0.075	W	
Input Protection	T2.0A/250 VAC	internal fuse in line	9	•	

Output					
Characteristic	Min.	Тур.	Max.	Units	Notes & Conditions
Output Voltage	5		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				%	See models and ratings table
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 $\mu$ F electrolytic in parallel with 0.1 $\mu$ F ceramic capacitor.
Overshoot		5		%	At turn on / turn off
Overload Protection	115		210	%	
Overvoltage Protection	117		143	%	Auto recovery
Short Circuit Protection	Trip and restart (h	niccup), auto rese	tting	•	•
Temperature Coefficient		0.05		%/°C	

Environmental						
Characteristic	Minimum	Typical	Maximum	Units	Notes & Conditions	
Operating Temperature	-20		+60	°C	Derate from 100% load at 40 °C to 60% load at 60 °C	
Cooling	Natural convection					
Operating Humidity	5		90	%RH	Non-condensing	
Storage Temperature	-20		+85	°C		
Operating Altitude			2000	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**

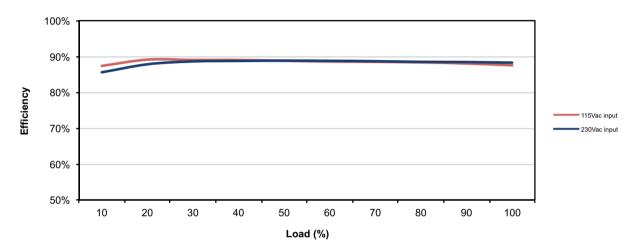




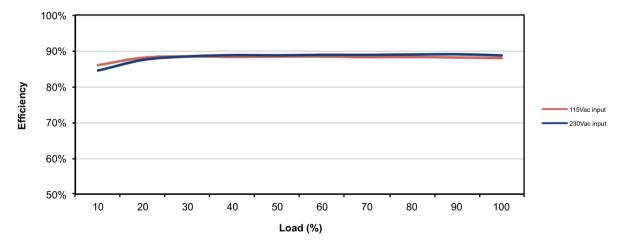
General					
Characteristic	Minimum	Typical	Maximum	Units	Notes & Conditions
Efficiency		88		%	See Models and Ratings table and curves.
Isolation: Input to Output	4242			VDC	
Switching Frequency		67		kHz	
Power Density		5.4		W/in³	
Mean Time Between Failure	283			kHrs	48 V version, MIL-HDBK-217F at 25 °C GB, 115 VAC
Weight		0.38 (190)		lb (g)	

### **Efficiency Curves**

#### **AEJ36US12**



#### **AEJ36US24**



## **EMC: Emissions**

Phenomenon	Standard	Test Level	Notes & Conditions
Emissions	EN55032	Level B	Conducted & Radiated
Harmonic Current	EN61000-3-2	Class A	
Voltage Flicker	EN61000-3-3		



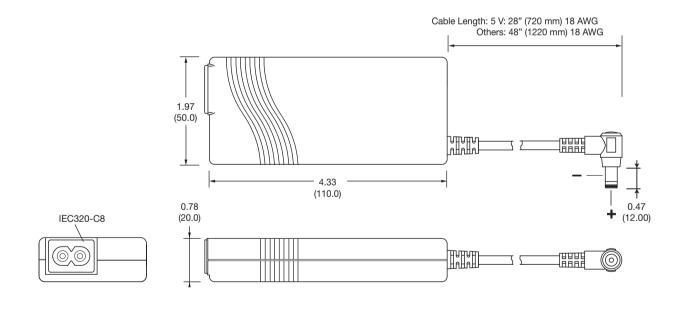
## **EMC: Immunity**

Phenomenon	Standard	Test Level	Criteria	Notes & Conditions
ESD	EN61000-4-2	±8 kV Air, ±4 kV contact	Α	
Radiated	EN61000-4-3	3 V/m	Α	
EFT/Burst	EN61000-4-4	2	Α	
Surge	EN61000-4-5	2	А	Line to Neutral
Conducted	EN61000-4-6	3 V	А	
Magnetic Fields	EN61000-4-8	3 A/m	Α	
		Dip: 30% 500 ms	A	
Dips and Interruptions	EN61000-4-11	Dip: 60% 100 ms	A/B	230 VAC/115 VAC
Dips and interruptions		Int: 100% 5000 ms	В	
		Int: 100% 10 ms	A/B	230 VAC/115 VAC

## Safety Approvals

Safety Agency	Safety Standard	Notes & Conditions
UL	UL 62368-1 & CAN/CSA C22.2 No. 62368-1-14	
TUV	EN62368-1:2014/A11:2017	
СВ	IEC60950-1:2005 Ed 2	
AU/NZ	AU/NZ 60950.1	

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