# **AKM36 Series**

## AC-DC Power Supplies



# 36 Watt

- Energy Efficiency Level VI
- European CoC Tier 2
- Medical and ITE Approvals
- Class II Construction
- Optional White Versions
- Output Voltages from 9 V to 36 V
- 3 Years Warranty



The AKM36 series of desktop adaptors comply with the latest energy efficiency level VI standards with high active mode efficiency and extremely low no load power consumption. Available with a standard jack plug connector these adaptors suit a wide variety of cost sensitive industrial and medical applications while maintaining industry leading performance.

#### Dimensions:

AKM: 4.25 x 1.97 x 1.33" (108.0 x 50.0 x 33.8 mm)

Output Power	Output Voltage	Output Current	Total Regulation <sup>(1)</sup>	Efficiency <sup>(2)</sup>	Model Number
	9.0 V	4.0 A	5%	88.9%	AKM36US09C2
	12.0 V	3.0 A	5%	89.3%	AKM36US12C2
	15.0 V	2.4 A	5%	88.4%	AKM36US15C2
36 W	18.0 V	2.0 A	5%	89.5%	AKM36US18C2
	24.0 V	1.5 A	5%	89.4%	AKM36US24C2
	30.0 V	1.2 A	5%	89.9%	AKM36US30C2
	36.0 V	1.0 A	5%	89.2%	AKM36US36C2

#### Notes

1. Total regulation includes initial set accuracy, line and load regulation.

2. Typical average value measured at 25%, 50%, 75% and 100% at 230 VAC.

3. For white case version add suffix '-W' e.g. AKM36US12C2-W. MOQ applies, contact sales for details.

Input					
Characteristic	Minimum	Typical	Maximum	Units	Notes & Conditions
Input Voltage	90		264	VAC	
Input Frequency	47		63	Hz	
Input Current			1.0	A	90 VAC
Inrush Current			70	A	230 VAC, cold start at 25 °C
Power Factor					EN61000-3-2, class A
No Load Input Power			75	mW	
Input Protection	Internal fuse in I	ine			

Output					
Characteristic	Minimum	Typical	Maximum	Units	Notes & Conditions
Output Voltage	9		36	V	See Models and Ratings table
Minimum Load	0			A	No minimum load required
Start Up Delay			4	S	
Start Up Rise Time		30		ms	
Hold Up Time	10			ms	Full load and 100 VAC
Total Regulation			5	%	See Models and Ratings table
Transient Response			4	% deviation	Recovery within <1% within 500 µs for a 60% step load change at 0.15 A/µs
Ripple & Noise			200	mV pk-pk	Measured with 20 MHz bandwidth and 10 µF electrolytic in parallel with 0.1 µF ceramic capacitor
Short Circuit Protection					Continuous, trip and restart (hiccup mode) with auto recovery
Temperature Coefficient			0.05	%/°C	

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General

Characteristic	Minimum	Typical	Maximum	Units	Notes & Conditions
Efficiency		89.5		%	Typical average of efficiencies measured at 25%, 50%, 75% and 100% load and 115 VAC input
Energy Efficiency					Level VI
Isolation	4000			VAC	Input to Output, 2 x MOPP
Leakage Current			50	μA	264 VAC, 60 Hz
Switching Frequency	24		70	kHz	Variable
Mean Time Between Failure	200			kHrs	MIL-HDBK-217F at 25 °C GB
Weight		0.53 (240)		lb (g)	

### Environmental

Characteristic	Minimum	Typical	Maximum	Units	Notes & Conditions
Operating Temperature	0		+40	°C	
Storage Temperature	-20		+70	°C	
Operating Humidity	5		90	%	RH, non-condensing
Operating Altitude			5000	m	
Cooling					Natural convection
Shock					1 m drop onto concrete on each of 6 axes, non operating
Vibration	10		300	Hz	2 g, 0.3 decades/min, 15 mins for each of 3 axes

### **EMC: Emissions**

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

### **EMC: Immunity**

Phenomenon	Standard	Test Level	Criteria	Notes & Conditions
Medical Device EMC	IEC60601-1-2	Ed.4.0 : 2014	as below	
Low Voltage PSU EMC	EN61204-3	High severity level	as below	
ESD Immunity	EN61000-4-2	±8 kV contact, ±15 kV air	A	
Radiated Immunity	EN61000-4-3	10 V/m	A	
EFT/Burst	EN61000-4-4	Level 3	A	
Surge	EN61000-4-5	Level 2	A	
Conducted Immunity	EN61000-4-6	6 V	A	
Magnetic Fields	EN61000-4-8	30 A/m	A	
	EN61000-4-11	Int: 100% 10 ms	A	
		Dip: 30% 500 ms	A/B	High Line/Low Line
		Int: 100% 5000 ms	В	
Dips and Interruptions	EN60601-1-2	Dip: 30% 25 AC Cycles	A/B	High Line/Low Line
		Int: 100% 0.5 AC Cycle	A	At 8 angles
		Int: 100% 1 AC Cycle	A/B	High Line/Low Line
		Int.: >95% 5000 ms	В	

#### 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 / IEC62368-1:2014 Information Technology CE LVD AU/NZ AU/NZ 60950.1 UL ANSI/AAMI ES 60601-1 CSA CSA C22.2 No. 60601 Medical, 2 x MOPP TUV EN60601-1 СВ IEC60601-1

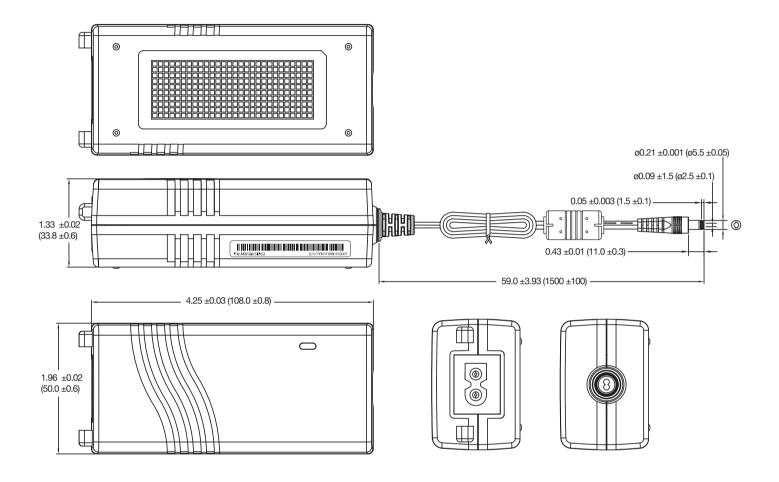
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### **Mechanical Details**

### AKM36USXXC2



#### Notes

1. Dimensions in inches (mm).

2. Weight: 0.53 lbs (240 g).

<sup>3.</sup> Output plug: ø5.5 x ø2.5 x 11.0mm, centre positive.