

AA36U Series

36W Desktop Adapter Series with C14 Inlet



Features

- IEC 320 C14 Inlet
- US DoE Level VI Efficiency Compliance
- CoC V5 Tier 2 Compliance
- Over-Voltage, Over-Current & Short Circuit Protection
- Class B EMI
- Up to 5,000 Meter Operating Altitude

Applications

- Portable Devices
- Peripheral Devices
- Networking Devices
- Audio Speakers

Description

The AA36U series AC/DC desktop adapters provide an output of 36 watts and are available in single output voltages of 12VDC and 24VDC. Utilizing a 1,500mm long output cable, the highly efficient Class I power supplies feature an IEC 60320 C14 inlet, meeting the more demanding Level VII efficiency and no-load limits proposed by the US Department of Energy in February 2023, as well as those for Europe's voluntary Code of Conduct Version 5 Tier 2.

Approved for operation to +45 degrees C without derating and up to 5,000 meters altitude, the AA36U series power adapters meets $\pm 8\text{kV}$ contact discharge and $\pm 15\text{kV}$ air discharge ESD levels and Class B emissions limits and have UL, CE, UKCA, FCC, CAN ICES-3(B), and NRCan compliance approvals. The cost-effective, high-performance adapter is ideal for use in portable equipment, peripheral and networking applications.

AA36U Series

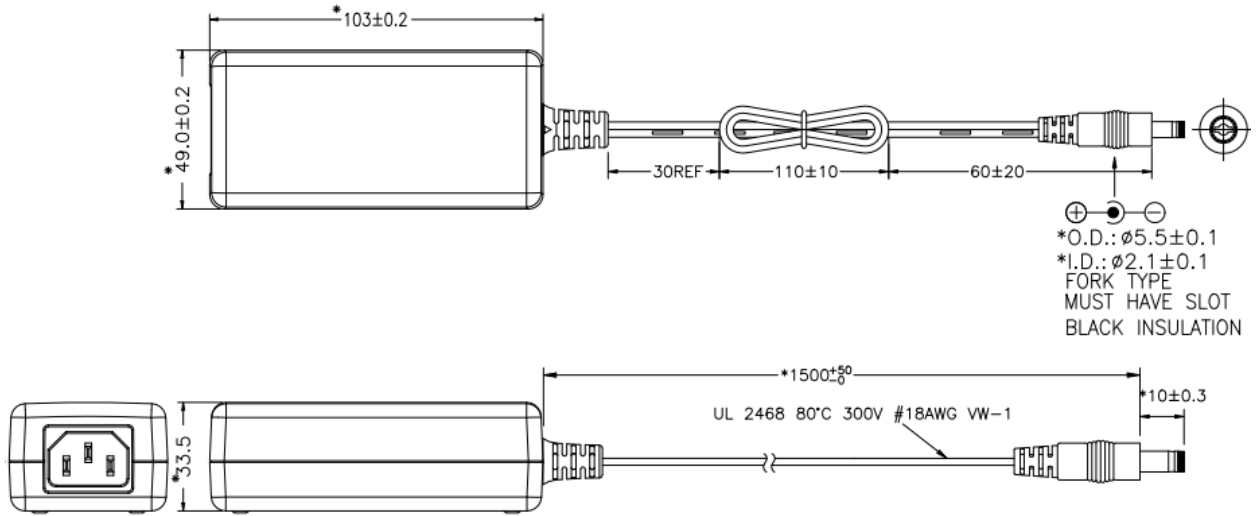
Specifications¹

Model		AA36U-120B-R	AA36U-240B-R
Output	DC Output Voltage	12V	24V
	Max Current	3.0A	1.5A
	Output Power	36.0W	
	Regulation	± 5% Line & Load	
	Ripple & Noise P-P(max) ²	240mV	
Input	AC Input Voltage Range	90 to 264VAC	
	AC Input Frequency	47 to 63Hz	
	AC Input Current	1.0A (RMS) max. at 100VAC/60Hz	
	AC Inrush Current	<100A@264VAC/50Hz, cold start	
	No Load Power Consumption at 115VAC & 230VAC Input	≤0.075W	
	115VAC Average Efficiency ³	≥88.3%	
	230VAC Average Efficiency ³	≥88.3%	
	230VAC 10% Load Efficiency ³	≥78.3%	
	Leakage Current	0.25mA max. at 264VAC/50Hz max., no load	
Protection	Over-Voltage	<16V, auto-recovery	<32V, auto-recovery
	Short Circuit	Auto-recovery and no damage.	
	Over-Current	<4.5A, auto-recovery	<2.5A, auto-recovery
Environmental	Operating Temperature ⁴	-10°C to +65°C (derate after +45°C)	
	Non-Operating Temperature	-20° to +85°C	
	Operating Humidity	20% to 90% RH max	
Safety Approvals and EMC (Pending)	Dielectric Withstand (HI-POT)	Primary to Secondary: 3000VAC, <3.5mA max. 1 min.	
	Insulation Resistance	Primary to Secondary: Min. 50M OHM at 500 VDC	
	Standards	cULus 62368-1, IEC 62368-1	
	EMI Emissions	FCC Part 15 Class B, CAN ICES-003(B)/NMB-003(B), CISPR 32	
	Harmonic Current Emissions	IEC 61000-3-2	
	Voltage Fluctuations & Flicker	IEC 61000-3-3	
Mechanical	Immunity	EN 55035/CISPR 35: IEC 61000-4-2 (+/-15kV air, +/- 8kV contact), IEC 61000-4-3, IEC 61000-4-4, IEC 61000-4-5 (2KV L-L, 1KV L-FG), IEC 61000-4-6, IEC 61000-4-8, IEC 61000-4-11	
	Dimensions (L x W x H)	103.0mm (4.06in) x 49.0mm (1.93in) x 33.5mm (1.32in)	
	Cable Length & Gauge	1500mm 18AWG	
	DC Output Connector	2.1mm (+) x 5.5mm (-) x 10mm	
MTBF	Telcordia	>200K Hours min. at 264VAC/50Hz, max. load, 25°C	
Notes	<ol style="list-style-type: none"> The specifications defined are at ambient temperature of 25C, unless otherwise specified. 20MHz bandwidth frequency oscilloscope, add a 0.1µF multilayer Cap. and Low ESR Electrolytic Cap. (10µF) at output connector terminals (nominal line voltage, full load). Efficiency is measured after 30 minutes burn-in. Refer to derating curve. 		

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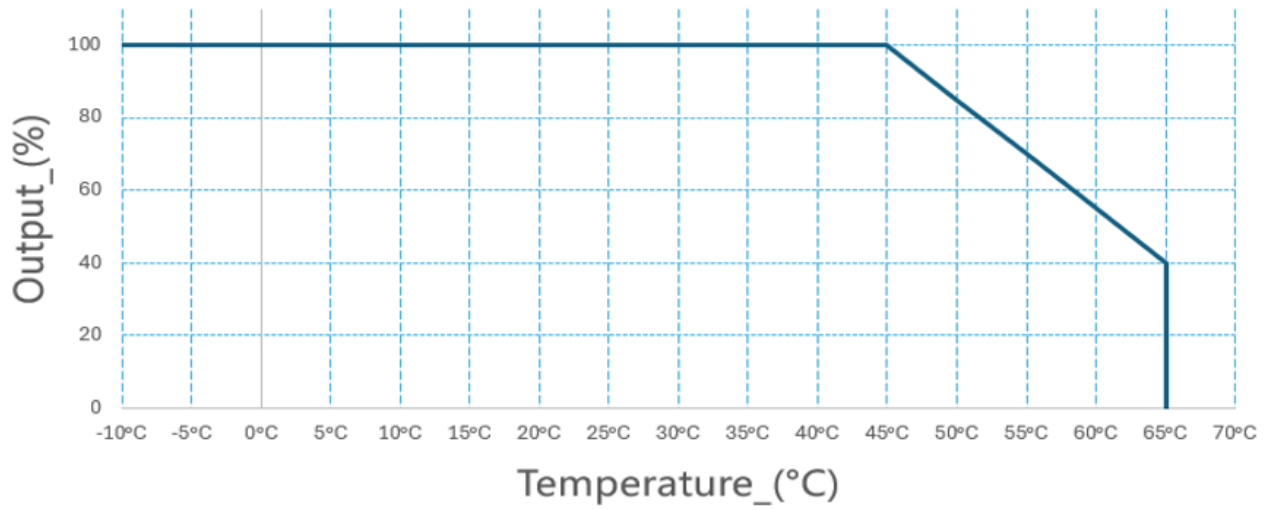
Outline Drawing (mm)



PRELIMINARY

Operating Temperature Curve

【36W_Derating Curve】




PRELIMINARY

C14 Line Cords



Sold Separately

Model		AC30UNA-R	AC30UEU-R	AC30UUK-R
Specifications	Plug Type	North America NEMA 5-15P	Continental Europe CEE 7VIII	United Kingdom BS 1363
	Connector	IEC320 C13	IEC320 C13	IEC320 C13
	Wire Size	18 AWG	0.75mm	1.0mm
	Temperature	60°C	60°C	70 °C
	Amperage Rating	10A	6A	10A
	Voltage Rating	125V	250V	250V
	Cable Length	1830mm	1830mm	2500mm
Safety Approvals		CSA; UL	CEBEC; DEMKO; DVE; FIMKO; GOST; IMQ; KEMA; NEMKO; NF; OVE; SEMKO	BSI; Safety Mark
Photos				

C14 Line Cords

Outline Drawing (mm)

