

#### 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 ± 8kV contact discharge and ± 15kV 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.

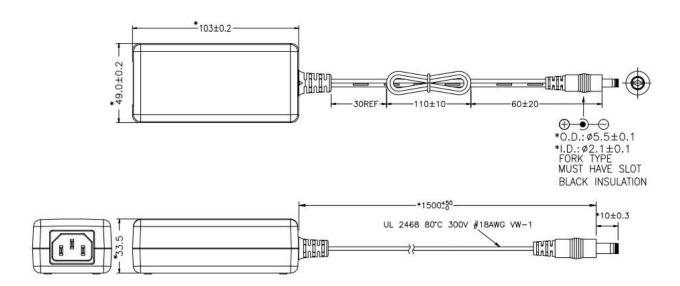


## Specifications<sup>1</sup>

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) <sup>2</sup>	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 <sup>3</sup>	≥88.3%			
	230VAC Average Efficiency <sup>3</sup>	≥88.3%			
	230VAC 10% Load Efficiency <sup>3</sup>	≥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 Temperature⁴	-10°C to +65°C (derate after +45°C)			
	Non-Operating Temperature	-20° to +85°C			
	Operating Humidity	20% to 90% RH max			
Outro	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			
Safety Approvals and	EMI Emissions	FCC Part 15 Class B, CAN ICES-003(B)/NMB-003(B), CISPR 32			
EMC (Pending)	Harmonic Current Emissions	IEC 61000-3-2			
	Voltage Fluctuations & Flicker	IEC 61000-3-3			
	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			
Mechanical	Dimensions (L x W x H)	103.0mm (4.06n) 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> <li>The specifications defined are at ambient temperature of 25C, unless otherwise specified.</li> <li>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).</li> <li>Efficiency is measured after 30 minutes burn-in.</li> <li>Refer to derating curve.</li> </ol>				

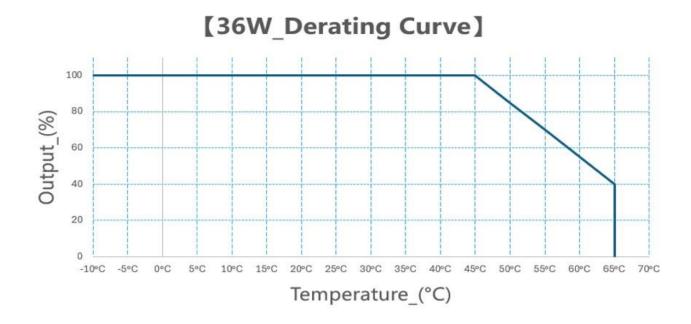


#### Outline Drawing (mm)





## Operating Temperature Curve



## **C14 Line Cords**



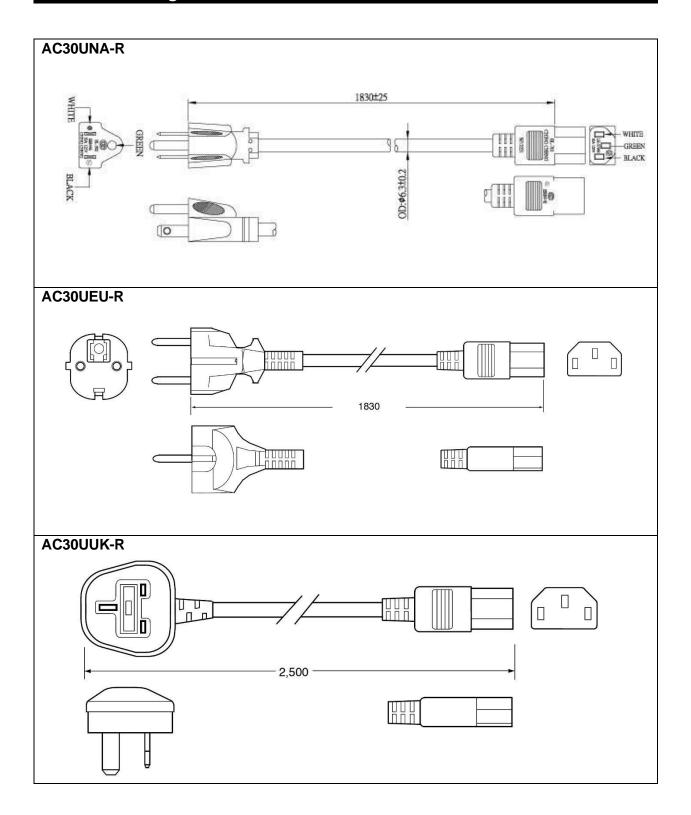
# Sold Separately

Model		AC30UNA-R	AC30UEU-R	AC30UUK-R
	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
Specifications	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				
			O. B. B. Barrell	O. B. Market

## **C14 Line Cords**



## Outline Drawing (mm)



## **Mouser Electronics**

**Authorized Distributor** 

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#### Phihong:

AA36U-120B-R AA36U-240B-R