



# 60W USB Type-C Adapter



 Energy Verified  
Rendement  
Énergétique Vérifié



## **Features**

- USB Power Delivery 3.0
- DoE Level VI, CoC Version 5 Tier 2 Compliance
- 5,000 Meters Operating Altitude
- Suitable for commercial and consumer electronic products

## **Applications**

- Wireless Communications
- Portable Equipment
- Peripherals
- Consumer Electronics

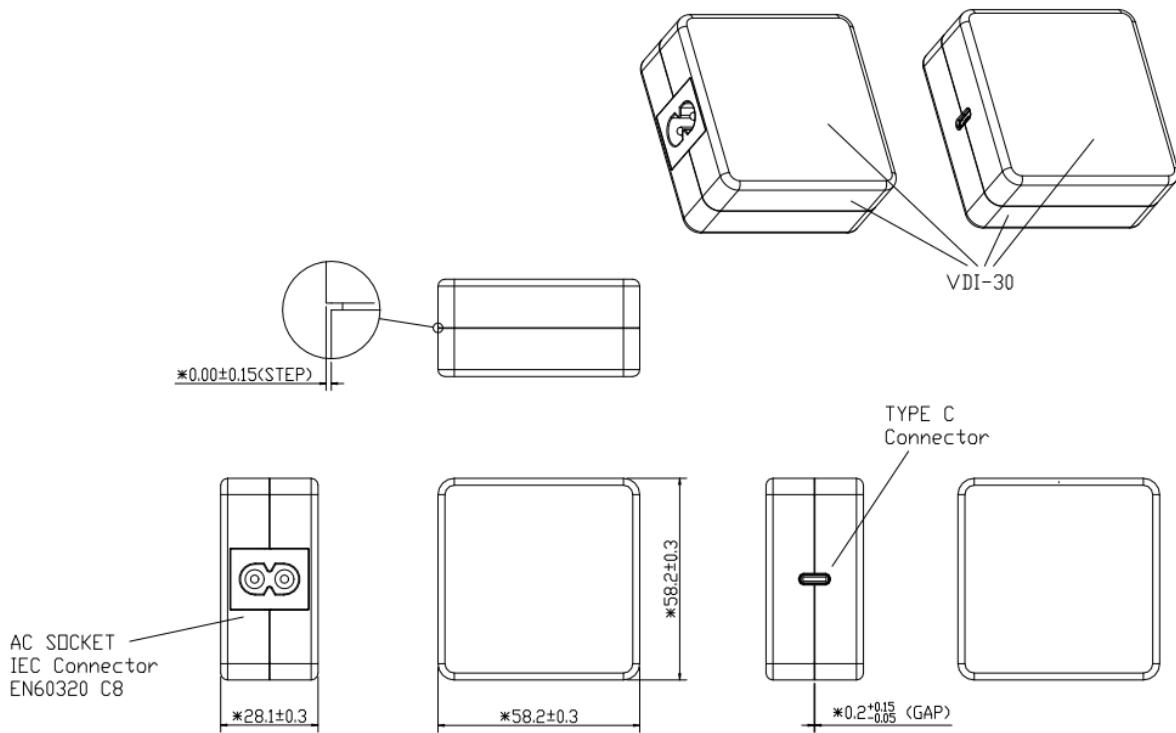


# AQ60W-59FKKA-R Specifications<sup>1</sup>

Model		AQ60W-59FKKA-R
Output	DC Output Voltage	5.0V/9.0V/15.0V/20.0V
	Max Current	3.0A/3.0A/3.0A/3.0A
	Output Power	15.0W/27.0W/45.0W/60.0W
	Regulation	± 5%
	Ripple & Noise P-P(max) <sup>2</sup>	200mV (pk-pk) at max load, 100Vac/240Vac
Input	AC Inlet	C8
	AC Input Voltage Range	90 to 264VAC
	AC Input Frequency	47 to 63Hz
	Input Current	1.5A(RMS) max at 100VAC
	115VAC Average Efficiency <sup>3</sup>	5V ≥ 81.4%; 9V ≥ 86.6%; 15V ≥ 87.7%; 20V ≥ 88% DoE Alternate Method: 5V/2A: ≥ 78.7%
	230VAC Average Efficiency <sup>3</sup>	5V: 85.56%; 9V: 88.50%; 15V: 91.14%; 20V: 91.41%
	230VAC 10% Load Efficiency <sup>3</sup>	5V: 84.45%; 9V: 84.34%; 15V: 85.76%; 20V: 86.00%
	No Load Power Consumption	5V/9V/15V: ≤ 100mW@115VAC, ≤ 0.057W@230VAC; 20V: ≤ 210mW@115VAC, ≤ 0.057W@230VAC
	Leakage Current	80uA max at 264Vac 50Hz
Protection	Short Circuit	Auto-recovery
	Over-Current	3.3A ~ 3.9A; Auto-recovery
	Over Temperature	Latch off function
	Over-Voltage	6V ~ 7V for 5V; 10.8V ~ 12.6V for 9V; 18V ~ 21V for 15V; 23V ~ 25V for 20V
Environmental	Operating Temperature	0°C to +40°C
	Storage Temperature	-30°C to +85°C
	Operating Humidity	10 to +90%RH
	Storage Humidity	5 to +95%RH
	Operation Altitude	5000M
Safety Approvals and EMC (Designed to Meet)	Dielectric Withstand (HI-POT)	Primary to Secondary: 4242Vdc ≤ 10mA for 1 Minute
	Insulation Resistance	Pri. to Sec.: >50 M ohm 500Vdc
	Standards	cULus 62368-1, IEC62368-1
	EMI Emissions	FCC Part 15 Class B, CAN ICES-003(B)/NMB-003(B), EN 55032 Class B Conducted & Radiated
	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 (3V/m), IEC 61000-4-4 (1kV), IEC 61000-4-5 (+/-1kV), IEC 61000-4-6 (3V), IEC 61000-4-8 (1A/m), IEC 61000-4-11 (Dips: >95% reduction 0.5 period, 30% reduction, 25 period; Interruption: >95% reduction, 250 periods)
Mechanical	Dimensions (L x W x H)	58.2mm (2.29in) x 58.2mm (2.29in) x 28.1mm (1.10in)
	DC Output Connector	USB-C
Notes	1. The specifications defined are at ambient temperature of 25°C, unless otherwise specified. 2. 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). 3. Efficiency is measured after 30 minutes burn-in.	



# AQ60W-59FKKA-R Outline Drawing





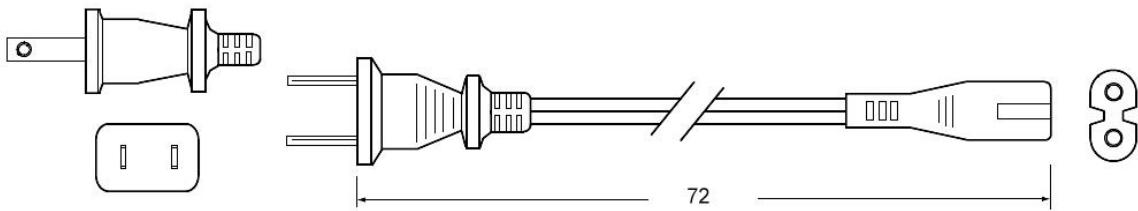
# Line Cords - Sold Separately

Model		AC15WNA-R	AC15WEU-R	AC15WUK-R
Specifications	Plug Type	North America NEMA 1-15P	Continental Europe CEE 7XVI	North America NEMA 5-15P
	Connector	IEC320 C7	IEC320 C7	IEC320 C6
	Wire Size	18 AWG	0.75mm	18 AWG
	Temperature	60°C	70°C	60°C
	Amperage Rating	7A	2.5A	7A
	Voltage Rating	125V	250V	125V
	Cable Length	72mm	1830mm	1829mm
Safety Approvals		CSA; UL	CEBEC; DEMKO; DVE; FIMKO; GOST; IMQ; KEMA; NEMKO; NF; OVE; SEMKO; SEV	BSI; Safety Mark
Photos				

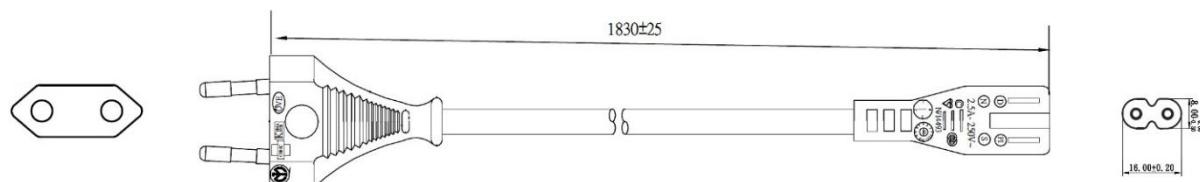


# Line Cords - Outline Drawings

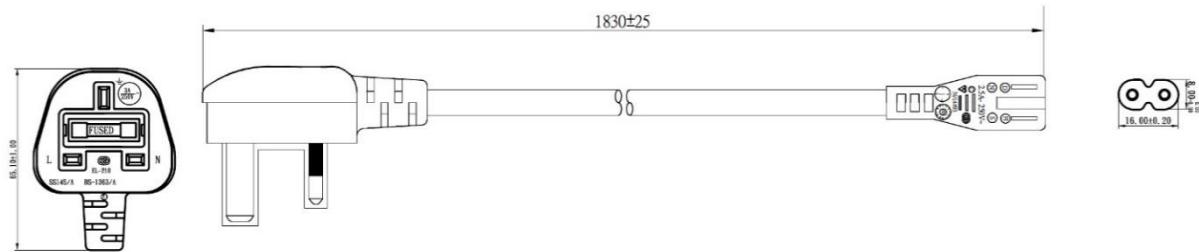
**AC15WNA-R**



**AC15WEU-R**



**AC15WUK-R**





# USB Cables – Sold Separately

Part no: UES-1001A160	Desc: Low Drop Type-C USB Cable – 1 Meter – 23AWG on Power – 30AWG on Data - Black

**Supplier's Declaration of Conformity  
47 CFR § 2.1077 Compliance Information**

Phihong USA Corporation  
47800 Fremont Boulevard  
Fremont, CA 94538  
Telephone: (510) 445-0100  
[www.phihong.com](http://www.phihong.com)

MODEL  
AQ60W-59FKKA-R

This device complies with part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.