

### 60W USB Type-C Adapter





### **Features**

- GaN (Gallium Nitride) Technology
- Compact 2.29" x 2.29" x 1.10" High Power Density Size
- 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

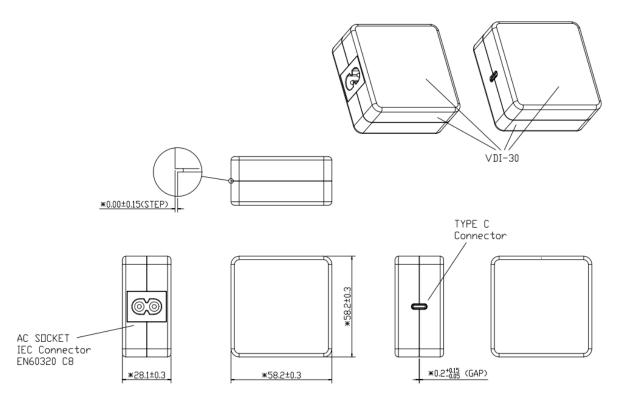


# AQ60W-59FKKA-R Specifications<sup>1</sup>

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: ≥ 81.8%; 9V: ≥ 87.3%; 15V: ≥ 88.9%; 20V: ≥ 89.0%		
	230VAC 10% Load Efficiency <sup>3</sup>	5V: ≥ 72.5 %; 9V: ≥ 77.3%; 15V: ≥ 78.9%; 20V: ≥ 79.0%		
	No Load Power Consumption	5V/9V/15V: ≤ 0.100W@115VAC, 20V: ≤ 0.210W@115VAC; 5V/9V/15V: ≤ 0.075W@230VAC; 20V: ≤ 0.150W@230VAC		
	Leakage Current	80uA max at 264Vac 50Hz		
	Short Circuit	Auto-recovery		
	Over-Current	3.3A ~ 3.9A; Auto-recovery		
Protection	Over Temperature	Latch off function		
	Over-Voltage	$6V \sim 7V$ for 5V; 10.8V $\sim$ 12.6V for 9V; 18V $\sim$ 21V for 15V; 23V $\sim$ 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 $\leq$ 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	<ol> <li>The specifications defined are at ambient temperature of 25°C, 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> </ol>			



### AQ60W-59FKKA-R Outline Drawing



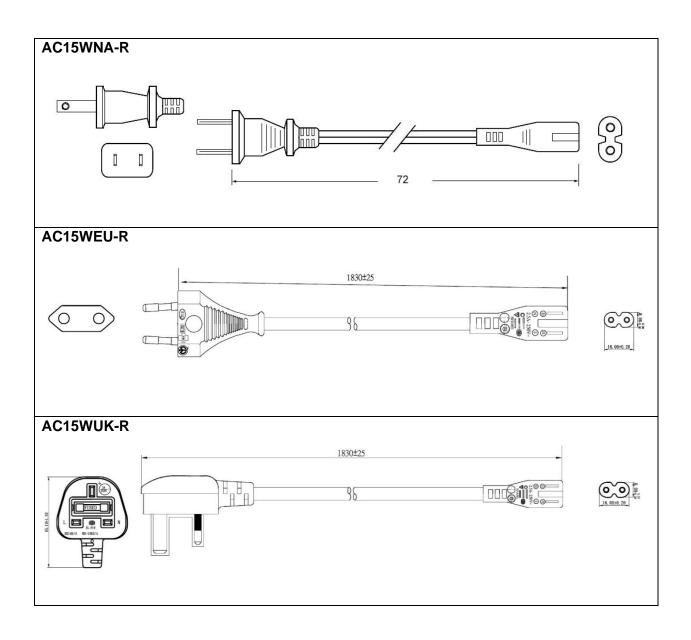


## Line Cords - Sold Separately

Model		AC15WNA-R	AC15WEU-R	AC15WUK-R
	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
Specifications	Temperature	60°C	70ºC	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				

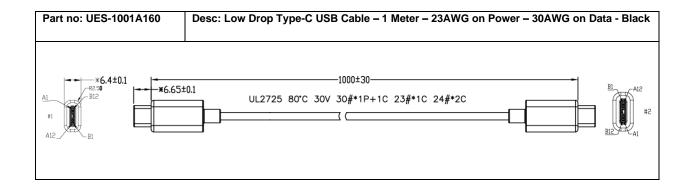


Line Cords - Outline Drawings





### USB Cables - Sold Separately



#### 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

#### 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.