

27W USB Type-C with Power Delivery 3.0 Adapter Series



Features

- USB-C PD 3.0 Certified
- DOE Level VI
- COC Version 5 Tier 2
- Programmable Power Source¹
- Small Form Factor/High Power Density
- Class B EMI

Applications

- Mobile Phone
- Tablet
- Networking Devices
- Monitor

Safety Approvals

- UL/cUL 60950-1²
- UL/cUL 62368-1²
- CE
- IEC 60950-1³
- IEC 62368-1³

Mechanical Characteristics – AQ27A

- Length: 54mm (2.13in)
- Width: 46mm (1.81in)
- Height: 23mm (0.91in)

Mechanical Characteristics – AQ27E

- Length: 72mm (2.83in)
- Width: 46mm (1.81in)
- Height: 23mm (0.91in)

Mechanical Characteristics – AQ27K

- Length: 65.5mm (2.58in)
- Width: 50.3mm (1.98in)
- Height: 31mm (1.22in)

Output Specifications

Model	Prong Style	DC Output Voltage	Load		Ripple ⁴ P-P(max.)	Regulation Line & Load
			Min.	Max.		
AQ27A-59A-H	US	5V/9V	0A	3A/3A	200mV	±5%
AQ27E-59A-H	EU	5V/9V	0A	3A/3A	200mV	±5%
AQ27K-59A-H ⁵	UK	5V/9V	0A	3A/3A	200mV	±5%
AQ27A-59CFA-H	US	5V/9V/12V/15V	0A	3A/3A/2.25A/1.8A	200mV	±5%
AQ27E-59CFA-H	EU	5V/9V/12V/15V	0A	3A/3A/2.25A/1.8A	200mV	±5%
AQ27K-59CFA-H ⁵	UK	5V/9V/12V/15V	0A	3A/3A/2.25A/1.8A	200mV	±5%

AQ27 Series Characteristics⁶

Input:

AC Input Voltage Rating

100 to 240V AC

AC Input Voltage Range

90 to 264V AC

AC Input Current

0.8A(RMS) max at 100V AC input

Leakage Current

65uA max at 250V AC/50Hz

Input Power Saving

<75mW at no load at 230VAC

Output:

Efficiency⁷

DOE Level VI

COC Version 5 Tier 2

Hold-up Time

8.3mS min at 120VAC/60Hz

Environmental:

Temperature

Operation 0°C to +40°C

Non-operation -30°C to +85°C

Relative Humidity 10 to 90%

Emissions

Complies with FCC part 15, Class B

Complies with EN55032, Class B

Immunity

ESD: EN61000-4-2

RS: EN61000-4-3

EFT: EN61000-4-4

Surge: EN61000-4-5

CS : EN61000-4-6

MS : EN61000-4-8

Dip: EN61000-4-11

Dielectric Withstand (Hi-pot) Test

Pri. to Sec. 3000VAC 3mA for 1 Minute

Insulation Resistance

Pri to Sec. >100M ohm at 500VDC

FEATURES:

Over-Voltage Protection

Auto-recovery. 130% max

Over-Current Protection

Auto-recovery. Trip point is less than 130% of I_o

Over-Temperature Protection

Latch off function.

Short-Circuit Protection

Auto-recovery, the output can be shorted permanently without damage.

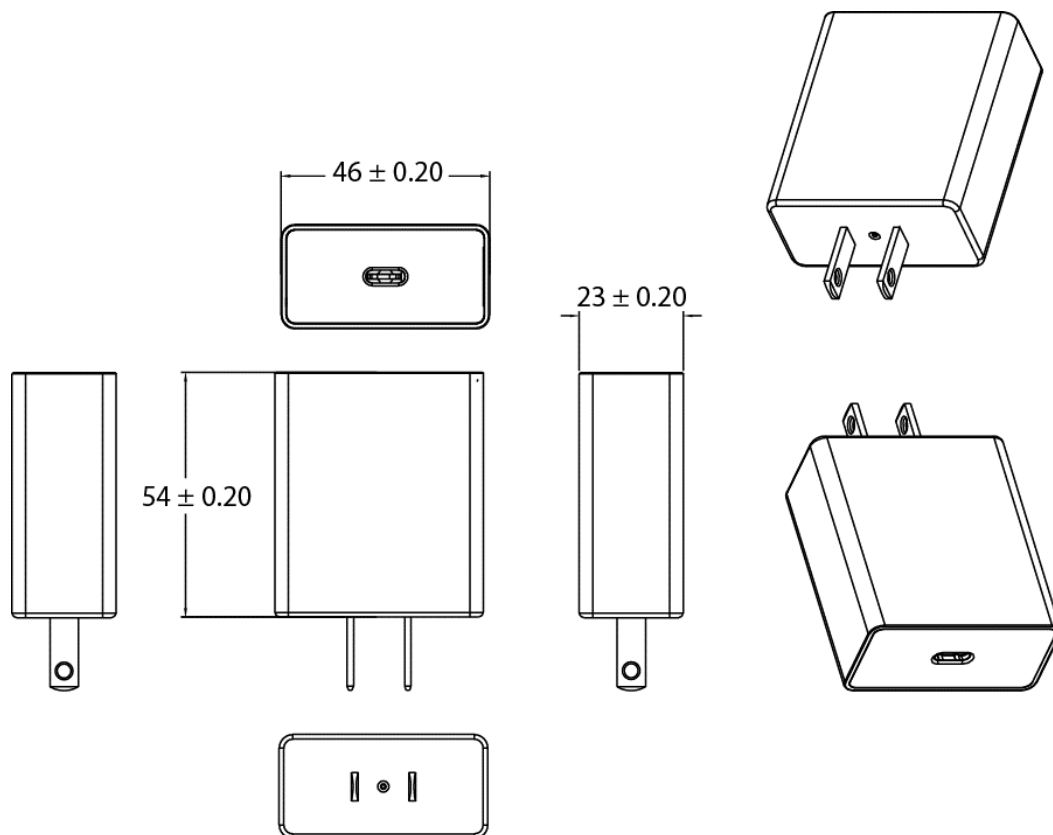
DC Output Connector

USB Type-C receptacle

Notes:

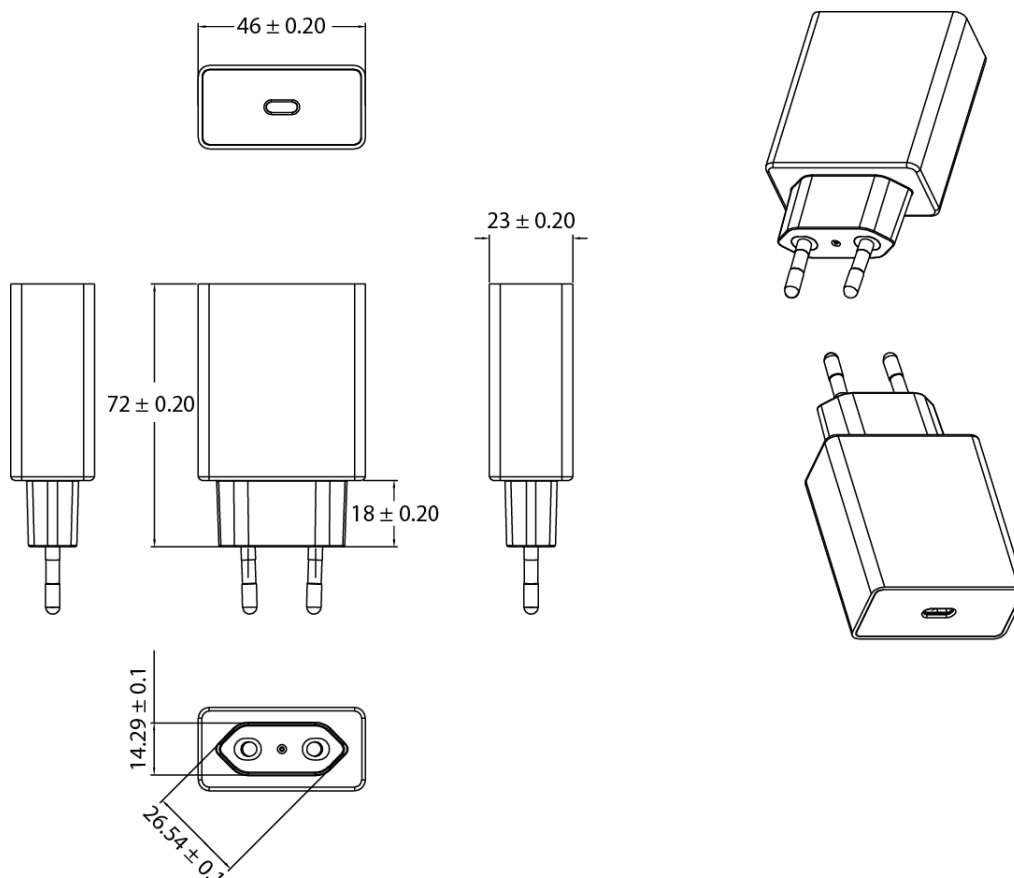
1. Only models AQ27A-59A-H, AQ27E-59A-H and AQ27K-59A-H
2. Applies to US models only
3. Applies to EU and UK models only
4. Measures at the end of 100m ohm cable. Measurements shall be made with an oscilloscope with 20MHz Bandwidth. Outputs should be bypassed at a connector with a 0.1uF ceramic capacitor and a 10uF electrolytic capacitor (Low ESR).
5. Special order MOQ
6. The characteristics defined are at ambient temperature of 25°C unless otherwise specified
7. Efficiency is measured after 30 minutes burn-in

Dimension Diagram Unit: mm



Dimension Diagram Unit: mm

EU Versions



Revision 12/4/2019

Dimension Diagram Unit: mm

