



PHIHONG 18W Quick Charge 3.0 Adapter

The Quick Charge 3.0 (QC 3.0) 18W adapter is the latest offering from a world leader of charging adapters- Phihong Technology. With more than 45 years professional experiences in power supply design and manufacturing, Phihong constantly creates innovative products and at the same time insists on quality and safety.

Phihong Quick Charge 3.0 (QC 3.0) adapters are tested and certified to Quick Charge 3.0 (QC 3.0) standard. This new product supports automatic sensing and switching between 3.6V-6V in constant current mode and between 6.2V-12V in constant power mode. It can power QC 3.0-enabled devices efficiently and to charge 4 times faster than conventional chargers. Additionally, Phihong QC 3.0 adapters meet DoE level VI and CoC V5 Tier 2 high-efficiency standards and certified to UL, CB and CE safety specifications.



Protections

- Over voltage protection (OVP)
- Over current protection (OCP)
- Short circuit protection (SCP)

Features

- Quick Charge 3.0 Certified (pending)
- Automatic sensing and switching between 3.6V-6V in constant current mode and between 6.2V-12V in constant power mode
- More granular range of voltages: 200mV increments, from 3.6V to 12V
- High Efficiency, meet DoE level VI and CoC V5 tier 2
- Wide input range (90 ~ 264Vac Max)
- Default 5V/3A DC output for non-QC 3.0 enabled devices
- Backward-compatible with Quick Charge 1.0 and Quick Charge 2.0 devices
- Output with USB Standard-A receptacle
- Plug types available for US, EU, UK and Korea
- UL, CB, CE approved (pending)
- 49g light weight and easy for travel
- Case color : black or white

Specification

Model Name	AQ18x-308A-H, AQ18x-308AW-H		
AC input range	100~240Vac (90~264Vac min/max)	Protection	OVP, OCP, SCP
AC input frequency	50/60Hz Nom (47~63Hz min/max)	Operating temperature	-5°C ~ +45°C
Output voltage	3.6V-6V constant current mode (3A max); 6.2V-12V constant power mode (18W max)	Safety	UL, CB, CE
		EMI	FCC Class B, EN55022 Class B
Output current	0~3A	Dimension	45 x 27 x 45 mm
Output power	18W max	Weight	49g
Power saving	<75mW @ 115Vac/230Vac	Plug Type	x=A (US), E (EU), K (UK), H (Korea)
Ripple	180mVpk-pk	Case color	Black, W=white.



PHIHONG TECHNOLOGY CO., LTD.



18 Watt Fixed Pin Qualcomm® Quick Charge™ 3.0 Adapter



Features

Limited Power Source (LPS)

OVP, OCP and Short Circuit Protection

Class B EMI

DOE Level VI, CoC V5 Tier 2

Applications

Smartphones
Tablets

Personal Communication Devices

Mechanical Characteristics

Length: 45mm (1.77in)

Height: 27mm (1.06in)

Width: 45mm (1.77in)

Weight: 53.5g (1.88oz)

Output Specifications

Model	Prong Style	DC Output Voltage	Current Rating	Ripple ⁽¹⁾ P-P (max.)	Case Color
AQ18A-308A	US	3.6V-12V	3A@3.6V-6V or 18W@6.2V-12V	180mV	Black
AQ18A-308AW	US	3.6V-12V	3A@3.6V-6V or 18W@6.2V-12V	180mV	White
AQ18E-308A	EU	3.6V-12V	3A@3.6V-6V or 18W@6.2V-12V	180mV	Black
AQ18E-308AW	EU	3.6V-12V	3A@3.6V-6V or 18W@6.2V-12V	180mV	White
AQ18H-308A	Korea	3.6V-12V	3A@3.6V-6V or 18W@6.2V-12V	180mV	Black
AQ18H-308AW	Korea	3.6V-12V	3A@3.6V-6V or 18W@6.2V-12V	180mV	White
AQ18K-308A	UK	3.6V-12V	3A@3.6V-6V or 18W@6.2V-12V	180mV	Black
AQ18K-308AW	UK	3.6V-12V	3A@3.6V-6V or 18W@6.2V-12V	180mV	White

Notes (1) Measurements shall be made with an oscilloscope with 20mHz bandwidth. Outputs should be bypassed at a connector with a 0.1uF ceramic capacitor.

Phihong is not responsible for any error, and reserves the right to make changes without notice.

AQ18X-308A Characteristics

Input:

AC Input Voltage Rating

100 to 240V AC

AC Input Voltage Range

90 to 264V AC

AC Input Frequency

47 to 63Hz

Input Current

0.5A (RMS) maximum

Leakage Current

20uA Max.

Inrush Current

<60A(max) @25°C, cold start

Input Power Saving

<75mW@115V AC/230V AC

Output:

Efficiency

DOE Level VI
CoC V5 Tier 2

Environmental:

Temperature

Operation	-5 to +45°C
Non-operation	-40 to +85°C
Humidity	0 to 90%

Emissions

Complies with FCC Class B
Complies with EN55032 Class B

Immunity

EN61000-4-1 (Contact: ±8KV, Air:±15KV)
EN61000-4-3 Level 2
EN61000-4-4 Level 2
EN61000-4-5 (Line to neutral: ±1KV)
EN61000-4-6 Level 2
EN61000-4-11
EN61000-3-2
EN61000-3-3

Hold-up Time

>5mS @max load. 115V AC/60Hz

Over Voltage Protection

7.8V

Output Current Protection

Output current shall not exceed 3.6A

Short-Circuit Protection

Output can be shorted permanently without damage

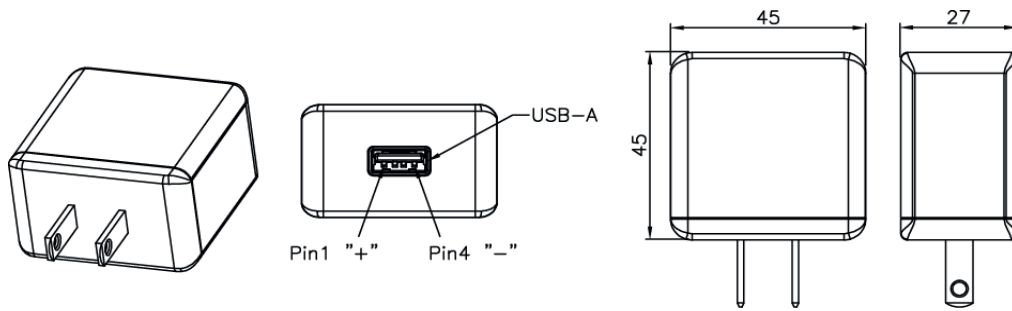
Dielectric Withstand (Hi-pot) Test

Primary to Secondary: 3000V AC for 1 min.,
10mA

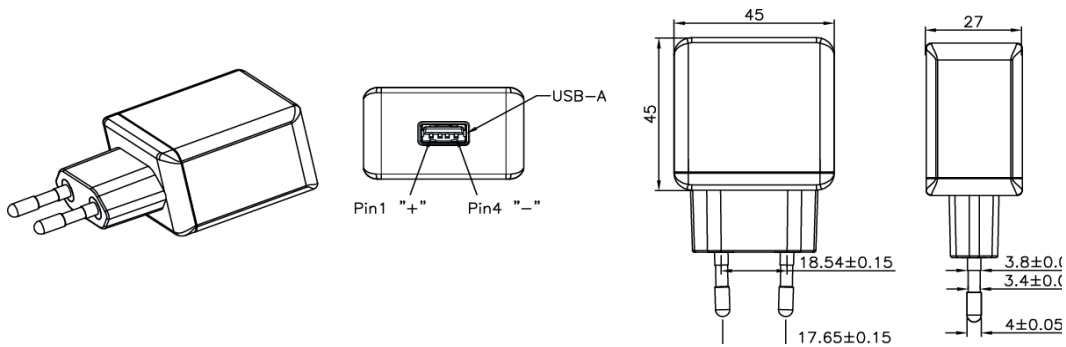
DC Output Connector

USB-A

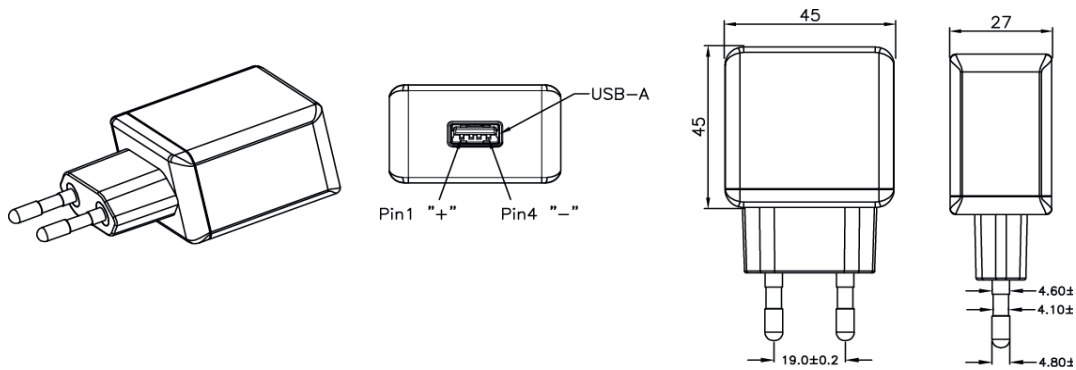
AQ18A-308A Dimension Diagram Unit: mm (inch)



AQ18E-308A Dimension Diagram Unit: mm (inch)



AQ18H-308A Dimension Diagram Unit: mm (inch)



AQ18K-308A Dimension Diagram Unit: mm (inch)

