



# 27W Fixed Blade USB-C Charger with Power Delivery 3.0 – EU



## Features

- USB Type-C
- Power Delivery 3.0 Compliance
- Fixed Blade
- Ecodesign/ErP Lot 7 (EU) 2019/1782 Compliance
- CoC Version 5 Tier 2 Compliance
- Limited Power Source (LPS)
- Class B EMI
- OVP and short circuit protection

## Applications

- Mobile Phones
- Networking Devices
- Tablets

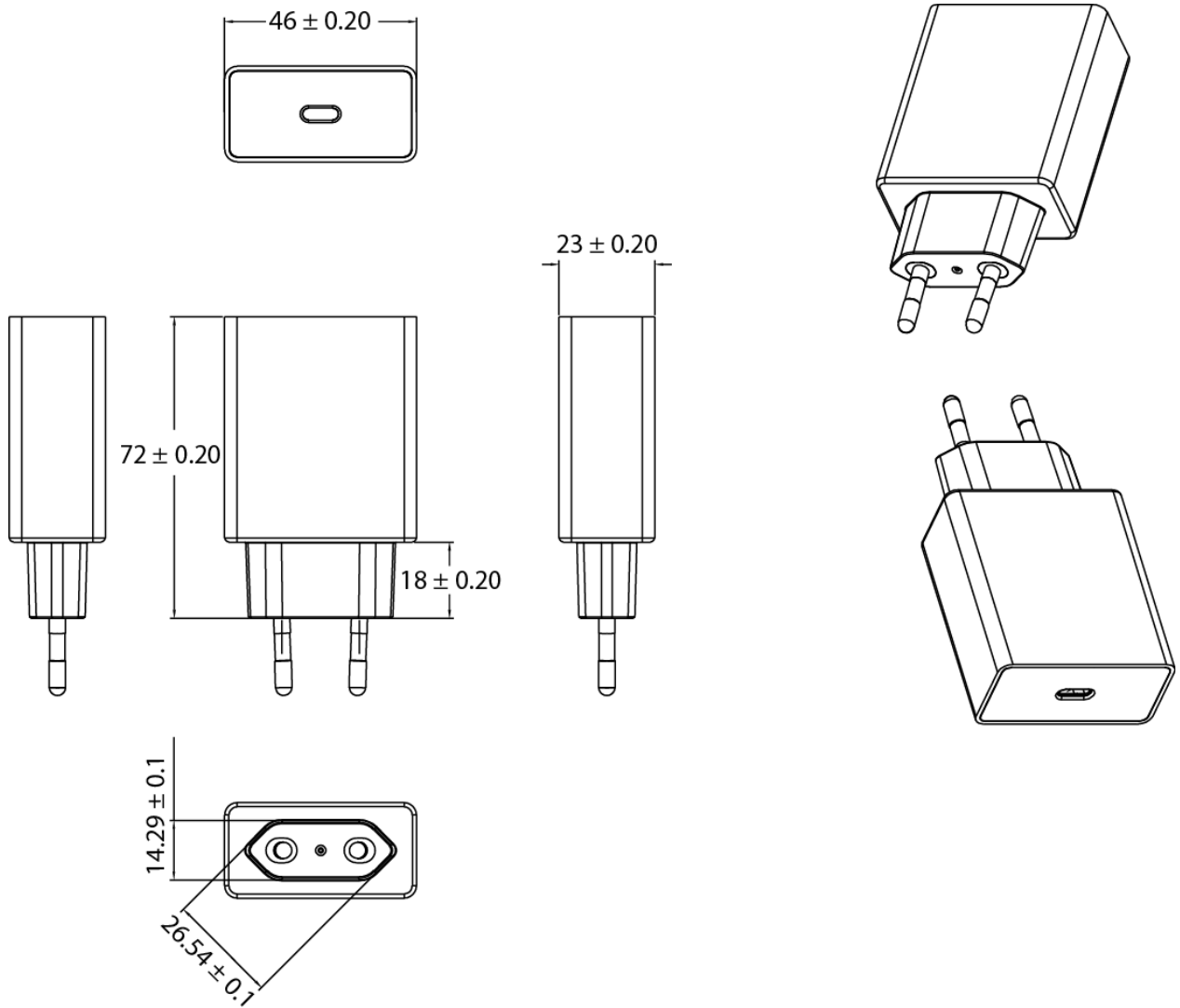


# AQ27E Specifications<sup>1</sup>

| Model                    |                                                                                                                                                                                                                                                                                                                                                                                           | AQ27E-59A-H                                                  | AQ27E-59CFA-H                                       |
|--------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------|-----------------------------------------------------|
| Output                   | DC Output Voltage                                                                                                                                                                                                                                                                                                                                                                         | 5.0V/9.0V                                                    | 5.0V/9.0V/12.0V/15.0V                               |
|                          | Max Current                                                                                                                                                                                                                                                                                                                                                                               | 3.0A/3.0A                                                    | 3.0A/3.0A/2.25A/1.8A                                |
|                          | Output Power                                                                                                                                                                                                                                                                                                                                                                              | 18.0W/27.0W                                                  | 18.0W/27.0W/27.0W/27.0W                             |
|                          | Regulation                                                                                                                                                                                                                                                                                                                                                                                | ± 5%                                                         |                                                     |
|                          | Ripple & Noise P-P(max) <sup>2</sup>                                                                                                                                                                                                                                                                                                                                                      | 200mV                                                        |                                                     |
| Input                    | AC Input Voltage Range                                                                                                                                                                                                                                                                                                                                                                    | 90 to 264VAC                                                 |                                                     |
|                          | AC Input Frequency                                                                                                                                                                                                                                                                                                                                                                        | 47 to 63Hz                                                   |                                                     |
|                          | Input Current                                                                                                                                                                                                                                                                                                                                                                             | 0.8A (RMS) max at 100VAC                                     |                                                     |
|                          | No Load Power Consumption at 115VAC Input                                                                                                                                                                                                                                                                                                                                                 | 0.075W                                                       | 0.075W                                              |
|                          | No Load Power Consumption at 230VAC Input                                                                                                                                                                                                                                                                                                                                                 | 0.029W                                                       | 0.029W                                              |
|                          | 115VAC Average Efficiency <sup>3</sup>                                                                                                                                                                                                                                                                                                                                                    | 5V: 87.86%, 9V: 89.29%                                       | 5V: 87.86%, 9V: 89.29%,<br>12V: 89.54%, 15V: 89.26% |
|                          | 230VAC Average Efficiency <sup>3</sup>                                                                                                                                                                                                                                                                                                                                                    | 5V: 86.53%, 9V: 88.86%                                       | 5V: 86.53%, 9V: 88.86%,<br>12V: 89.17%, 15V: 88.84% |
|                          | 230VAC 10% Load Efficiency <sup>3</sup>                                                                                                                                                                                                                                                                                                                                                   | 5V: 80.44%, 9V: 82.21%                                       | 5V: 80.44%, 9V: 82.21%,<br>12V: 80.64%, 15V: 78.2%  |
| Leakage Current          | 65uA max at 250VAC 50Hz                                                                                                                                                                                                                                                                                                                                                                   |                                                              |                                                     |
| Protections              | Over-Voltage                                                                                                                                                                                                                                                                                                                                                                              | Auto-recover. 130% max                                       |                                                     |
|                          | Over-Current                                                                                                                                                                                                                                                                                                                                                                              | Auto-recover. Trip point is less than 130% of I <sub>o</sub> |                                                     |
|                          | Short Circuit                                                                                                                                                                                                                                                                                                                                                                             | Auto-recover                                                 |                                                     |
|                          | Over Temperature                                                                                                                                                                                                                                                                                                                                                                          | Latch off. No damage.                                        |                                                     |
| Environmental            | Operating Temperature                                                                                                                                                                                                                                                                                                                                                                     | 0°C to +40°C                                                 |                                                     |
|                          | Non-Operating Temperature                                                                                                                                                                                                                                                                                                                                                                 | -30° to +85°C                                                |                                                     |
|                          | Operating Humidity                                                                                                                                                                                                                                                                                                                                                                        | 10 to 90% RH                                                 |                                                     |
| Safety Approvals and EMC | Dielectric Withstand (HI-POT)                                                                                                                                                                                                                                                                                                                                                             | Primary to Secondary: 3000VAC for 1min, 3mA                  |                                                     |
|                          | Insulation Resistance                                                                                                                                                                                                                                                                                                                                                                     | Primary to Secondary: >100M ohm for 500VDC                   |                                                     |
|                          | Standards                                                                                                                                                                                                                                                                                                                                                                                 | IEC 62368-1                                                  |                                                     |
|                          | EMI Emissions                                                                                                                                                                                                                                                                                                                                                                             | EN 55032/CISPR 32 Class B Conducted and Radiated             |                                                     |
|                          | Harmonic Current Emissions                                                                                                                                                                                                                                                                                                                                                                | IEC 61000-3-2                                                |                                                     |
|                          | Voltage Fluctuations & Flicker                                                                                                                                                                                                                                                                                                                                                            | IEC 61000-3-3                                                |                                                     |
| Immunity                 | EN 55035/CISPR 35: IEC 61000-4-2 (Contact: ±8KV, Air: ±15KV),<br>IEC 61000-4-3, IEC 61000-4-4, IEC 61000-4-5 (± 1kV), IEC 61000-4-6,<br>IEC 61000-4-8, IEC 61000-4-11                                                                                                                                                                                                                     |                                                              |                                                     |
| Mechanical               | Dimensions (L x W x H)                                                                                                                                                                                                                                                                                                                                                                    | 72.0mm (2.83in) x 46.0mm (1.81in) x 23.0mm (0.91in)          |                                                     |
|                          | DC Output Connector                                                                                                                                                                                                                                                                                                                                                                       | USB-C                                                        |                                                     |
| Notes                    | <ol style="list-style-type: none"> <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> |                                                              |                                                     |



# AQ27E Outline Drawing





# USB Cables – Sold Separately

## Unit: mm

|                       |                                                                                    |
|-----------------------|------------------------------------------------------------------------------------|
| Part no: UES-1001A160 | Desc: Low Drop Type-C USB Cable – 1 Meter – 23AWG on Power – 30AWG on Data - Black |
|                       |                                                                                    |
| Part no: UES-1003A160 | Desc: Low Drop Type-C USB Cable - 1 Meter – 23AWG on Power – 30AWG on Data - White |
|                       |                                                                                    |