

# AA90x Series



## 90W Desktop Adapter Series



### Features

- US DoE Level VI Efficiency Compliance
- CoC Tier 2 Compliance
- OVP, OCP, SCP, OTP Protections
- Class B EMI
- Operating Altitude to 5,000 Meters

### Applications

- Networking Device
- Monitor
- Notebook
- Industrial Equipment

### Description

The single output 12VDC to 54VDC AA90x series AC/DC desktop adapters provide an output of 90 watts. Utilizing a 1,200mm to 1,500mm long output cable, the highly efficient power supplies feature an IEC 60320 C14 inlet as standard, are available with an IEC 60320 C8 inlet as special order and comply with the more demanding Level VII efficiency and no-load limits proposed by the US Department of Energy in February 2023 as well as those for Europe's voluntary Code of Conduct Version 5 Tier 2.

Approved for operation to +40 degrees C without derating and up to 5,000 meters altitude, the AA90x series power adapter meets  $\pm 8\text{kV}$  contact discharge and  $\pm 15\text{kV}$  air discharge ESD levels and Class B emissions limits and has UL, CE, UKCA, FCC, CAN ICES-3(B), and NRCan compliance approvals. The cost-effective, high-performance adapter is suitable for use in a wide range of consumer, enterprise, and industrial applications.

## AA90x Series

Specifications<sup>1</sup>

| Model                    |   | AA90W-120B-R <sup>2</sup>  | AA90U-120B-R             |
|--------------------------|---|--|--------------------------|
| Output                   | DC Output Voltage                         | 12.0V  |                          |
|                          | Max Current                               | 7.5A   |                          |
|                          | Output Power                              | 90.0W  |                          |
|                          | Regulation                                | ± 5%   |                          |
|                          | Ripple & Noise P-P(max) <sup>3</sup>      | 120mV  |                          |
| Input                    | AC Input Voltage Range                    | 90 to 264VAC   |                          |
|                          | AC Input Voltage Rating                   | 100 VAC to 240VAC  |                          |
|                          | AC Input Frequency                        | 47 to 63Hz   |                          |
|                          | Inrush Current                            | 200A @ 240VAC Max Load   |                          |
|                          | Power Factor                              | >0.95 @ 120 VAC; >0.90 @ 240 VAC Full Load   |                          |
|                          | No Load Power Consumption at 115VAC Input | ≤ 0.077W   |                          |
|                          | No Load Power Consumption at 230VAC Input | ≤ 0.085W   |                          |
|                          | 115VAC Average Efficiency <sup>4</sup>    | ≥ 89.2%  |                          |
|                          | 230VAC Average Efficiency <sup>4</sup>    | ≥ 89.2%  |                          |
|                          | 230VAC 10% Load Efficiency <sup>4</sup>   | ≥ 88.8%  |                          |
| Protection               | Leakage Current                           | 0.25mA max. @254vac, 50Hz  | 3.5mA max. @254vac, 50Hz |
|                          | Over-Voltage                              | 16V max., Auto-recovery  |                          |
|                          | Short Circuit                             | Auto-recovery  |                          |
|                          | Over-Current                              | 10.5A max., Auto-recovery  |                          |
| Environmental            | Over-Temperature                          | Auto-recovery  |                          |
|                          | Operating Temperature <sup>5</sup>        | -10°C to +70°C (derate above +40°C)  |                          |
|                          | Operating Humidity                        | 5% to 90% RH max   |                          |
| Safety and EMC Standards | Operating Altitude                        | Up to 5000m  |                          |
|                          | Dielectric Withstand (HI-POT)             | Primary to Secondary: 3000VAC or 4242Vdc for 1min, 10mA  |                          |
|                          | Insulation Resistance                     | Primary to Secondary: >7M ohm for 500VDC   |                          |
|                          | Standards                                 | IEC 62368-1, UL 62368-1 3 <sup>rd</sup> Edition  |                          |
|                          | EMI Emissions                             | EN55032 Class B, FCC Class B, CAN ICES-003(B)/NMB-003(B)<br>Conducted and Radiated   |                          |
|                          | Harmonic Current Emissions                | IEC 61000-3-2  |                          |
| Mechanical               | Immunity                                  | EN 55035/CISPR 35: IEC 61000-4-2 (+/- 15kV air, +/- 8kV contact),<br>IEC 61000-4-3, IEC 61000-4-4, IEC 61000-4-5 (+/- 1kV L-L, 2kV L-G),<br>IEC 61000-4-6, IEC 61000-4-8, IEC 61000-4-11 |                          |
|                          | Dimensions (L x W x H)                    | 141.5mm (5.57in) x 62.5mm (2.46in) x 33mm (1.30in)   |                          |
|                          | Cable Length                              | 1200mm 16AWG   |                          |
|                          | Output Connector                          | 2.1mm x 5.5mm x 9.5mm barrel   |                          |
| Notes                    | Input Connector                           | IEC 60320 C8   | IEC 60320 C14            |
|                          | 1.  | The specifications defined are at ambient temperature of 25°C, unless otherwise specified.   |                          |
|                          | 2.  | Special order model. Minimum order quantity applies.   |                          |
|                          | 3.  | 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).                |                          |
|                          | 4.  | Efficiency is measured after 30 minutes burn-in.   |                          |
|                          | 5.  | Refer to derating curve.   |                          |

## AA90x Series

Specifications<sup>1</sup>

| Model                    |   | AA90W-190B-R <sup>2</sup>  | AA90U-190B-R             |
|--------------------------|---|--|--------------------------|
| Output                   | DC Output Voltage                         | 19.0V  |                          |
|                          | Max Current                               | 4.74A  |                          |
|                          | Output Power                              | 90.06W   |                          |
|                          | Regulation                                | ± 5%   |                          |
|                          | Ripple & Noise P-P(max) <sup>3</sup>      | 190mV  |                          |
| Input                    | AC Input Voltage Range                    | 90 to 264VAC   |                          |
|                          | AC Input Voltage Rating                   | 100 VAC to 240VAC  |                          |
|                          | AC Input Frequency                        | 47 to 63Hz   |                          |
|                          | Inrush Current                            | 200A @ 240VAC Max. Load  |                          |
|                          | Power Factor                              | >0.95 @ 120 VAC; >0.90 @ 240 VAC Full Load   |                          |
|                          | No Load Power Consumption at 115VAC Input | ≤ 0.097W   |                          |
|                          | No Load Power Consumption at 230VAC Input | ≤ 0.115W   |                          |
|                          | 115VAC Average Efficiency <sup>4</sup>    | ≥ 91.1%  |                          |
|                          | 230VAC Average Efficiency <sup>4</sup>    | ≥ 91.3%  |                          |
|                          | 230VAC 10% Load Efficiency <sup>4</sup>   | ≥ 89.5%  |                          |
| Protection               | Leakage Current                           | 0.25mA max..@254vac, 50Hz  | 3.5mA max. @254vac, 50Hz |
|                          | Over-Voltage                              | 25V max., Auto-recovery  |                          |
|                          | Short Circuit                             | Auto-recovery  |                          |
|                          | Over-Current                              | 6.6A max., Auto-recovery   |                          |
| Environmental            | Over-Temperature                          | Auto-recovery  |                          |
|                          | Operating Temperature <sup>5</sup>        | -10°C to +70°C (derate above +40°C)  |                          |
|                          | Operating Humidity                        | 5% to 90% RH max   |                          |
| Safety and EMC Standards | Operating Altitude                        | Up to 5000m  |                          |
|                          | Dielectric Withstand (HI-POT)             | Primary to Secondary: 3000VAC or 4242Vdc for 1min, 10mA  |                          |
|                          | Insulation Resistance                     | Primary to Secondary: >7M ohm for 500VDC   |                          |
|                          | Standards                                 | IEC 62368-1, UL 62368-1 3 <sup>rd</sup> Edition  |                          |
|                          | EMI Emissions                             | EN55032 Class B, FCC Class B, CAN ICES-003(B)/NMB-003(B)<br>Conducted and Radiated   |                          |
|                          | Harmonic Current Emissions                | IEC 61000-3-2  |                          |
| Mechanical               | Immunity                                  | EN 55035/CISPR 35: IEC 61000-4-2 (+/- 15kV air, +/- 8kV contact),<br>IEC 61000-4-3, IEC 61000-4-4, IEC 61000-4-5 (+/- 1kV L-L, 2kV L-G),<br>IEC 61000-4-6, IEC 61000-4-8, IEC 61000-4-11 |                          |
|                          | Dimensions (L x W x H)                    | 141.5mm (5.57in) x 62.5mm (2.46in) x 33mm (1.30in)   |                          |
|                          | Cable Length                              | 1200mm 16AWG   |                          |
|                          | Output Connector                          | 2.1mm x 5.5mm x 9.5mm barrel   |                          |
| Notes                    | Input Connector                           | IEC 60320 C8   | IEC 60320 C14            |
|                          | 1.  | The specifications defined are at ambient temperature of 25°C, unless otherwise specified.   |                          |
|                          | 2.  | Special order model. Minimum order quantity applies.   |                          |
|                          | 3.  | 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).                |                          |
|                          | 4.  | Efficiency is measured after 30 minutes burn-in.   |                          |
|                          | 5.  | Refer to derating curve.   |                          |

## AA90x Series

Specifications<sup>1</sup>

| Model                    |   | AA90W-240B-R <sup>2</sup>  | AA90U-240B-R             |
|--------------------------|---|--|--------------------------|
| Output                   | DC Output Voltage                         | 24.0V  |                          |
|                          | Max Current                               | 3.75A  |                          |
|                          | Output Power                              | 90.0W  |                          |
|                          | Regulation                                | ± 5%   |                          |
|                          | Ripple & Noise P-P(max) <sup>3</sup>      | 240mV  |                          |
| Input                    | AC Input Voltage Range                    | 90 to 264VAC   |                          |
|                          | AC Input Voltage Rating                   | 100 VAC to 240VAC  |                          |
|                          | AC Input Frequency                        | 47 to 63Hz   |                          |
|                          | Inrush Current                            | 200A @ 240VAC max Load   |                          |
|                          | Power Factor                              | >0.95 @ 120 VAC; >0.90 @ 240 VAC Full Load   |                          |
|                          | No Load Power Consumption at 115VAC Input | ≤ 0.115W   |                          |
|                          | No Load Power Consumption at 230VAC Input | ≤ 0.124W   |                          |
|                          | 115VAC Average Efficiency <sup>4</sup>    | ≥ 91.7%  |                          |
|                          | 230VAC Average Efficiency <sup>4</sup>    | ≥ 91.9%  |                          |
|                          | 230VAC 10% Load Efficiency <sup>4</sup>   | ≥ 89.6%  |                          |
| Protection               | Leakage Current                           | 0.25mA max. @254vac, 50Hz  | 3.5mA max. @254vac, 50Hz |
|                          | Over-Voltage                              | 35V max., Auto-recovery  |                          |
|                          | Short Circuit                             | Auto-recovery  |                          |
|                          | Over-Current                              | 5.3A max., Auto-recovery   |                          |
| Environmental            | Over-Temperature                          | Auto-recovery  |                          |
|                          | Operating Temperature <sup>5</sup>        | -10°C to +70°C (derate above +40°C)  |                          |
|                          | Operating Humidity                        | 5% to 90% RH max   |                          |
| Safety and EMC Standards | Operating Altitude                        | Up to 5000m  |                          |
|                          | Dielectric Withstand (HI-POT)             | Primary to Secondary: 3000VAC or 4242Vdc for 1min, 10mA  |                          |
|                          | Insulation Resistance                     | Primary to Secondary: >7M ohm for 500VDC   |                          |
|                          | Standards                                 | IEC 62368-1, UL 62368-1 3 <sup>rd</sup> Edition  |                          |
|                          | EMI Emissions                             | EN55032 Class B, FCC Class B, CAN ICES-003(B)/NMB-003(B)<br>Conducted and Radiated   |                          |
|                          | Harmonic Current Emissions                | IEC 61000-3-2  |                          |
| Mechanical               | Immunity                                  | EN 55035/CISPR 35: IEC 61000-4-2 (+/- 15kV air, +/- 8kV contact),<br>IEC 61000-4-3, IEC 61000-4-4, IEC 61000-4-5 (+/- 1kV L-L, 2kV L-G),<br>IEC 61000-4-6, IEC 61000-4-8, IEC 61000-4-11 |                          |
|                          | Dimensions (L x W x H)                    | 141.5mm (5.57in) x 62.5mm (2.46in) x 33mm (1.30in)   |                          |
|                          | Cable Length                              | 1500mm 18AWG   |                          |
|                          | Output Connector                          | 2.1mm x 5.5mm x 9.5mm barrel   |                          |
| Notes                    | Input Connector                           | IEC 60320 C8   | IEC 60320 C14            |
|                          | 1.  | The specifications defined are at ambient temperature of 25°C, unless otherwise specified.   |                          |
|                          | 2.  | Special order model. Minimum order quantity applies.   |                          |
|                          | 3.  | 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).                |                          |
|                          | 4.  | Efficiency is measured after 30 minutes burn-in.   |                          |
|                          | 5.  | Refer to derating curve.   |                          |

## AA90x Series

Specifications<sup>1</sup>

| Model                    |   | AA90W-480B-R <sup>2</sup>  | AA90U-480B-R             |
|--------------------------|---|--|--------------------------|
| Output                   | DC Output Voltage                         | 48.0V  |                          |
|                          | Max Current                               | 1.875A   |                          |
|                          | Output Power                              | 90.0W  |                          |
|                          | Regulation                                | ± 5%   |                          |
|                          | Ripple & Noise P-P(max) <sup>3</sup>      | 480mV  |                          |
| Input                    | AC Input Voltage Range                    | 90 to 264VAC   |                          |
|                          | AC Input Voltage Rating                   | 100 VAC to 240VAC  |                          |
|                          | AC Input Frequency                        | 47 to 63Hz   |                          |
|                          | Inrush Current                            | 200A @ 240VAC max Load   |                          |
|                          | Power Factor                              | >0.95 @ 120 VAC; >0.90 @ 240 VAC Full Load   |                          |
|                          | No Load Power Consumption at 115VAC Input | ≤ 0.125W   |                          |
|                          | No Load Power Consumption at 230VAC Input | ≤ 0.137W   |                          |
|                          | 115VAC Average Efficiency <sup>4</sup>    | ≥ 91.5%  |                          |
|                          | 230VAC Average Efficiency <sup>4</sup>    | ≥ 91.8%  |                          |
|                          | 230VAC 10% Load Efficiency <sup>4</sup>   | ≥ 88.8%  |                          |
| Protection               | Leakage Current                           | 0.25mA max. @254vac, 50Hz  | 3.5mA max. @254vac, 50Hz |
|                          | Over-Voltage                              | 60V max., Auto-recovery  |                          |
|                          | Short Circuit                             | Auto-recovery  |                          |
|                          | Over-Current                              | 2.7A max., Auto-recovery   |                          |
| Environmental            | Over-Temperature                          | Auto-recovery  |                          |
|                          | Operating Temperature <sup>5</sup>        | -10°C to +70°C (derate above +40°C)  |                          |
|                          | Operating Humidity                        | 5% to 90% RH max   |                          |
| Safety and EMC Standards | Operating Altitude                        | Up to 5000m  |                          |
|                          | Dielectric Withstand (HI-POT)             | Primary to Secondary: 3000VAC or 4242Vdc for 1min, 10mA  |                          |
|                          | Insulation Resistance                     | Primary to Secondary: >7M ohm for 500VDC   |                          |
|                          | Standards                                 | IEC 62368-1, UL 62368-1 3 <sup>rd</sup> Edition  |                          |
|                          | EMI Emissions                             | EN55032 Class B, FCC Class B, CAN ICES-003(B)/NMB-003(B)<br>Conducted and Radiated   |                          |
|                          | Harmonic Current Emissions                | IEC 61000-3-2  |                          |
| Mechanical               | Immunity                                  | EN 55035/CISPR 35: IEC 61000-4-2 (+/- 15kV air, +/- 8kV contact),<br>IEC 61000-4-3, IEC 61000-4-4, IEC 61000-4-5 (+/- 1kV L-L, 2kV L-G),<br>IEC 61000-4-6, IEC 61000-4-8, IEC 61000-4-11 |                          |
|                          | Dimensions (L x W x H)                    | 141.5mm (5.57in) x 62.5mm (2.46in) x 33mm (1.30in)   |                          |
|                          | Cable Length                              | 1500mm AWG   |                          |
|                          | Output Connector                          | 2.1mm x 5.5mm x 9.5mm barrel   |                          |
| Notes                    | Input Connector                           | IEC 60320 C8   | IEC 60320 C14            |
|                          | 1.  | The specifications defined are at ambient temperature of 25°C, unless otherwise specified.   |                          |
|                          | 2.  | Special order model. Minimum order quantity applies.   |                          |
|                          | 3.  | 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).                |                          |
|                          | 4.  | Efficiency is measured after 30 minutes burn-in.   |                          |
|                          | 5.  | Refer to derating curve.   |                          |

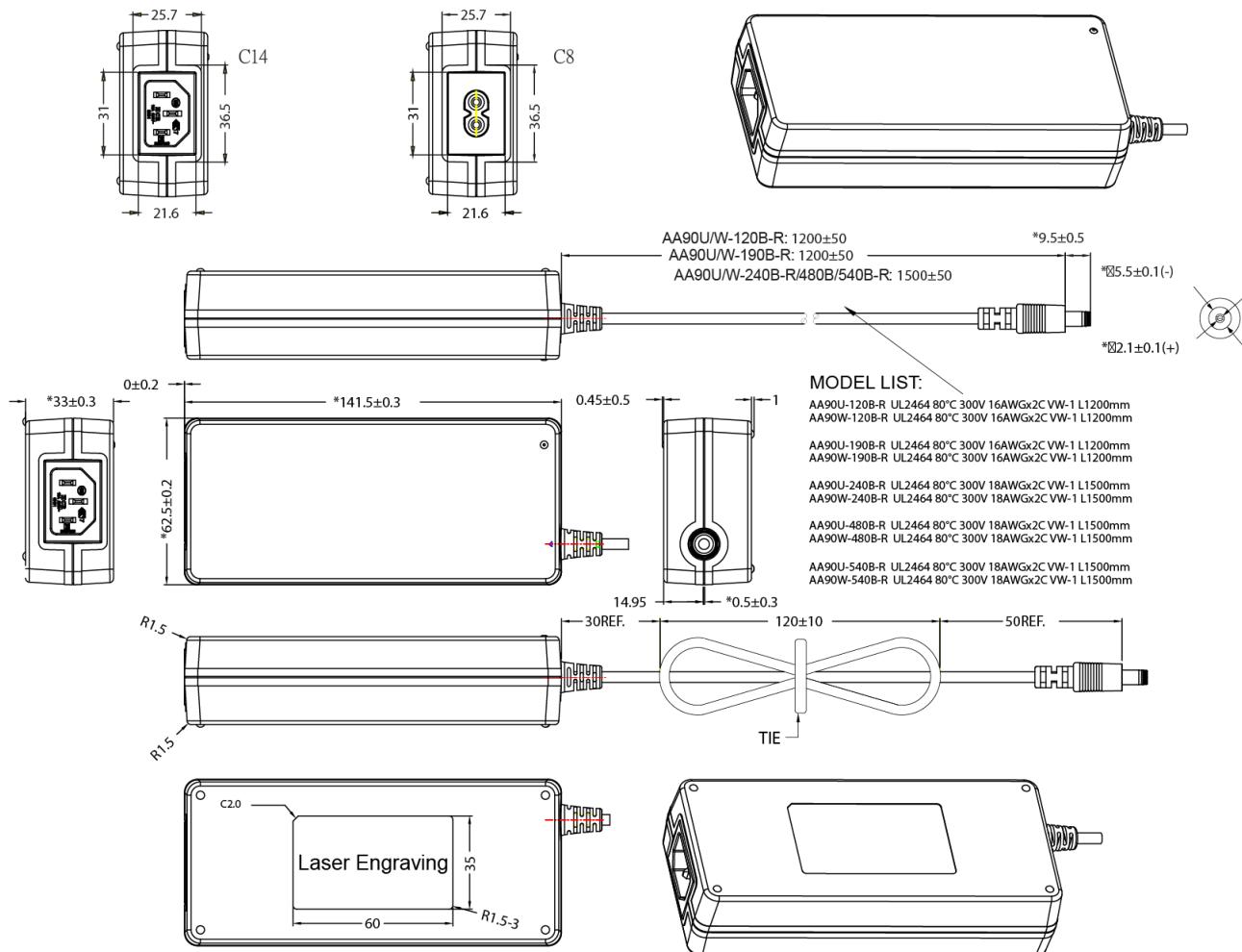
## AA90x Series

Specifications<sup>1</sup>

| Model                    |   | AA90W-540B-R <sup>2</sup>  | AA90U-540B-R             |
|--------------------------|---|--|--------------------------|
| Output                   | DC Output Voltage                         | 54.0V  |                          |
|                          | Max Current                               | 1.67A  |                          |
|                          | Output Power                              | 90.18W   |                          |
|                          | Regulation                                | ± 5%   |                          |
|                          | Ripple & Noise P-P(max) <sup>3</sup>      | 540mV  |                          |
| Input                    | AC Input Voltage Range                    | 90 to 264VAC   |                          |
|                          | AC Input Voltage Rating                   | 100 VAC to 240VAC  |                          |
|                          | AC Input Frequency                        | 47 to 63Hz   |                          |
|                          | Inrush Current                            | 200A @ 240VAC max Load   |                          |
|                          | Power Factor                              | >0.95 @ 120 VAC; >0.90 @ 240 VAC Full Load   |                          |
|                          | No Load Power Consumption at 115VAC Input | ≤ 0.128W   |                          |
|                          | No Load Power Consumption at 230VAC Input | ≤ 0.142W   |                          |
|                          | 115VAC Average Efficiency <sup>4</sup>    | ≥ 91.6%  |                          |
|                          | 230VAC Average Efficiency <sup>4</sup>    | ≥ 91.3%  |                          |
|                          | 230VAC 10% Load Efficiency <sup>4</sup>   | ≥ 87.6%  |                          |
| Protection               | Leakage Current                           | 0.25mA max. @254vac, 50Hz  | 3.5mA max. @254vac, 50Hz |
|                          | Over-Voltage                              | 60V max., Auto-recovery  |                          |
|                          | Short Circuit                             | Auto-recovery  |                          |
|                          | Over-Current                              | 2.4A max., Auto-recovery   |                          |
| Environmental            | Over-Temperature                          | Auto-recovery  |                          |
|                          | Operating Temperature <sup>5</sup>        | -10°C to +70°C (derate above +40°C)  |                          |
|                          | Operating Humidity                        | 5% to 90% RH max   |                          |
| Safety and EMC Standards | Operating Altitude                        | Up to 5000m  |                          |
|                          | Dielectric Withstand (HI-POT)             | Primary to Secondary: 3000VAC or 4242Vdc for 1min, 10mA  |                          |
|                          | Insulation Resistance                     | Primary to Secondary: >7M ohm for 500VDC   |                          |
|                          | Standards                                 | IEC 62368-1, UL 62368-1 3 <sup>rd</sup> Edition  |                          |
|                          | EMI Emissions                             | EN55032 Class B, FCC Class B, CAN ICES-003(B)/NMB-003(B)<br>Conducted and Radiated   |                          |
|                          | Harmonic Current Emissions                | IEC 61000-3-2  |                          |
| Mechanical               | Immunity                                  | EN 55035/CISPR 35: IEC 61000-4-2 (+/- 15kV air, +/- 8kV contact),<br>IEC 61000-4-3, IEC 61000-4-4, IEC 61000-4-5 (+/- 1kV L-L, 2kV L-G),<br>IEC 61000-4-6, IEC 61000-4-8, IEC 61000-4-11 |                          |
|                          | Dimensions (L x W x H)                    | 141.5mm (5.57in) x 62.5mm (2.46in) x 33mm (1.30in)   |                          |
|                          | Cable Length                              | 1500mm AWG   |                          |
|                          | Output Connector                          | 2.1mm x 5.5mm x 9.5mm barrel   |                          |
| Notes                    | Input Connector                           | IEC 60320 C8   | IEC 60320 C14            |
|                          | 1.  | The specifications defined are at ambient temperature of 25°C, unless otherwise specified.   |                          |
|                          | 2.  | Special order model. Minimum quantity order applies.   |                          |
|                          | 3.  | 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).                |                          |
|                          | 4.  | Efficiency is measured after 30 minutes burn-in.   |                          |
|                          | 5.  | Refer to derating curve.   |                          |

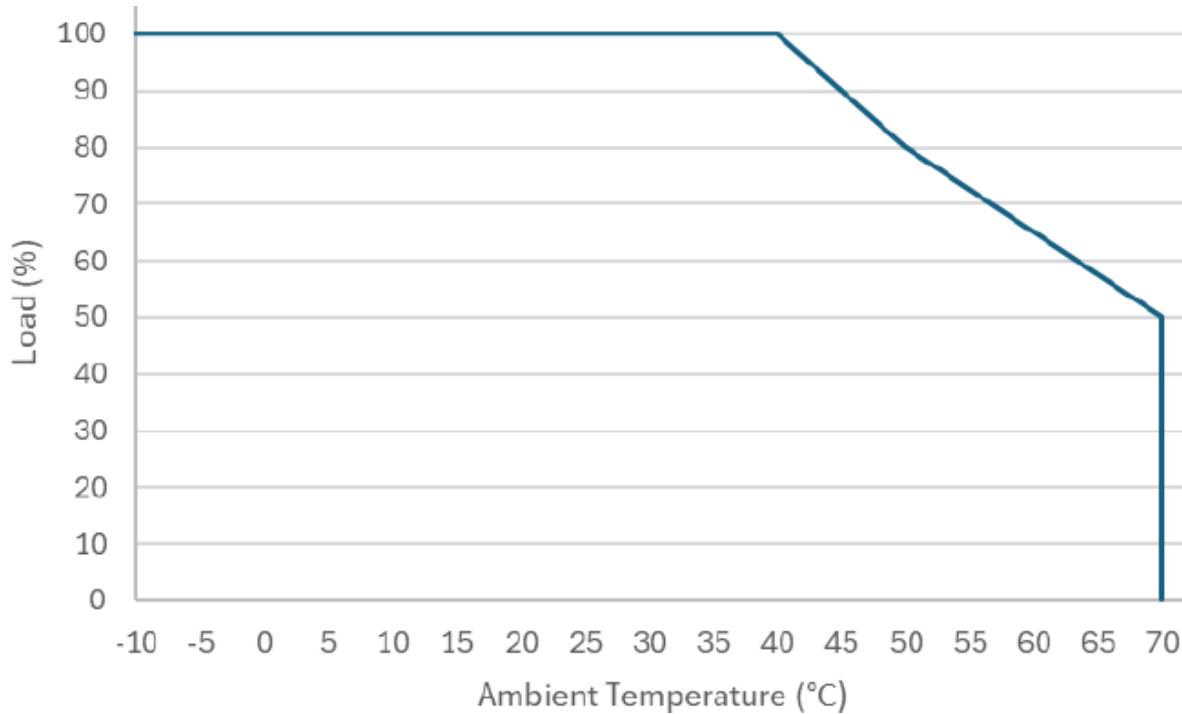
## AA90x Series

## Outline Drawing (mm)



## AA90x Series

## Derating Curve





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

**MODELS**

AA90W-120B-R, AA90U-120B-R,  
AA90W-190B-R, AA90U-190B-R,  
AA90W-240B-R, AA90U-240B-R,  
AA90W-480B-R, AA90U-480B-R,  
AA90W-540B-R, AA90U-540B-R

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

*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.*

## AA90W Series Line Cords



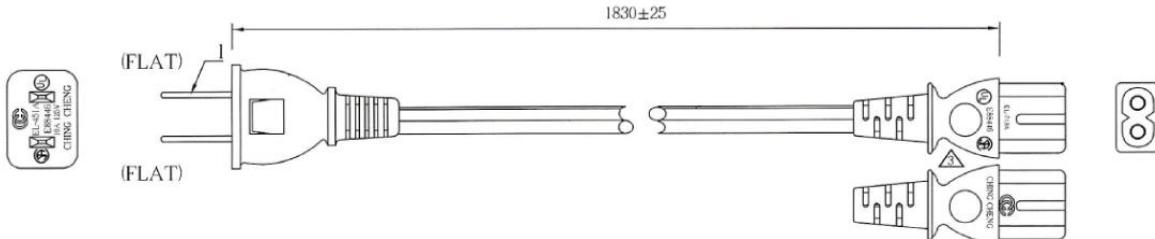
Sold Separately

| Model            |                 | AC15WNA-R  | AC15WEU-R  | AC15WUK-R  |
|------------------|-----------------|--|--|--|
| Specifications   | Plug Type       | North America<br>NEMA 1-15P  | Continental Europe<br>CEE 7XVI   | United Kingdom<br>BS 1363  |
|                  | Connector       | IEC320 C7  | IEC320 C7  | IEC320 C7  |
|                  | Wire Size       | 18 AWG   | 0.75mm   | 0.75mm   |
|                  | Temperature     | 60°C   | 60°C   | 60 °C  |
|                  | Amperage Rating | 7A   | 2.5A   | 2.5A   |
|                  | Voltage Rating  | 125V   | 250V   | 250V   |
|                  | Cable Length    | 1830mm   | 1830mm   | 1830mm   |
| Safety Approvals |                 | CSA; UL  | CEBEC; DEMKO; DVE;<br>FIMKO; GOST; IMQ;<br>KEMA; NEMKO; NF; OVE;<br>SEMKO; SEV   | BSI; Safety Mark   |
| Photos           |                 | <br> | <br> | <br> |

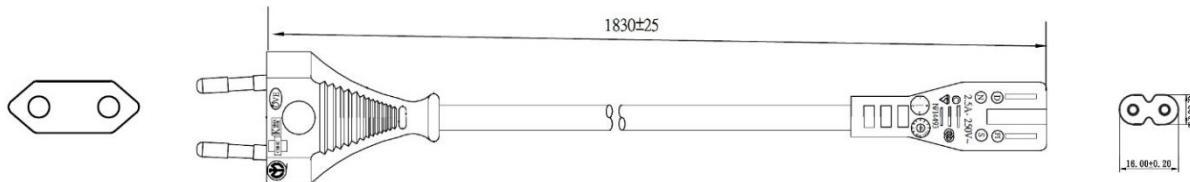
## AA90W Series Line Cords

## Outline Drawing (mm)

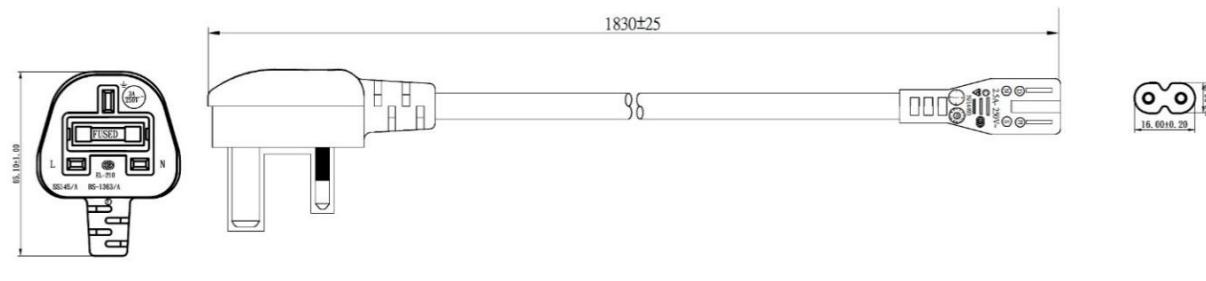
## AC15WNA-R



## AC15WEU-R



## AC15WUK-R



## AA90U Series Line Cords



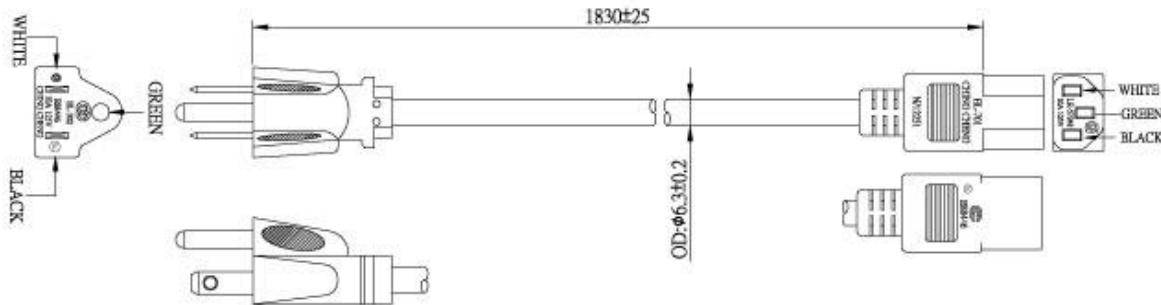
Sold Separately

| Model            |                 | AC30UNA-R   | AC30UEU-R   | AC30UUK-R   |
|------------------|-----------------|---|---|---|
| Specifications   | Plug Type       | North America<br>NEMA 5-15P   | Continental Europe<br>CEE 7VIII   | United Kingdom<br>BS 1363   |
|                  | Connector       | IEC320 C13  | IEC320 C13  | IEC320 C13  |
|                  | Wire Size       | 18 AWG  | 0.75mm  | 1.0mm   |
|                  | Temperature     | 60°C  | 60°C  | 70 °C   |
|                  | Amperage Rating | 10A   | 6A  | 10A   |
|                  | Voltage Rating  | 125V  | 250V  | 250V  |
|                  | Cable Length    | 1830mm  | 1830mm  | 2500mm  |
| Safety Approvals |                 | CSA; UL   | CEBEC; DEMKO;<br>DVE; FIMKO; GOST;<br>IMQ; KEMA;<br>NEMKO; NF; OVE;<br>SEMKO          | BSI; Safety Mark  |
| Photos           |                 |  |  |  |
|                  |                 |  |  |  |

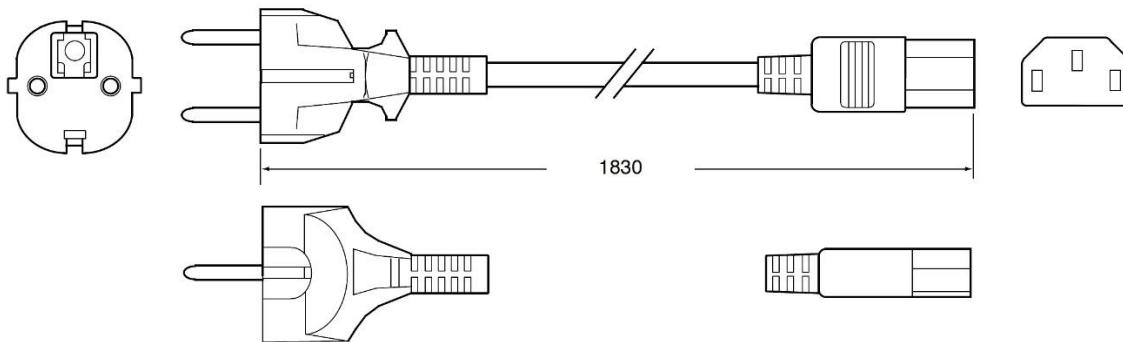
## AA90U Series Line Cords

## Outline Drawing (mm)

## AC30UNA-R



## AC30UEU-R



## AC30UUK-R

