

Qualtek

Electronics Corporation

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Division

Power Supplies

- AC/DC Switch Mode
- AC/DC Adapters



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About Us



Qualtek Electronics Corp. was established in 1980 and has become a world leader in fan accessories, primary power components, EMI power line filters, cable assemblies, domestic and international power cords, and heat shrink products. Qualtek provides high quality, low cost products and superior customer service.

Qualtek is known for its persistent commitment to quality and technology. Not simply a manufacturer, Qualtek is equipped with a strategic global network of resources and expertise in various fields and provides a select portfolio of components, products and consultant services as solutions to the electronics industry. According to geographical peculiarities, various regions have different strengths in product design and production. Having anticipated the growth opportunity through the commercial exchange of products, information and technologies across the borders, Qualtek established an extensive international network, professional operations, efficient logistics, competent marketing and sales organization to facilitate this mission.

Qualtek supports its customers through a global network of offices, engineers, manufacturer's representatives, and authorized stocking distributors. Qualtek also provides tooling capabilities to modify or customize products to meet specific customer requirements.

Qualtek is an ISO 9001 registered facility and our products are designed, manufactured, and tested to meet the domestic and international safety requirements. We are committed to the continual improvement of our products, our service and our quality management system. A full range of products are maintained in inventory for quick, on-time deliveries.

| AC/DC Enclosed Frame Power Supplies | | | | | |
|---|--------------|-------------------------------------|--|-----------------------------------|------|
| Series | Output Power | Output Voltage VDC | Description | Dimensions | Page |
| AC/DC Enclosed Frame Power Supply Overview | | | | | 5 |
| QPD-15 | 15W | 3, 3, 5, 12, 15, 24 | Universal AC Input 88-264VAC, Single Output, No load power consumption <0.5W, Conformal Coating on PCB soldering side, Operating temp: -25°C to +70°C | 79 x 51 x 28.8 | 6 |
| QPD-25 | 25W | 3, 3, 5, 12, 15, 24 | Universal AC Input 88-264VAC, Single Output, No load power consumption <0.5W, Conformal Coating on PCB soldering side, Operating temp: -25°C to +70°C | 79 x 51 x 28.8 | 8 |
| QPD-35 | 35W | 5, 12, 15, 24, 48 | Universal AC Input 90-264VAC, Single Output, No load power consumption <0.5W, Conformal Coating on PCB soldering side, Operating temp: -25°C to +70°C, Operating altitude up to 5000M | 101.6 x 63.5 x 33 | 10 |
| QPD-50 | 50W | 5, 12, 15, 24, 48 | Universal AC Input 90-264VAC, Single Output, No load power consumption <0.5W, Conformal Coating on PCB soldering side, Operating temp: -25°C to +70°C, Operating altitude up to 5000M | 99 x 82 x 35 | 12 |
| QPD-75 | 75W | 5, 12, 15, 24, 48 | Universal AC Input 90-264VAC, Single Output, No load power consumption <0.5W, Conformal Coating on PCB soldering side, Operating temp: -25°C to +70°C, Operating altitude up to 5000M | 129 x 98 x 38 | 14 |
| QPD-100 | 100W | 5, 12, 15, 24, 48 | Universal AC Input 90-264VAC, Single Output, Operating temp: -20°C to +70°C | 160 x 98 x 38 | 16 |
| QPD-150 | 150W | 5, 12, 15, 24, 48 | Universal AC Input 88-264VAC Selectable by switch, Single Output, Operating temp: -20°C to +70°C | 199 x 98 x 38 | 18 |
| QPDF-100 | 100W | 5, 12, 15, 24, 36, 48 | Universal AC Input 90-264VAC, Single Output, Built-in active Power Factor Correction PF>0.95, Operating temp: -10°C to +60°C | 194 x 99 x 50 | 20 |
| QPDF-150 | 150W | 5, 12, 15, 24, 36, 48 | Universal AC Input 85-264VAC, Single Output, Built-in active Power Factor Correction PF>0.95, Operating temp: -25°C to +70°C | 194 x 99 x 50 | 22 |
| QPWF-200 QPWF-200L | 200W | 5, 12, 24, 48 | Universal AC Input 90-264VAC, Single Output, Compact Fanless Design, Built-in active Power Factor Correction PF>0.95, Conformal Coating on PCB soldering side, Operating temp: -20°C to +70°C, Operating altitude up to 5000M | 199 x 99 x 50 199 x 99 x 38(L) | 24 |
| QGKF-200 | 200W | 5, 12, 24, 48 | Universal AC Input 85-264VAC, Single Output, Compact Design, Built-in active Power Factor Correction PF>0.95, Conformal Coating on both PCB sides, Operating temp: -25°C to +70°C, Built-in DC cooling fan, Operating altitude up to 5000M | 199 x 99 x 50 | 26 |
| QGKF-240 | 240W | 5, 12, 24, 48 | Universal AC Input 85-264VAC, Single Output, Compact Design, Built-in active Power Factor Correction PF>0.95, Conformal Coating on both PCB sides, Operating temp: -25°C to +70°C, Built-in DC cooling fan, Operating altitude up to 5000M | 199 x 99 x 50 | 28 |
| QGKF-320 | 320W | 5, 12, 24, 48 | Universal AC Input 85-264VAC, Single Output, Compact Design, Built-in active Power Factor Correction PF>0.95, Conformal Coating on both PCB sides, Operating temp: -25°C to +70°C, Built-in DC cooling fan, Operating altitude up to 5000M | 199 x 99 x 50 | 30 |
| QPDF-320 | 320W | 3, 3, 4, 5, 7.5, 12, 24, 28, 36, 48 | Universal AC Input 88-264VAC, Single Output, Built-in active Power Factor Correction PF>0.95, Conformal Coating on PCB soldering side, Operating temp: -25°C to +70°C, Built-in DC cooling fan. | 226.5 x 115 x 50 | 32 |
| QPDF-480 | 480W | 12, 24, 27, 36, 48 | Universal AC Input 90-264VAC, Single Output, Built-in active Power Factor Correction PF>0.96, 1U Low Profile Design, Operating temp: -30°C to +70°C, Built-in DC cooling fan. | 218 x 116.5 x 41 | 34 |
| QPDF-500 | 500W | 12, 24, 27.5, 48 | Universal AC Input 88-264VAC, Single Output, Built-in active Power Factor Correction PF>0.95, Operating temp: -20°C to +70°C, Built-in DC cooling fan. | 170 x 120 x 83.5 | 36 |
| QPDF-600 | 600W | 12, 24, 36, 48 | Universal AC Input 90-264VAC, Single Output, Built-in active Power Factor Correction PF>0.96, 1U Low Profile Design, Operating temp: -30°C to +70°C, Built-in DC cooling fan. | 218 x 116.5 x 41 | 38 |
| QPDF-800 | 800W | 24, 27, 48 | Universal AC Input 90-264VAC, Single Output, Built-in active Power Factor Correction PF>0.96, 1U Low Profile Design, Operating temp: -30°C to +70°C, Built-in DC cooling fan. | 226 x 116.5 x 41 | 40 |

| AC/DC Open Frame Power Supplies | | | | | |
|---|--------------|-------------------------|---|-------------------|------|
| Series | Output Power | Output Voltage VDC | Description | Dimensions | Page |
| AC/DC Open Frame Power Supply Overview | | | | | 42 |
| QPS-20 | 20W | 3, 3, 5, 12, 15, 24, 48 | Universal AC Input 90-264VAC, Single Output, Ultra-miniature size, Operating temp: -20°C to +60°C | 89 x 51 x 20 | 43 |
| QPS-60 | 60W | 5, 12, 15, 24, 48 | Universal AC Input 90-264VAC, Single Output, High Efficiency, low power consumption, Operating temp: -25°C to +70°C | 101.6 x 50.8 x 30 | 45 |
| QPSF-125 | 125W | 5, 12, 15, 24, 48 | Universal AC Input 90-264VAC, Single Output, Remote Sense Function, Built-in active Power Factor Correction PF>0.95, Operating temp: -20°C to +70°C | 127 x 76 x 30.5 | 47 |

| Output Plug Types | | | | | |
|------------------------------------|--|--|--|--|------|
| AC/DC Adapters - Output Plug Specs | | | | | Page |
| | | | | | 49 |

| AC/DC Desktop Power Supplies | | | | | |
|--|--------------|---|---|---------------|------|
| Series | Output Power | Output Voltage VDC | Description | Dimensions | Page |
| AC/DC Desktop Power Supplies Overview | | | | | 51 |
| QADA-18 | 18W | 4.5, 5, 7, 7.5, 9, 10, 12, 13.5, 15, 16, 18, 20, 24 | Universal AC Input 100-240VAC, Single Output, No load power consumption <0.3W, Level V Efficiency, Available with IEC C8 Inlet, Operating temp: 0°C to 40°C | 88 x 50 x 34 | 52 |
| QADA-24 | 24W | 5, 5.9, 7, 7.5, 9, 9.5, 12, 15, 24, 48 | Universal AC Input 100-240VAC, Single Output, No load power consumption <0.3W, Level V Efficiency, Available with IEC C8 Inlet, Operating temp: 0°C to 40°C | 88 x 50 x 34 | 54 |
| QADB-24 | 24W | 5, 5.9, 7, 7.5, 9, 9.5, 12, 15, 24, 48 | Universal AC Input 100-240VAC, Single Output, No load power consumption <0.3W, Level V Efficiency, Available with IEC C6 and C14 Inlet, Operating temp: 0°C to 40°C | 100 x 50 x 33 | 56 |

| AC/DC Desktop Power Supplies con't | | | | | |
|------------------------------------|--------------|---|--|---------------|------|
| Series | Output Power | Output Voltage VDC | Description | Dimensions | Page |
| QADA-30 | 30W | 5, 7.5, 8.4, 8.5, 9, 12, 13.5, 15, 18, 24 | Universal AC Input 100-240VAC, Single Output, No load power consumption <0.3W, Level V Efficiency, Available with IEC C8 Inlet, Operating temp: 0°C to 40°C | 101 x 51 x 34 | 58 |
| QADB-30/40 | 30/40W | 18, 18.5, 19, 19.5, 20 | Universal AC Input 100-240VAC, Single Output, No load power consumption <0.3W, Level V Efficiency, Available with IEC C6 and C8 Inlet, Operating temp: 0°C to 40°C | 88 x 35 x 27 | 60 |
| QADA-40 | 40W | 9, 12, 15, 16, 18, 24 | Universal AC Input 100-240VAC, Single Output, No load power consumption <0.3W, Level V Efficiency, Available with IEC C6, C8, and C14 Inlet, Operating temp: 0°C to 40°C | 100 x 50 x 34 | 62 |
| QADA-50 | 50W | 9, 12, 13.5, 15, 18, 19, 20, 24, 48 | Universal AC Input 100-240VAC, Single Output, No load power consumption <0.3W, Level V Efficiency, Available with IEC C6, C8, and C14 Inlet, Operating temp: 0°C to 40°C | 115 x 53 x 38 | 64 |
| QADA-65/72 | 65/72W | 12, 15, 16, 18, 19, 20, 24, 30, 32, 48 | Universal AC Input 100-240VAC, Single Output, No load power consumption <0.5W, Level V Efficiency, Available with IEC C6, C8, and C14 Inlet, Operating temp: 0°C to 40°C | 115 x 53 x 38 | 66 |
| QADB-65 | 65W | 15, 16, 18, 18.5, 19, 20, 24 | Universal AC Input 100-240VAC, Single Output, No load power consumption <0.21W, Level V Efficiency, Available with IEC C6 Inlet, Operating temp: 0°C to 40°C | 108 x 46 x 32 | 68 |
| QADA-90 | 90W | 12, 15, 16, 18, 19, 20, 24, 30, 48 | Universal AC Input 100-240VAC, Single Output, No load power consumption <0.5W, Level V Efficiency, Available with IEC C6 and C14 Inlet, Operating temp: 0°C to 40°C | 151 x 64 x 36 | 70 |
| QADA-120 | 120W | 12, 15, 16, 18, 19, 20, 24, 30, 48 | Universal AC Input 100-240VAC, Single Output, No load power consumption <0.5W, Level V Efficiency, Available with IEC C6 and C14 Inlet, Operating temp: 0°C to 40°C | 168 x 66 x 39 | 72 |
| QADA-160 | 160W | 12, 19, 24, 48 | Universal AC Input 100-240VAC, Single Output, No load power consumption <0.5W, Level V Efficiency, Available with IEC C6 and C14 Inlet, Operating temp: 0°C to 40°C | 175 x 74 x 42 | 74 |
| QADA-200 | 200W | 12, 13.5, 18, 19, 20, 24, 48 | Universal AC Input 100-240VAC, Single Output, No load power consumption <0.5W, Level V Efficiency, Available with IEC C6 and C14 Inlet, Operating temp: 0°C to 40°C, Available with optional ON/OFF Switch | 183 x 81 x 42 | 76 |

| AC/DC Wall Mount Power Supplies | | | | | |
|--|--------------|--|---|----------------|------|
| Series | Output Power | Output Voltage VDC | Description | Dimensions | Page |
| AC/DC Wall Mount Power Supplies Overview | | | | | 78 |
| QFAW | 5/6W | 5, 6 | Universal AC Input 100-240VAC, Single Output, USB A Female output connection, No load power consumption <0.3W, Level V Efficiency, Operating temp: -20°C to 40°C | 38.6 x 30 x 30 | 79 |
| QAWA-5 | 5W | 3, 3.3, 4.2, 4.5, 5, 6, 7.5, 9, 12, 15 | Universal AC Input 100-240VAC, Single Output, No load power consumption <0.1W, Level V Efficiency, Available with US, EU, UK, and AU plugs, Operating temp: 0°C to 40°C | 57 x 43 x 26 | 81 |
| QAWA-10 | 10W | 3.3, 4.5, 5, 6, 7.5, 8.4, 9, 12, 13.5, 15, 18, 24 | Universal AC Input 100-240VAC, Single Output, No load power consumption <0.3W, Level V Efficiency, Available with US, EU, UK, and CN plugs, Operating temp: 0°C to 40°C | 72 x 34 x 59 | 83 |
| QAWA-18 | 18W | 4.5, 5, 5.9, 7, 7.5, 9, 10, 12, 13.5, 15, 16, 18, 20, 24 | Universal AC Input 100-240VAC, Single Output, No load power consumption <0.3W, Level V Efficiency, Available with US, EU, UK, AU, and CN plugs, Operating temp: 0°C to 40°C | 72 x 34 x 69 | 85 |
| QAWB-18 | 18W | 4.5, 5, 5.9, 7, 7.5, 9, 10, 12, 13.5, 15, 16, 18, 20, 24 | Interchangeable AC Plugs, Universal AC Input 100-240VAC, Single Output, No load power consumption <0.3W, Level V Efficiency, Available with US, EU, UK, AU, and CN plugs, Operating temp: 0°C to 40°C | 78 x 52 x 41 | 87 |
| QAWA-24 | 24W | 5, 5.9, 7, 7.5, 9, 9.5, 12, 15, 24, 48 | Universal AC Input 100-240VAC, Single Output, No load power consumption <0.3W, Level V Efficiency, Available with US, EU, UK, AU, and CN plugs, Operating temp: 0°C to 40°C | 72 x 34 x 69 | 89 |
| QAWB-24 | 24W | 5, 5.9, 7.5, 9, 9.5, 12, 15, 24, 48 | Interchangeable AC Plugs, Universal AC Input 100-240VAC, Single Output, No load power consumption <0.3W, Level V Efficiency, Available with US, EU, UK, AU, and CN plugs, Operating temp: 0°C to 40°C | 78 x 52 x 41 | 91 |
| QAWA-30/36 | 30/36W | 5, 7.5, 9, 12, 13.5, 15, 18, 24, 30, 36 | Universal AC Input 100-240VAC, Single Output, No load power consumption <0.3W, Level V Efficiency, Available with US, EU, UK, and AU plugs, Operating temp: 0°C to 40°C | 95 x 34 x 72 | 93 |
| QAWB-30/36 | 30/36W | 5, 7.5, 9, 12, 13.5, 15, 18, 24, 30, 36 | Interchangeable AC Plugs, Universal AC Input 100-240VAC, Single Output, No load power consumption <0.3W, Level V Efficiency, Available with US, EU, UK, AU, and CN plugs, Operating temp: 0°C to 40°C | 95 x 35 x 64 | 95 |

| AC/DC Desktop Medical Power Supplies | | | | | |
|---|--------------|---------------------------|---|---------------|------|
| Series | Output Power | Output Voltage VDC | Description | Dimensions | Page |
| AC/DC Desktop Medical Power Supplies Overview | | | | | 97 |
| QAMA-30 | 30W | 5, 7.5, 9, 12, 15, 18, 24 | 60601-1 Medical Approved, Universal AC Input 100-240VAC, Single Output, No load power consumption <0.3W, Level V Efficiency, Available with IEC C6, C8, C14, and C18 Inlet, Operating temp: 0°C to 40°C | 100 x 50 x 34 | 98 |
| QAMA-65 | 65W | 12, 15, 18, 19, 24, 36 | 60601-1 Medical Approved, Universal AC Input 100-240VAC, Single Output, No load power consumption <0.5W, Level V Efficiency, Available with IEC C6, C8, C14, and C18 Inlet, Operating temp: 0°C to 40°C | 119 x 60 x 36 | 100 |
| QAMA-90 | 90W | 12, 15, 19, 24, 36, 48 | 60601-1 Medical Approved, Universal AC Input 100-240VAC, Single Output, No load power consumption <0.5W, Level V Efficiency, Available with IEC C6 and C14 Inlet, Operating temp: 0°C to 40°C | 168 x 66 x 39 | 102 |
| QAMA-120 | 120W | 12, 15, 19, 24, 36, 48 | 60601-1 Medical Approved, Universal AC Input 100-240VAC, Single Output, No load power consumption <0.5W, Level V Efficiency, Available with IEC C6 and C14 Inlet, Operating temp: 0°C to 40°C | 175 x 74 x 42 | 104 |
| QAMA-160 | 160W | 12, 19, 24, 48 | 60601-1 Medical Approved, Universal AC Input 100-240VAC, Single Output, No load power consumption <0.5W, Level V Efficiency, Available with IEC C6 and C14 Inlet, Operating temp: 0°C to 40°C | 183 x 81 x 42 | 106 |

AC/DC Enclosed Frame Power Supplies

- Output power: 15W - 800W
- Universal input
- High efficiency and reliability
- Available with power factor correction
- Available with conformal coating





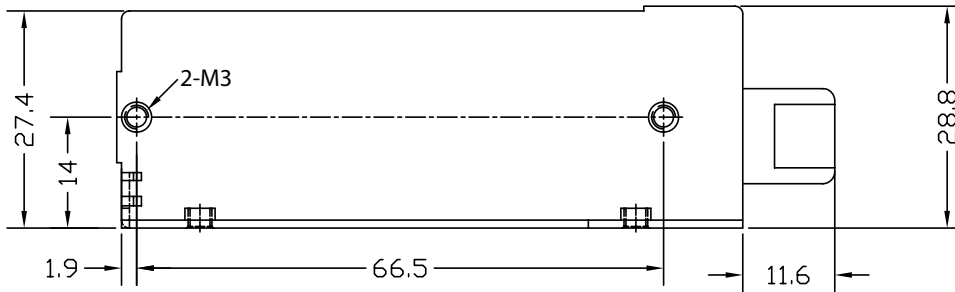
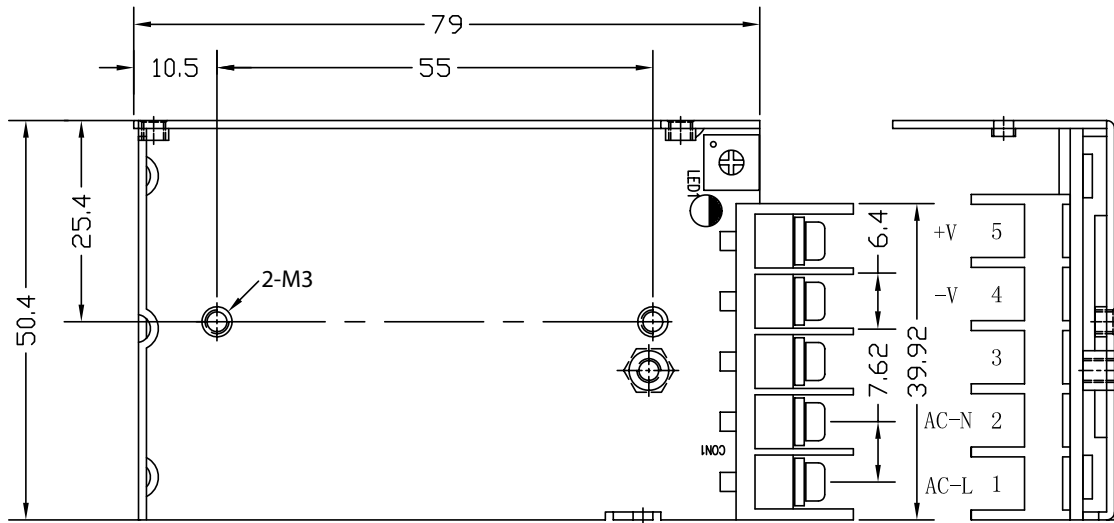
Features:

- Universal AC input/ Full range
- No Load Power Consumption <0.5W
- High Efficiency, and High Reliability
- Output Protections: OLP/OVP/SCP
- Wide operating ambient temperature (-25°C~70°C)
- All using 105°C long life electrolytic capacitors.
- 100% full load burn-in test
- PCB soldering side with conformal coating

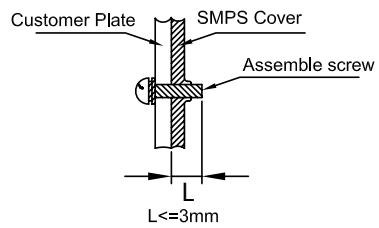


| Model | QPD-15-3.3 | QPD-15-5 | QPD-15-12 | QPD-15-15 | QPD-15-24 | |
|--------------------------------------|--|-----------|-------------|-------------|-------------|-----|
| Output Characteristics | | | | | | |
| DC Output | 3.3V | 5V | 12V | 15V | 24V | |
| Rated Current | 4A | 3A | 1.3A | 1A | 0.7A | |
| Current Range | 0~4A | 0~3A | 0~1.3A | 0~1.0A | 0~0.7A | |
| Ripple and Noise | 50mV | 50mV | 120mV | 120mV | 120mV | |
| Voltage ADJ. Range | 3.0V~3.6V | 4.4V~5.5V | 10.0V~13.0V | 13.8V~16.1V | 20.7V~26.7V | |
| Voltage Accuracy | ±2.0% | ±2.0% | ±1.0% | ±1.0% | ±1.0% | |
| Line Regulation | ±0.5% | ±0.5% | ±0.5% | ±0.5% | ±0.5% | |
| Load Regulation | ±2.0% | ±2.0% | ±1.0% | ±1.0% | ±1.0% | |
| Set-up Time | <2.0s (115VAC input, full load); <1.0s (230VAC input, full load) | | | | | |
| Hold-up Time | >10ms (115VAC input, full load); >20ms (230VAC input, full load) | | | | | |
| Temperature Coefficient | ±0.03%/°C | | | | | |
| Overshoot and Undershoot | <5.0% | | | | | |
| Input Characteristics | | | | | | |
| Voltage Range | 88VAC~264VAC, 124-370VDC | | | | | |
| Frequency Range | 47Hz-63Hz | | | | | |
| Efficiency (Typical) | 115VAC Input | 70% | 76% | 80% | 82% | 84% |
| | 230VAC Input | 71% | 78% | 82% | 83% | 85% |
| AC Current (max) | 0.7A | | | | | |
| Inrush Current (Typical) | 20A@115VAC Cold Start 40A@230VAC Cold start | | | | | |
| Leakage Current | Input-Output: <0.25mA Input-PG: <3.5mA | | | | | |
| Protection | | | | | | |
| Over Load (OLP) | 105%~150% of rated output current, hiccup mode, auto recovery | | | | | |
| Over Voltage (OVP) | 105%~150% of rated output voltage, constant voltage | | | | | |
| Short Circuit (SCP) | Long-term mode, auto recovery | | | | | |
| Environmental Characteristics | | | | | | |
| Operating Amb. Temp. & Hum | -25°C~70°C; 20%~90% RH Non-Condensing | | | | | |
| Storage Temp. & Hum | -40°C~85°C; 10%~95% RH Non-Condensing | | | | | |
| Safety Standards | UL60950-1; EN60950-1: 2006 | | | | | |
| Withstand Voltage | Primary-Secondary: 3.0KVAC;≤10mA. Primary-PG: 1.5KVAC;≤10mA. Secondary-PG: 0.5KVDC;≤10mA | | | | | |
| Isolation Resistance | ≥100M ohms | | | | | |
| EMI Conduction & Radiation | Compliance to EN55022(CISPR22) Class B | | | | | |
| Harmonic Current | Compliance to EN61000-3-2, -3 | | | | | |
| EMS Immunity | Compliance to EN6100-4-2, 3, 4, 5, 6, 8, 11; ENV50204, light industry level, criteria A | | | | | |
| General Characteristics | | | | | | |
| MTBF (MIL-HDBK-217F) | More than 200,000Hrs (25°C, Full load) | | | | | |
| Dimension (LxWxH) | 79x51x28.8mm | | | | | |
| Packing | 48PCS/CTN. G.W: 10.4kgs | | | | | |
| Cooling Method | Cooling by free air convection | | | | | |

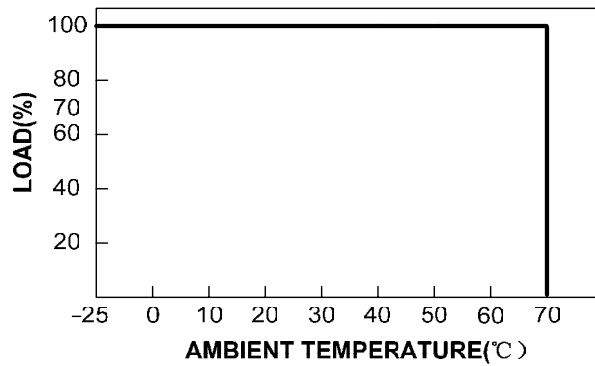
MECHANICAL SPECIFICATIONS



| Pin No. | Assignment |
|---------|--------------|
| 1 | AC-L |
| 2 | AC-N |
| 3 | F.G |
| 4 | DC output -V |
| 5 | DC output +V |



DERATING CURVE



UNIT: mm



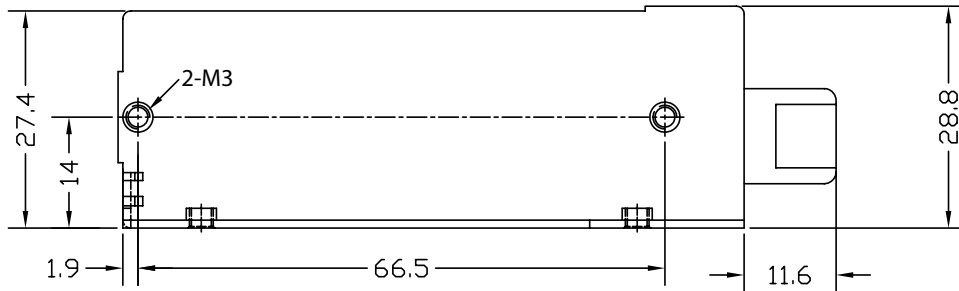
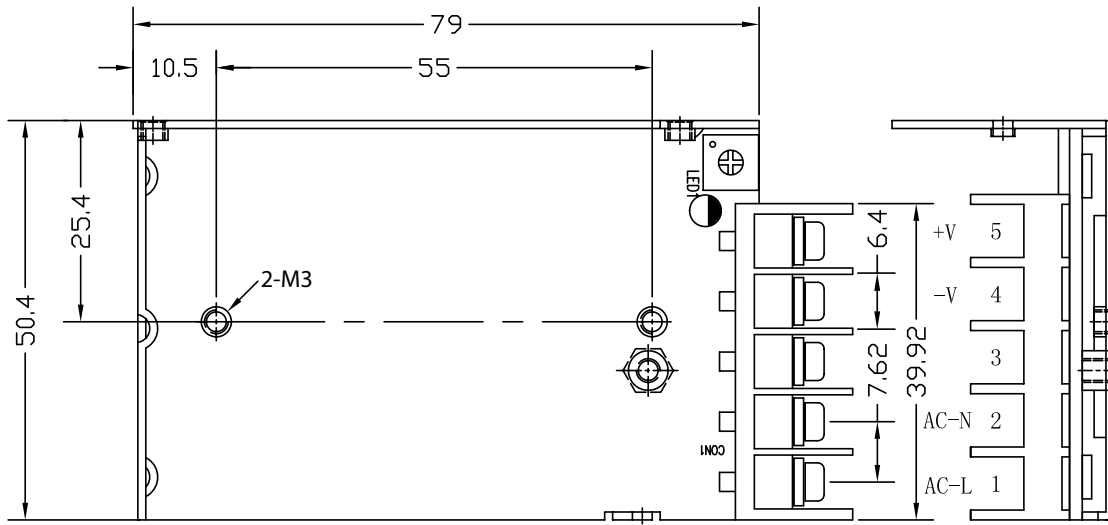
Features:

- Universal AC input/ Full range
- No Load Power Consumption <0.5W
- Wide Operating Ambient Temperature (-25°C~70°C)
- High Efficiency, and High Reliability
- Output Protections: OLP/OVP/SCP
- All using 105°C long life electrolytic capacitors.
- 100% full load burn-in test
- PCB soldering side with conformal coating

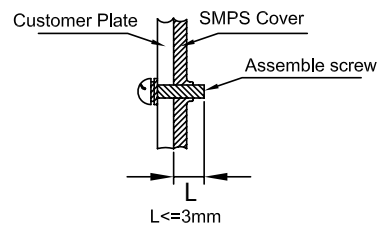


| Model | QPD-25-3.3 | QPD-25-5 | QPD-25-12 | QPD-25-15 | QPD-25-24 | |
|--------------------------------------|--|-----------|-------------|-------------|-------------|-----|
| Output Characteristics | | | | | | |
| DC Output | 3.3V | 5V | 12V | 15V | 24V | |
| Rated Current | 5A | 5A | 2.1A | 1.6A | 1.1A | |
| Current Range | 0~5A | 0~5A | 0~2.1A | 0~1.6A | 0~1.1A | |
| Ripple and Noise (-20°C~70°C) | <50mV | <50mV | <120mV | <120mV | <120mV | |
| Voltage ADJ. Range | 3.0V~3.6V | 4.4V~5.5V | 10.0V~13.0V | 13.8V~16.1V | 20.7V~26.7V | |
| Voltage Accuracy | ±2.0% | ±2.0% | ±1.0% | ±1.0% | ±1.0% | |
| Line Regulation | ±0.5% | ±0.5% | ±0.5% | ±0.5% | ±0.5% | |
| Load Regulation | ±2.0% | ±2.0% | ±1.0% | ±1.0% | ±1.0% | |
| Set-up Time | <2.0s (115VAC input, full load); <1.0s (230VAC input, full load) | | | | | |
| Hold-up Time | >14ms (115VAC input, full load); >30ms (230VAC input, full load) | | | | | |
| Temperature Coefficient | ±0.03%/°C | | | | | |
| Overshoot and Undershoot | <5.0% | | | | | |
| Input Characteristics | | | | | | |
| Voltage Range | 88VAC~264VAC, 127VDC~370VDC | | | | | |
| Frequency Range | 47Hz-63Hz | | | | | |
| Efficiency (Typical) | 115VAC Input | 70% | 76% | 80% | 82% | 84% |
| | 230VAC Input | 71% | 78% | 82% | 83% | 85% |
| AC Current (max) | 0.7A | 0.7A | 0.7A | 0.7A | 0.7A | |
| Inrush Current (Typical) | 20A@115VAC Cold start 40A@230VAC Cold start | | | | | |
| Leakage Current | Input-Output: <0.25mA Input-PG: <0.75mA | | | | | |
| Protection | | | | | | |
| Over Load (OLP) | 105%~150% of rated output current, hiccup mode, auto recovery | | | | | |
| Over Voltage (OVP) | 105%~150% of rated output voltage, constant voltage | | | | | |
| Short Circuit (SCP) | Long-term mode, auto recovery | | | | | |
| Environmental Characteristics | | | | | | |
| Operating Amb. Temp. & Hum | -25°C~70°C; 20%~90% RH Non-Condensing | | | | | |
| Storage Temp. & Hum | -40°C~85°C; 10%~95% RH Non-Condensing | | | | | |
| Safety Standards | UL60950-1; EN60950-1: 2006 | | | | | |
| Withstand Voltage | Primary-Secondary: 3.0KVAC;≤10mA. Primary-PG: 1.5KVAC;≤10mA. Secondary-PG: 0.5KVDC;≤10mA | | | | | |
| Isolation Resistance | ≥100M ohms | | | | | |
| EMI Conduction & Radiation | Compliance to EN55022(CISPR22) Class B | | | | | |
| Harmonic Current | Compliance to EN61000-3-2,-3 | | | | | |
| EMS Immunity | Compliance to EN61000-4-2, 3, 4, 5, 6, 8, 11; ENV50204, light industry level, criteria A | | | | | |
| General Characteristics | | | | | | |
| MTBF (MIL-HDBK-217F) | More than 200,000Hrs (25°C, Full load) | | | | | |
| Dimension (LxWxH) | 79x51x28.8mm | | | | | |
| Packing | 48PCS/CTN. G.W: 10.4kgs | | | | | |
| Cooling Method | Cooling by free air convection | | | | | |

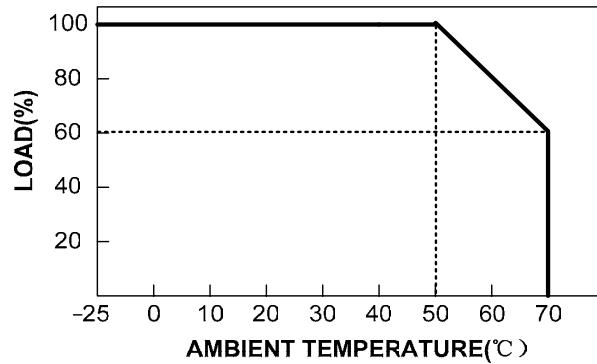
MECHANICAL SPECIFICATIONS



| Pin No. | Assignment |
|---------|--------------|
| 1 | AC-L |
| 2 | AC-N |
| 3 | F.G |
| 4 | DC output -V |
| 5 | DC output +V |



DERATING CURVE



UNIT: mm



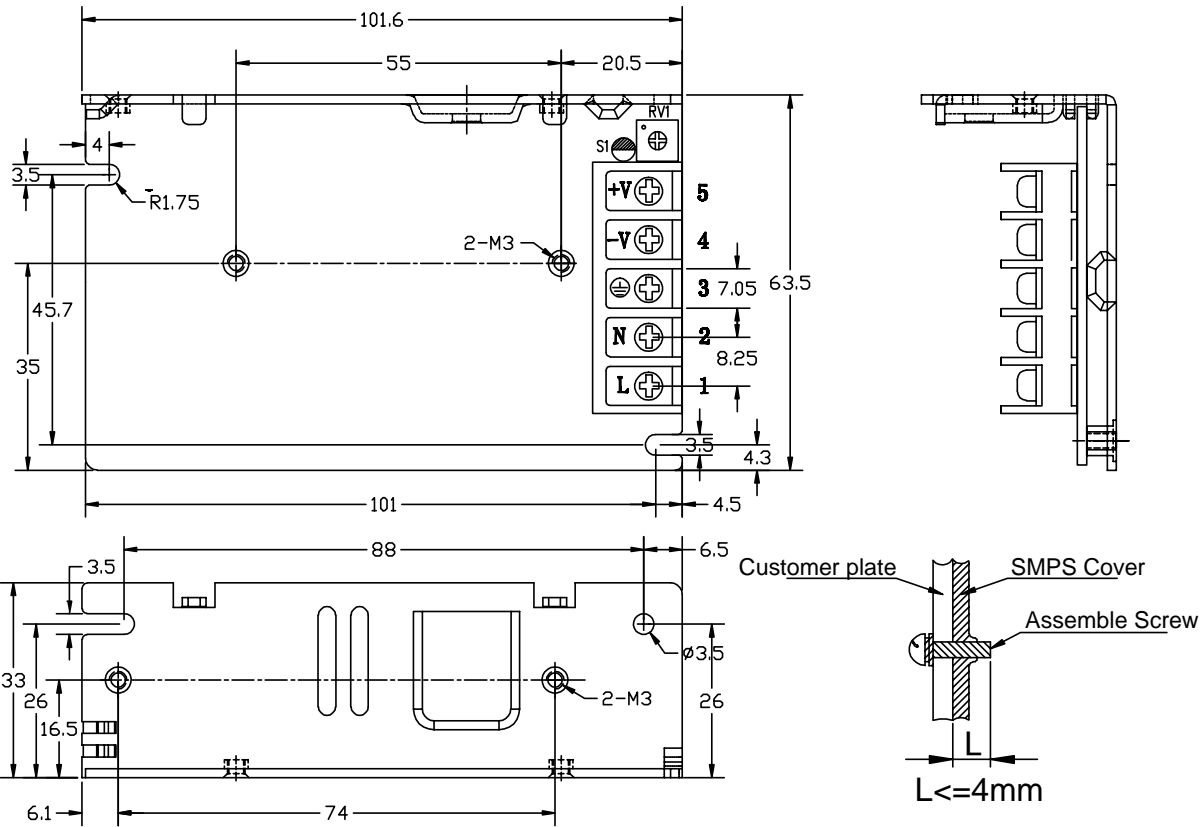
Features:

- Universal AC input/ Full range
- No Load Power Consumption <0.5W
- Wide Operating Ambient Temperature (-25°C~70°C)
- Operating Altitude up to 5000M
- High Efficiency, and High Reliability
- Output Protections: OLP/OVP/SCP
- All using 105°C long life electrolytic capacitors.
- 100% full load burn-in test
- Withstand 300VA Surge Input for 5 Sec
- PCB soldering side with conformal coating



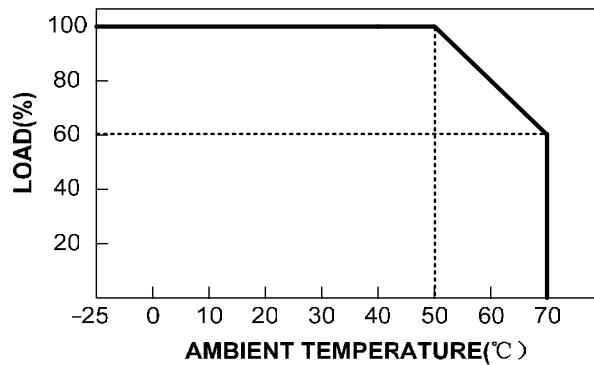
| Model | QPD-35-5 | QPD-35-12 | QPD-35-15 | QPD-35-24 | QPD-35-48 | |
|--------------------------------------|--|-------------|-------------|-------------|-------------|-----|
| Output Characteristics | | | | | | |
| DC Output | 5V | 12V | 15V | 24V | 48V | |
| Rated Current | 6A | 3A | 2.4A | 1.5A | 0.76A | |
| Current Range | 0~6A | 0~3A | 0~2.4A | 0~1.5A | 0~0.76A | |
| Ripple and Noise | 0~70°C | 50mV | 80mV | 120mV | 180mV | |
| | -25~0°C | 80mV | 180mV | 200mV | 240mV | |
| Voltage ADJ. Range | 4.75V~5.5V | 11.4V~13.2V | 14.3V~16.5V | 22.8V~26.4V | 45.6V~52.8V | |
| Voltage Accuracy | ±3.0% | ±3.0% | ±3.0% | ±3.0% | ±3.0% | |
| Line Regulation | ±0.5% | ±0.5% | ±0.5% | ±0.5% | ±0.5% | |
| Load Regulation | ±1.0% | ±1.0% | ±1.0% | ±1.0% | ±1.0% | |
| Set-up Time | <1.0s (230VAC input, full load) | | | | | |
| Hold-up Time | >10ms (115VAC input, full load); >20ms (230VAC input, full load) | | | | | |
| Temperature Coefficient | ±0.03%/°C | | | | | |
| Overshoot and Undershoot | <5.0% | | | | | |
| Input Characteristics | | | | | | |
| Voltage Range | 90VAC~264VAC, 127VDC~370VDC | | | | | |
| Frequency Range | 47Hz-63Hz | | | | | |
| Efficiency (Typical) | 115VAC Input | 79% | 83% | 85% | 86% | 87% |
| | 230VAC Input | 80% | 84% | 86% | 87% | 88% |
| AC Current (max) | <1.0A | | | | | |
| Inrush Current (Typical) | <50A@230VAC Cold start | | | | | |
| Leakage Current | Input-Output: <3.5mA Input-PG: <0.25mA | | | | | |
| Protection | | | | | | |
| Over Load (OLP) | 105%~150% of rated output current, constant power, auto recovery | | | | | |
| Over Voltage (OVP) | 105%~150% of rated output voltage, constant voltage | | | | | |
| Short Circuit (SCP) | Long-term mode, auto recovery | | | | | |
| Environmental Characteristics | | | | | | |
| Operating Amb. Temp. & Hum | -25°C~70°C; 20%~90% RH Non-Condensing | | | | | |
| Storage Temp. & Hum | -40°C~85°C; 10%~95% RH Non-Condensing | | | | | |
| Safety Standards | UL60950-1; EN60950-1: 2006 | | | | | |
| Withstand Voltage | Primary-Secondary: 3.0KVAC;≤10mA. Primary-PG: 1.5KVAC;≤10mA. Secondary-PG: 0.5KVDC;≤10mA | | | | | |
| Isolation Resistance | ≥100M ohms | | | | | |
| EMI Conduction & Radiation | Compliance to EN55022(CISPR22) Class B | | | | | |
| Harmonic Current | Compliance to EN61000-3-2,-3 | | | | | |
| EMS Immunity | Compliance to EN61000-4-2, 3, 4, 5, 6, 8, 11; ENV50204, light industry level, criteria A | | | | | |
| General Characteristics | | | | | | |
| MTBF (MIL-HDBK-217F) | More than 200,000Hrs (25°C, Full load) | | | | | |
| Dimension (LxWxH) | 101.6x63.5x33mm | | | | | |
| Packing | 60PCS/CTN. G.W: 15.08kgs | | | | | |
| Cooling Method | Cooling by free air convection | | | | | |

MECHANICAL SPECIFICATIONS



| Pin No. | Assignment |
|---------|--------------|
| 1 | AC-L |
| 2 | AC-N |
| 3 | F.G |
| 4 | DC output -V |
| 5 | DC output +V |

DERATING CURVE



UNIT: mm



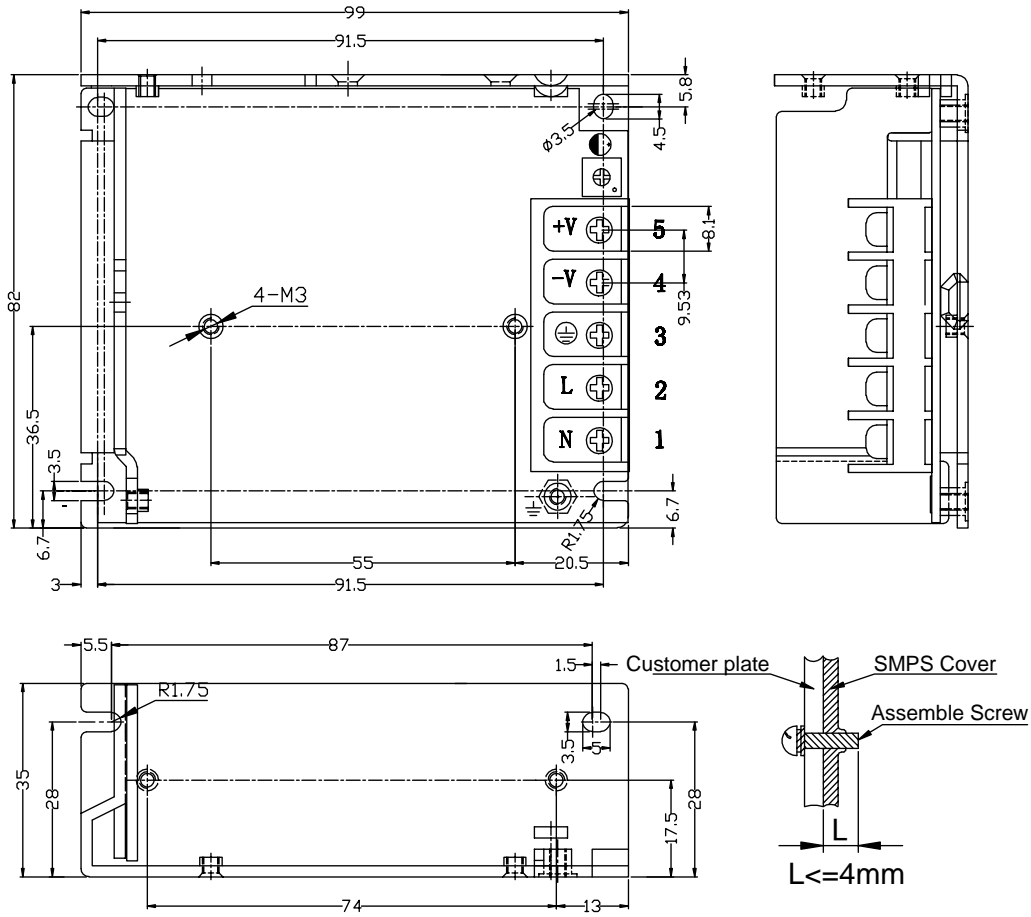
Features:

- Universal AC input/ Full range
- No Load Power Consumption <0.5W
- Wide Operating Ambient Temperature (-25°C~70°C)
- Operating Altitude up to 5000M
- High Efficiency, and High Reliability
- Output Protections: OLP/OVP/SCP
- All using 105°C long life electrolytic capacitors.
- 100% full load burn-in test
- Withstand 300VA Surge Input for 5 Sec
- PCB soldering side with conformal coating



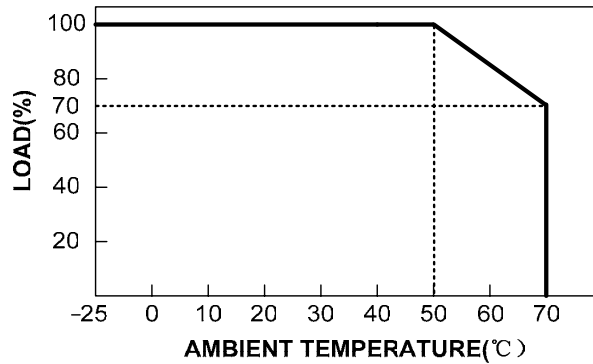
| Model | QPD-50-5 | QPD-50-12 | QPD-50-15 | QPD-50-24 | QPD-50-48 | |
|--------------------------------------|--|-----------|-----------|-----------|-----------|-----|
| Output Characteristics | | | | | | |
| DC Output | 5V | 12V | 15V | 24V | 48V | |
| Rated Current | 8A | 4.2A | 3.4A | 2.2A | 1.12A | |
| Current Range | 0-8A | 0-4.2A | 0-3.4A | 0-2.2A | 0-1.12A | |
| Ripple and Noise (-25~70°C) | 80mV | 120mV | 120mV | 200mV | 200mV | |
| Voltage ADJ. Range | ±10% of rated output voltage | | | | | |
| Voltage Accuracy | ±3.0% | ±3.0% | ±3.0% | ±3.0% | ±3.0% | |
| Line Regulation | ±0.5% | ±0.5% | ±0.5% | ±0.5% | ±0.5% | |
| Load Regulation | ±1.0% | ±1.0% | ±1.0% | ±1.0% | ±1.0% | |
| Set-up Time | <2.0s (115VAC input, full load); <1.5s (230VAC input, full load) | | | | | |
| Hold-up Time | >20ms (115VAC input, full load); >50ms (230VAC input, full load) | | | | | |
| Temperature Coefficient | ±0.03%/°C | | | | | |
| Overshoot and Undershoot | <5.0% | | | | | |
| Input Characteristics | | | | | | |
| Voltage Range | 90VAC~264VAC, 127VDC~370VDC | | | | | |
| Frequency Range | 47Hz-63Hz | | | | | |
| Efficiency (Typical) | 115VAC Input | 79% | 84% | 85% | 86% | 88% |
| | 230VAC Input | 80% | 85% | 86% | 87% | 89% |
| AC Current (max) | <1.5A | | | | | |
| Inrush Current (Typical) | <20A@115VAC Cold start <40A@230VAC Cold start | | | | | |
| Leakage Current | Input-Output: <0.25mA Input-PG: <0.75mA | | | | | |
| Protection | | | | | | |
| Over Load (OLP) | 105%-150% of rated output current, constant power, auto recovery | | | | | |
| Over Voltage (OVP) | 105%-150% of rated output voltage, constant voltage | | | | | |
| Short Circuit (SCP) | Long-term mode, auto recovery | | | | | |
| Environmental Characteristics | | | | | | |
| Operating Amb. Temp. & Hum | -25°C~70°C; 20%-90% RH Non-Condensing | | | | | |
| Storage Temp. & Hum | -40°C~85°C; 10%-95% RH Non-Condensing | | | | | |
| Safety Standards | UL60950-1; EN60950-1: 2006 | | | | | |
| Withstand Voltage | Primary-Secondary: 3.0KVAC; 10mA. Primary-PG: 1.5KVAC; 10mA. Secondary-PG: 0.5KVDC; 10mA | | | | | |
| Isolation Resistance | 100M ohms | | | | | |
| EMI Conduction & Radiation | Compliance to EN55022(CISPR22) Class B | | | | | |
| Harmonic Current | Compliance to EN61000-3-2,-3 | | | | | |
| EMS Immunity | Compliance to EN61000-4-2, 3, 4, 5, 6, 8, 11; ENV50204, light industry level, criteria A | | | | | |
| General Characteristics | | | | | | |
| MTBF (MIL-HDBK-217F) | More than 200,000Hrs (25°C, Full load) | | | | | |
| Dimension (LxWxH) | 99x82x35mm | | | | | |
| Packing | 40PCS/CTN. G.W: 13kgs | | | | | |
| Cooling Method | Cooling by free air convection | | | | | |

MECHANICAL SPECIFICATIONS



| Pin No. | Assignment |
|---------|--------------|
| 1 | AC-N |
| 2 | AC-L |
| 3 | F.G |
| 4 | DC output -V |
| 5 | DC output +V |

DERATING CURVE



UNIT: mm



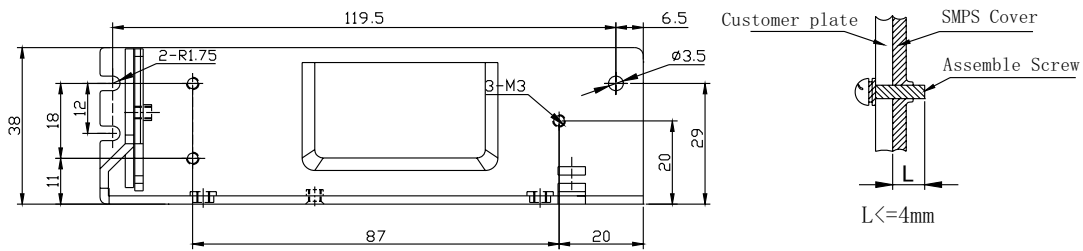
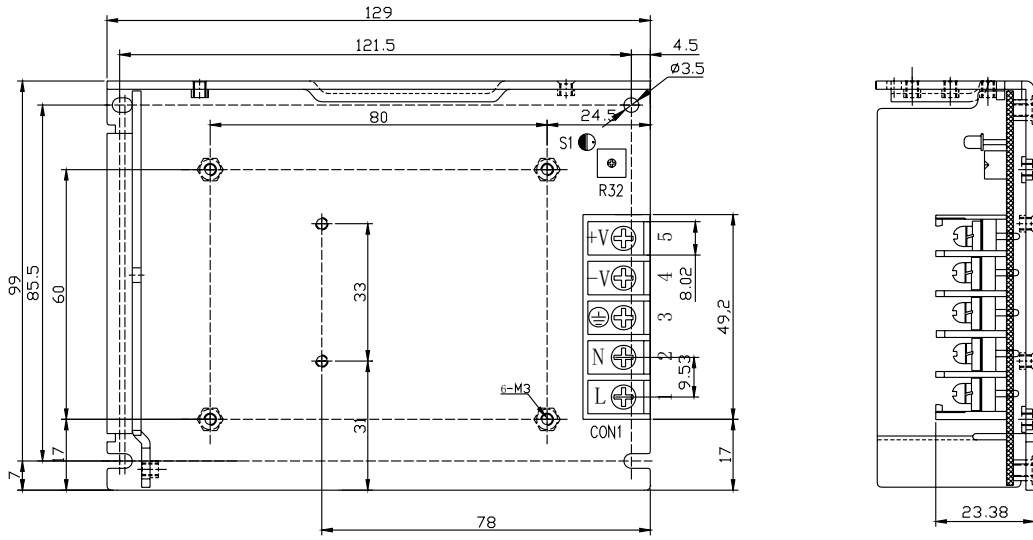
Features:

- Universal AC input/ Full range
- No Load Power Consumption <0.5W
- Wide Operating Ambient Temperature (-25°C~70°C)
- Operating Altitude up to 5000M
- High Efficiency, and High Reliability
- Output Protections: OLP/OVP/SCP
- All using 105°C long life electrolytic capacitors.
- 100% full load burn-in test
- Withstand 300VA Surge Input for 5 Sec
- PCB soldering side with conformal coating



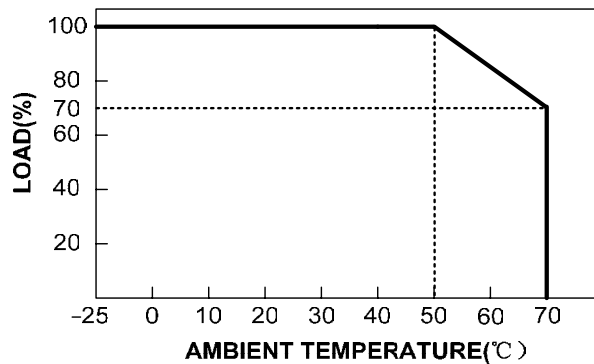
| Model | QPD-75-5 | QPD-75-12 | QPD-75-15 | QPD-75-24 | QPD-75-48 |
|--------------------------------------|--|-----------|-----------|-----------|-----------|
| Output Characteristics | | | | | |
| DC Output | 5V | 12V | 15V | 24V | 48V |
| Rated Current | 12A | 6A | 5A | 3.2A | 1.62A |
| Current Range | 0~12A | 0~6A | 0~5A | 0~3.2A | 0~1.62A |
| Ripple and Noise (-25~70°C) | 80mV | 120mV | 150mV | 200mV | 200mV |
| Voltage ADJ. Range | ±10% of rated output voltage | | | | |
| Voltage Accuracy | ±3.0% | ±3.0% | ±3.0% | ±3.0% | ±3.0% |
| Line Regulation | ±0.5% | ±0.5% | ±0.5% | ±0.5% | ±0.5% |
| Load Regulation | ±2.0% | ±2.0% | ±2.0% | ±2.0% | ±2.0% |
| Set-up Time | <2.0s (115VAC input, full load); <1.5s (230VAC input, full load) | | | | |
| Hold-up Time | >20ms (115VAC input, full load); >50ms (230VAC input, full load) | | | | |
| Temperature Coefficient | ±0.03%/°C | | | | |
| Overshoot and Undershoot | <5.0% | | | | |
| Input Characteristics | | | | | |
| Voltage Range | 90VAC~264VAC, 127VDC~370VDC | | | | |
| Frequency Range | 47Hz~63Hz | | | | |
| Efficiency (Typical) | 115VAC Input | 79% | 84% | 85% | 86% |
| | 230VAC Input | 80% | 85% | 86% | 87% |
| AC Current (max) | <2.5A | | | | |
| Inrush Current (Typical) | <20A@115VAC Cold start <40A@230VAC Cold start | | | | |
| Leakage Current | Input-Output: <0.25mA Input-PG: <0.75mA | | | | |
| Protection | | | | | |
| Over Load (OLP) | 105%-150% of rated output current, constant power, auto recovery | | | | |
| Over Voltage (OVP) | 105%-150% of rated output voltage, constant voltage | | | | |
| Short Circuit (SCP) | Long-term mode, auto recovery | | | | |
| Environmental Characteristics | | | | | |
| Operating Amb. Temp. & Hum | -25°C~70°C; 20%~90% RH Non-Condensing | | | | |
| Storage Temp. & Hum | -40°C~85°C; 10%~95% RH Non-Condensing | | | | |
| Safety Standards | UL60950-1; EN60950-1: 2006 | | | | |
| Withstand Voltage | Primary-Secondary: 3.0KVAC; 10mA. Primary-PG: 1.5KVAC; 10mA. Secondary-PG: 0.5KVDC; 10mA | | | | |
| Isolation Resistance | 100M ohms | | | | |
| EMI Conduction & Radiation | Compliance to EN55022(CISPR22) Class B | | | | |
| Harmonic Current | Compliance to EN61000-3-2,-3 | | | | |
| EMS Immunity | Compliance to EN61000-4-2, 3, 4, 5, 6, 8, 11; ENV50204, light industry level, criteria A | | | | |
| General Characteristics | | | | | |
| MTBF (MIL-HDBK-217F) | More than 100,000Hrs (25°C, Full load) | | | | |
| Dimension (LxWxH) | 129x98x38mm | | | | |
| Packing | 30PCS/CTN. G.W: 14.2kgs | | | | |
| Cooling Method | Cooling by free air convection | | | | |

MECHANICAL SPECIFICATIONS



| Pin No. | Assignment |
|---------|--------------|
| 1 | AC-L |
| 2 | AC-N |
| 3 | F.G |
| 4 | DC output -V |
| 5 | DC output +V |

DERATING CURVE



UNIT: mm



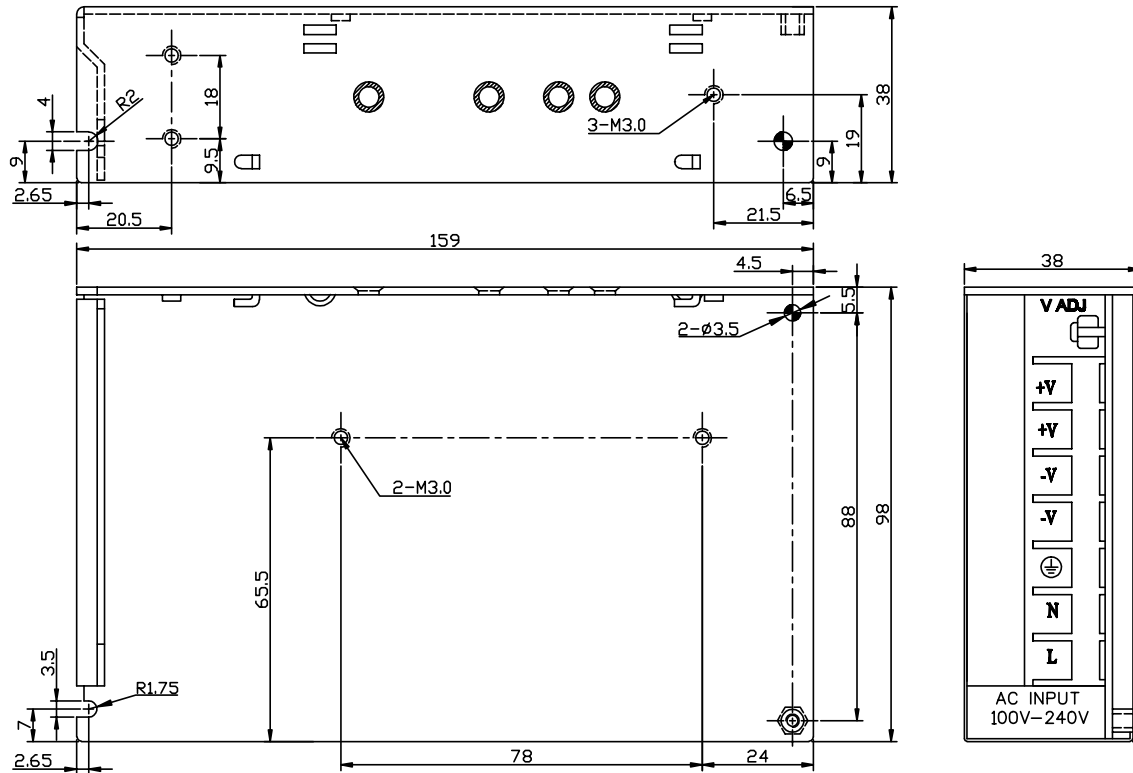
Features:

- Universal AC input/ Full range
- Wide Operating Ambient Temperature (-20°C~70°C)
- High Efficiency, and High Reliability
- Output Protections: OLP/OVP/SCP
- All using 105°C long life electrolytic capacitors.
- 100% full load burn-in test



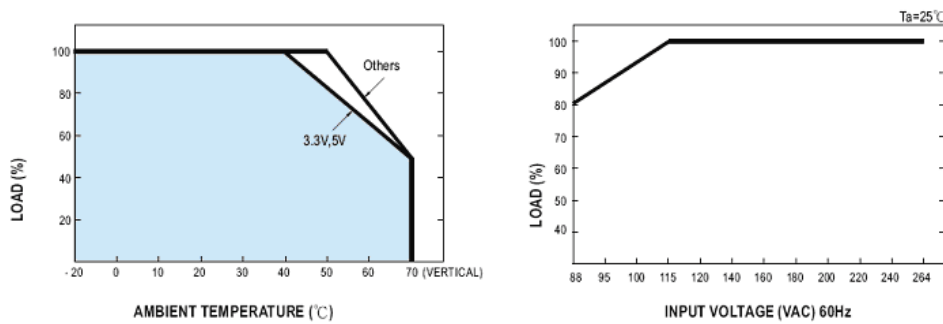
| Model | QPD-100-5 | QPD-100-12 | QPD-100-15 | QPD-100-24 | QPD-100-48 | |
|--------------------------------------|--|-----------------|------------------|------------------|------------------|-----|
| Output Characteristics | | | | | | |
| DC Output | 5V | 12V | 15V | 24V | 48V | |
| Rated Current | 16A | 8.5A | 7A | 4.5A | 2.3A | |
| Current Range | 0~16A | 0~8.5A | 0~7A | 0~4.5A | 0~2.3A | |
| Ripple and Noise | 0~70°C -20~0°C | <80mV <100mV | <100mV <120mV | <120mV <120mV | <200mV <200mV | |
| Voltage ADJ. Range | 4.7V-5.6V | 11.0V-13.0V | 13.7V-16.3V | 22.4V-27.3V | 44.4V-52.2V | |
| Voltage Accuracy | ±2.0% | ±1.0% | ±1.0% | ±1.0% | ±1.0% | |
| Line Regulation | ±0.5% | ±0.5% | ±0.5% | ±0.5% | ±0.5% | |
| Load Regulation | ±1.0% | ±1.0% | ±1.0% | ±1.0% | ±1.0% | |
| Set-up Time | <2.0s (115VAC input, full load); <1.0s (230VAC input, full load) | | | | | |
| Hold-up Time | >10ms (115VAC input, full load); >20ms (230VAC input, full load) | | | | | |
| Temperature Coefficient | ±0.03%/°C | | | | | |
| Overshoot and Undershoot | <5.0% | | | | | |
| Input Characteristics | | | | | | |
| Voltage Range | 90VAC~264VAC, 127VDC~370VDC | | | | | |
| Frequency Range | 47Hz-63Hz | | | | | |
| Efficiency (Typical) | 115VAC Input | 80% | 80% | 83% | 85% | 83% |
| | 230VAC Input | 80% | 81% | 84% | 85% | 84% |
| AC Current (max) | <2.5A | | | | | |
| Inrush Current (Typical) | 20A@115VAC Cold start 40A@230VAC Cold start | | | | | |
| Leakage Current | <0.4mA@115VAC <0.75mA@230VAC | | | | | |
| Protection | | | | | | |
| Over Load (OLP) | 105%~150% of rated output current, hiccup mode, auto recovery | | | | | |
| Over Voltage (OVP) | 110%~150% of rated output voltage, shut down, re-power on to recover | | | | | |
| Short Circuit (SCP) | Long-term mode, auto recovery | | | | | |
| Environmental Characteristics | | | | | | |
| Operating Amb. Temp. & Hum | -20°C~70°C; 20%~90% RH Non-Condensing | | | | | |
| Storage Temp. & Hum | -40°C~85°C; 10%~95% RH Non-Condensing | | | | | |
| Safety Standards | UL60950-1; EN60950-1: 2006 | | | | | |
| Withstand Voltage | Primary-Secondary: 3.0KVAC;≤10mA. Primary-PG: 1.5KVAC;≤10mA. Secondary-PG: 0.5KVDC;≤10mA | | | | | |
| Isolation Resistance | ≥100M ohms | | | | | |
| EMI Conduction & Radiation | Compliance to EN55022(CISPR22) Class B | | | | | |
| Harmonic Current | Compliance to EN61000-3-2, 3 | | | | | |
| EMS Immunity | Compliance to EN61000-4-2, 3, 4, 5, 6, 8, 11; ENV50204, light industry level, criteria A | | | | | |
| General Characteristics | | | | | | |
| MTBF (MIL-HDBK-217F) | More than 200,000Hrs (25°C, Full load) | | | | | |
| Dimension (LxWxH) | 160x98x38mm | | | | | |
| Packing | 20PCS/CTN. G.W: 13.6kgs | | | | | |
| Cooling Method | Cooling by free air convection | | | | | |

MECHANICAL SPECIFICATIONS



| Pin No. | Assignment |
|---------|--------------|
| 1 | AC-L |
| 2 | AC-N |
| 3 | F.G |
| 4.5 | DC output -V |
| 6.7 | DC output +V |

DERATING CURVE



UNIT: mm



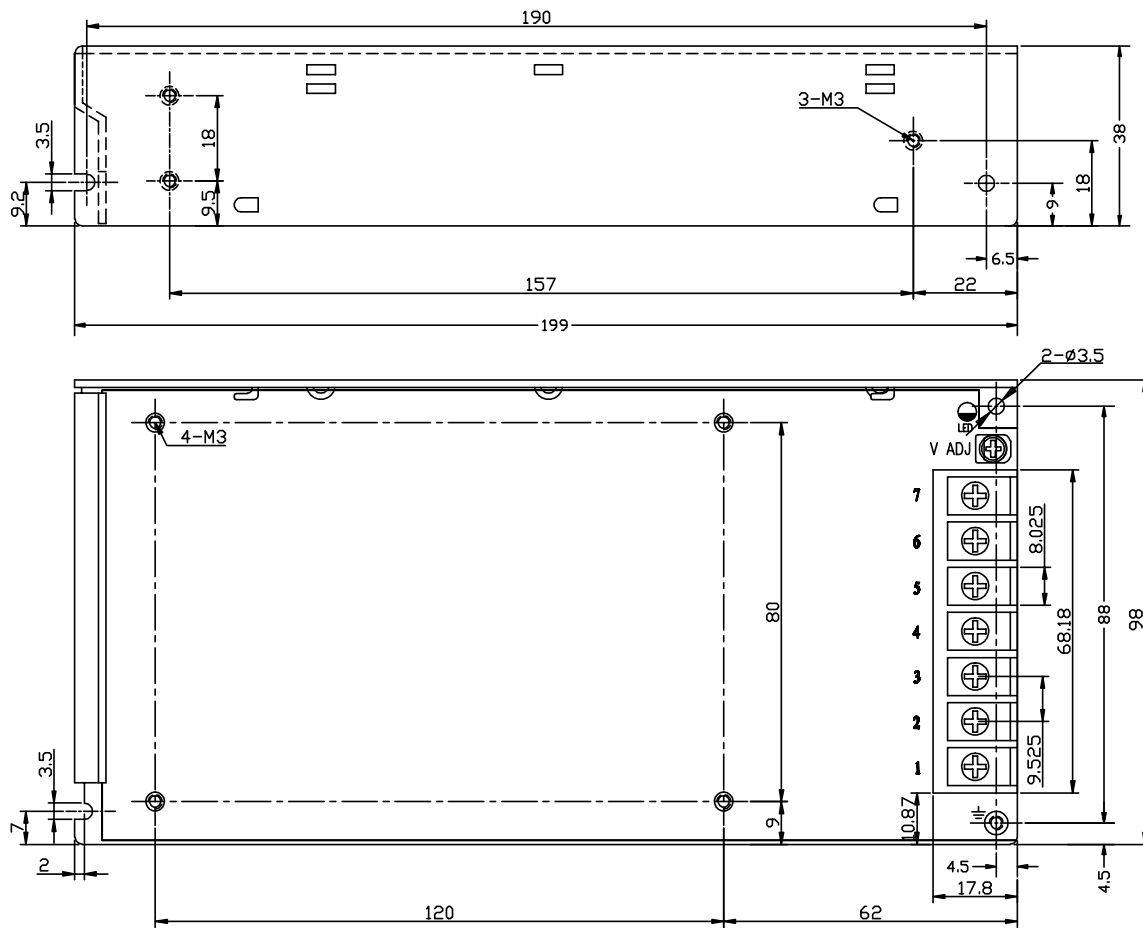
Features:

- AC input selectable by switch (115VAC/230VAC)
- Wide Operating Ambient Temperature (-20°C~70°C)
- High Efficiency, and High Reliability
- Output Protections: OLP/OVP/SCP
- All using 105°C long life electrolytic capacitors.
- 100% full load burn-in test



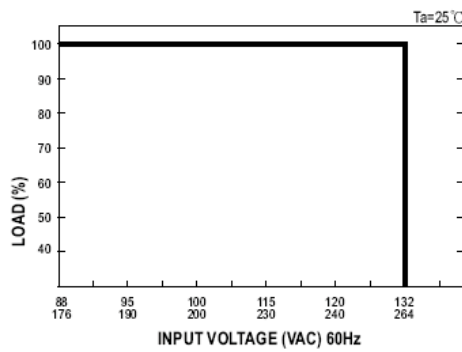
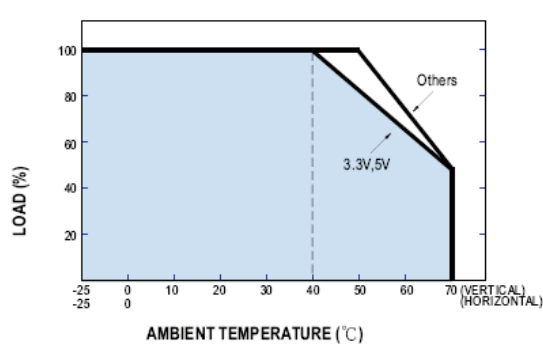
| Model | QPD-150-5 | QPD-150-12 | QPD-150-15 | QPD-150-24 | QPD-150-48 | |
|--------------------------------------|--|-------------|-------------|-------------|-------------|-----|
| Output Characteristics | | | | | | |
| DC Output | 5V | 12V | 15V | 24V | 48V | |
| Rated Current | 26A | 12.5A | 10A | 6.5A | 3.3A | |
| Current Range | 0~26A | 0~12.5A | 0~10A | 0~6.5A | 0~3.3A | |
| Ripple and Noise | 0~70°C | 80mV | 120mV | 120mV | 200mV | |
| | -20~0°C | 100mV | 150mV | 180mV | 300mV | |
| Voltage ADJ. Range | 4.2V-6.0V | 10.0V-14.0V | 13.0V-17.0V | 21.0V-28.0V | 43.0V-54.0V | |
| Voltage Accuracy | ±2.0% | ±1.0% | ±1.0% | ±1.0% | ±1.0% | |
| Line Regulation | ±0.5% | ±0.5% | ±0.5% | ±0.5% | ±0.5% | |
| Load Regulation | ±1.0% | ±1.0% | ±1.0% | ±1.0% | ±1.0% | |
| Set-up Time | <2.0s (115VAC input, full load); <1.0s (230VAC input, full load) | | | | | |
| Hold-up Time | >10ms (115VAC input, full load); >20ms (230VAC input, full load) | | | | | |
| Temperature Coefficient | ±0.03%/°C | | | | | |
| Overshoot and Undershoot | <5.0% | | | | | |
| Input Characteristics | | | | | | |
| Voltage Range | 88VAC/176VAC~132VAC/264VAC | | | | | |
| Frequency Range | 47Hz-63Hz | | | | | |
| Efficiency (Typical) | 115VAC Input | 78% | 83% | 83% | 84% | 85% |
| | 230VAC Input | 79% | 83% | 84% | 85% | 86% |
| AC Current (max) | ≤3.5A/2.0A | | | | | |
| Inrush Current (Typical) | 20A@115VAC Cold start 40A@230VAC Cold start | | | | | |
| Leakage Current | <1.0mA/115VAC <2.0mA/230VAC | | | | | |
| Protection | | | | | | |
| Over Load (OLP) | 105%~150% of rated output current, hiccup mode, auto recovery | | | | | |
| Over Voltage (OVP) | 120%~150% of rated output voltage, shut down, re-power on to recover | | | | | |
| Short Circuit (SCP) | Long-term mode, auto recovery | | | | | |
| Environmental Characteristics | | | | | | |
| Operating Amb. Temp. & Hum | -20°C~70°C; 20%~90% RH Non-Condensing | | | | | |
| Storage Temp. & Hum | -40°C~85°C; 10%-95% RH Non-Condensing | | | | | |
| Safety Standards | UL60950-1; EN60950-1: 2006 | | | | | |
| Withstand Voltage | Primary-Secondary: 3.0KVAC;≤10mA. Primary-PG: 1.5KVAC;≤10mA. Secondary-PG: 0.5KVDC;≤10mA | | | | | |
| Isolation Resistance | ≥100M ohms | | | | | |
| EMI Conduction & Radiation | Compliance to EN55022(CISPR22) Class B | | | | | |
| Harmonic Current | Compliance to EN61000-3-2,-3 | | | | | |
| EMS Immunity | Compliance to EN61000-4-2, 3, 4, 5, 6, 8, 11; ENV50204, light industry level, criteria A | | | | | |
| General Characteristics | | | | | | |
| MTBF (MIL-HDBK-217F) | More than 100,000Hrs (25°C, Full load) | | | | | |
| Dimension (LxWxH) | 199x98x38mm | | | | | |
| Packing | 20PCS/CTN. G.W: 15.0kgs | | | | | |
| Cooling Method | Cooling by free air convection | | | | | |

MECHANICAL SPECIFICATIONS



| Pin No. | Assignment |
|---------|--------------|
| 1 | AC-L |
| 2 | AC-N |
| 3 | F.G |
| 4,5 | DC output -V |
| 6,7 | DC output +V |

DERATING CURVE



UNIT: mm



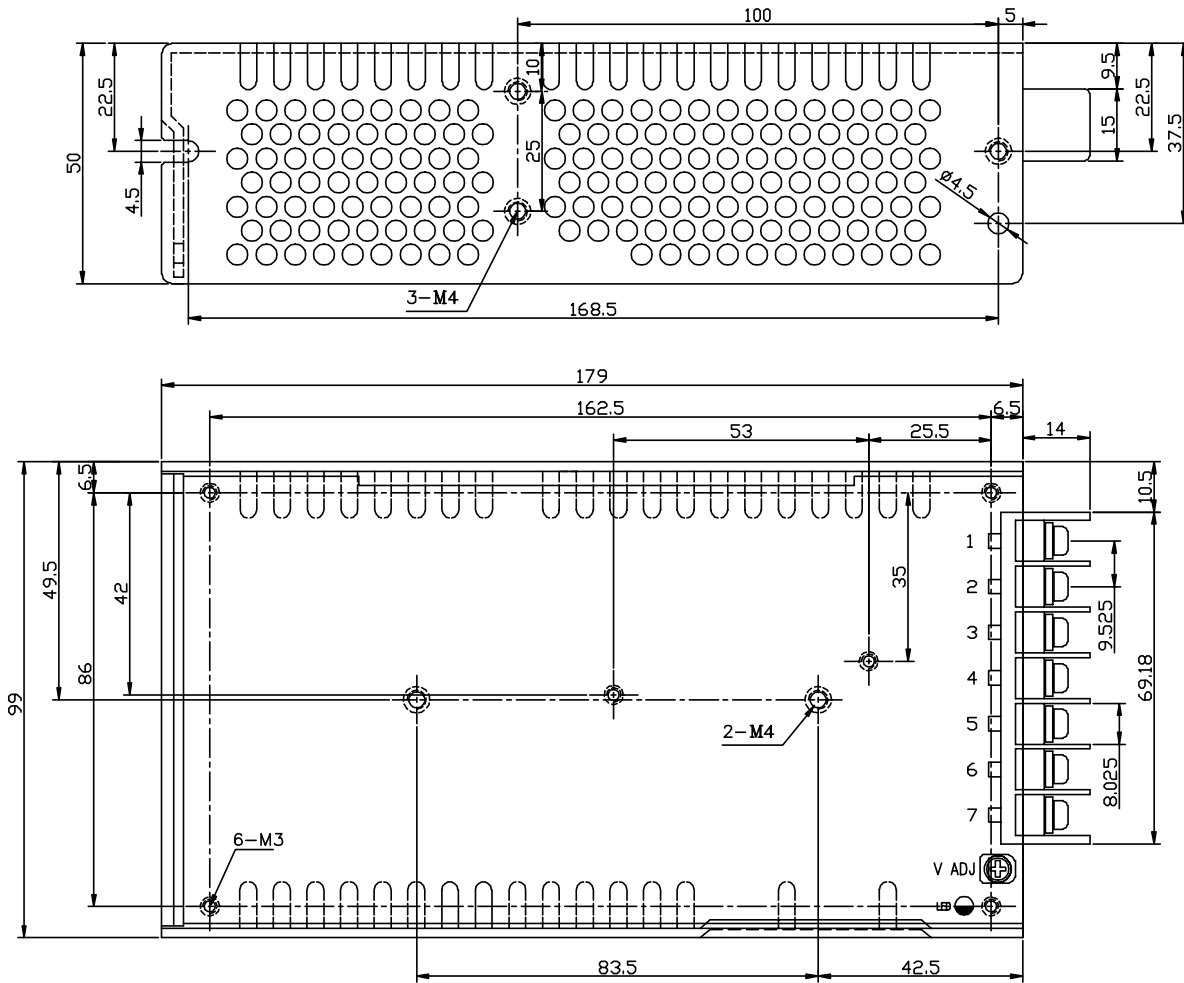
Features:

- Universal AC input/ Full range
- Built-in active PFC function, PF>0.95
- High Efficiency, and High Reliability
- Output Protections: OLP/OVP/SCP
- All using 105°C long life electrolytic capacitors.
- 100% full load burn-in test



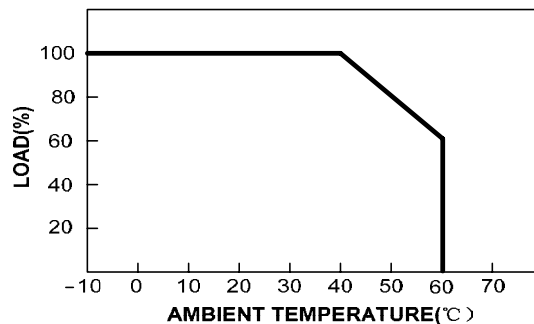
| Model | QPDF-100-5 | QPDF-100-12 | QPDF-100-15 | QPDF-100-24 | QPDF-100-36 | QPDF-100-48 |
|--------------------------------------|--|-------------|-------------|-------------|-------------|-------------|
| Output Characteristics | | | | | | |
| DC Output | 5V | 12V | 15V | 24V | 36V | 48V |
| Rated Current | 20A | 8.5A | 6.7A | 4.2A | 2.75A | 2.10A |
| Current Range | 0~20A | 0~8.5A | 0~6.7A | 0~4.2A | 0~2.75A | 0~2.10A |
| Ripple and Noise | 0~60°C | <50mV | <100mV | <100mV | <100mV | <100mV |
| | -10~0°C | <100mV | <100mV | <100mV | <100mV | <100mV |
| Voltage ADJ. Range | 4.5V~5.5V | 10.6V~13.6V | 13.5V~17.0V | 21.8V~27.4V | 32.6V~39.9V | 44V~52V |
| Voltage Accuracy | ±2.0% | ±2.0% | ±2.0% | ±1.0% | ±1.0% | ±1.0% |
| Line Regulation | ±0.5% | ±0.5% | ±0.5% | ±0.5% | ±0.5% | ±0.5% |
| Load Regulation | ±1.0% | ±1.0% | ±1.0% | ±1.0% | ±1.0% | ±1.0% |
| Set-up Time | <4.0s (115VAC input, full load); <2.0s (230VAC input, full load) | | | | | |
| Hold-up Time | >10ms (115VAC input, full load); >20ms (230VAC input, full load) | | | | | |
| Temperature Coefficient | ±0.03%/°C | | | | | |
| Overshoot and Undershoot | <5.0% | | | | | |
| Input Characteristics | | | | | | |
| Voltage Range | 90VAC~264VAC, 127VDC~370VDC | | | | | |
| Frequency Range | 47Hz-63Hz | | | | | |
| Power Factor (Typical) | PF>0.98/115VAC PF>0.95/230VAC | | | | | |
| Efficiency (Typical) | 115VAC Input | 78% | 84% | 84% | 84% | 86% |
| | 230VAC Input | 80% | 86% | 86% | 86% | 87% |
| AC Current (max) | <1.7A | | | | | |
| Inrush Current (Typical) | 30A@115VAC Cold start, 50A@230VAC Cold start | | | | | |
| Leakage Current | Input-Output: <0.25mA Input-PG: <3.5mA | | | | | |
| Protection | | | | | | |
| Over Load (OLP) | 105%~150% of rated output current, hiccup mode, auto recovery | | | | | |
| Over Voltage (OVP) | 110%~150% of rated output voltage, shut down, re-power on to recover | | | | | |
| Short Circuit (SCP) | Long-term mode, auto recovery | | | | | |
| Environmental Characteristics | | | | | | |
| Operating Amb. Temp. & Hum | -10°C~60°C; 20%~90% RH Non-Condensing | | | | | |
| Storage Temp. & Hum | -20°C~85°C; 10%~95% RH Non-Condensing | | | | | |
| Safety Standards | UL60950-1; EN60950-1: 2006 | | | | | |
| Withstand Voltage | Primary-Secondary: 3.0KVAC;≤10mA. Primary-PG: 1.5KVAC;≤10mA. Secondary-PG: 0.5KVDC;≤10mA | | | | | |
| Isolation Resistance | ≥100M ohms | | | | | |
| EMI Conduction & Radiation | Compliance to EN55022(CISPR22) Class B | | | | | |
| Harmonic Current | Compliance to EN61000-3-2, 17625.1-2003 | | | | | |
| EMS Immunity | Compliance to EN61000-4-2, 3, 4, 5, 6, 8, 11; ENV50204, light industry level, criteria A | | | | | |
| General Characteristics | | | | | | |
| MTBF (MIL-HDBK-217F) | More than 200,000Hrs (25°C, Full load) | | | | | |
| Dimension (LxWxH) | 194x99x50mm | | | | | |
| Packing | 10PCS/CTN. G.W: 8.1kgs | | | | | |
| Cooling Method | Cooling by free air convection | | | | | |

MECHANICAL SPECIFICATIONS



| Pin No. | Assignment |
|---------|--------------|
| 1 | AC-L |
| 2 | AC-N |
| 3 | F.G |
| 4,5 | DC output -V |
| 6,7 | DC output +V |

DERATING CURVE



UNIT: mm



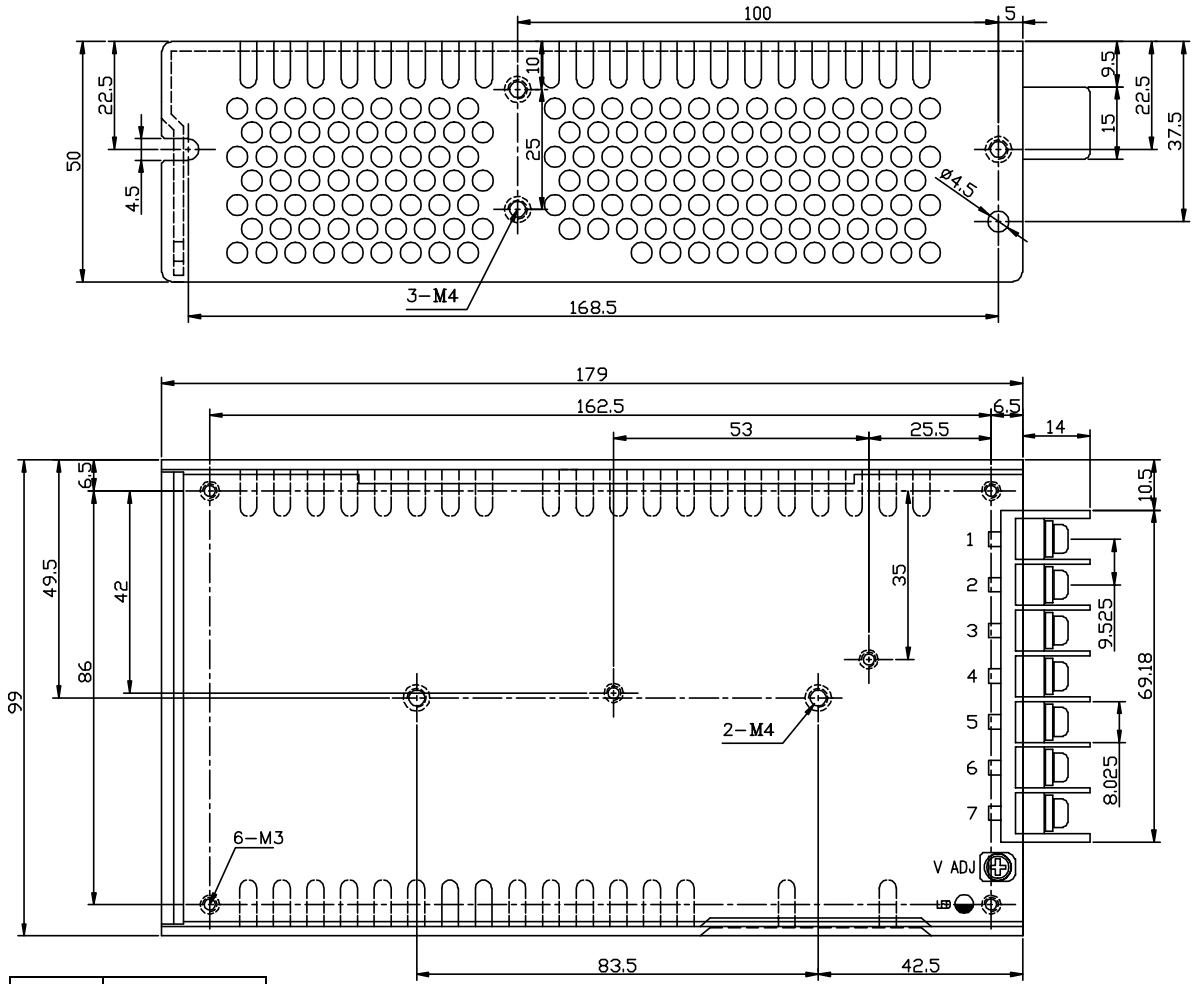
Features:

- Universal AC input/ Full range
- Built-in active PFC function, PF>0.95
- High Efficiency, and High Reliability
- Output Protections: OLP/OVP/SCP
- All using 105°C long life electrolytic capacitors.
- 100% full load burn-in test



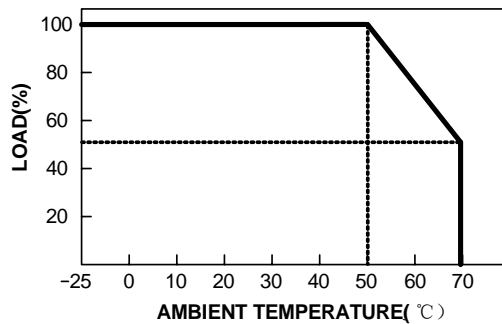
| Model | QPDF-150-5 | QPDF-150-12 | QPDF-150-15 | QPDF-150-24 | QPDF-150-36 | QPDF-150-48 | |
|--------------------------------------|--|-------------|-------------|-------------|-------------|-------------|-----|
| Output Characteristics | | | | | | | |
| DC Output | 5V | 12V | 15V | 24V | 36V | 48V | |
| Rated Current | 30A | 12.5A | 10A | 6.3A | 4.1A | 3.2A | |
| Current Range | 0~30A | 0~12.5A | 0~10A | 0~6.3A | 0~4.1A | 0~3.2A | |
| Ripple and Noise | <100mV | <100mV | <100mV | <150mV | <240mV | <240mV | |
| Voltage ADJ. Range | 4.3V~5.6V | 10.6V~13.5V | 12.7V~17.0V | 22.1V~26.7V | 33.0V~40.0V | 44V~52V | |
| Voltage Accuracy | ±2.0% | ±1.0% | ±1.0% | ±1.0% | ±1.0% | ±1.0% | |
| Line Regulation | ±0.5% | ±0.5% | ±0.5% | ±0.5% | ±0.5% | ±0.5% | |
| Load Regulation | ±1.0% | ±1.0% | ±1.0% | ±1.0% | ±1.0% | ±1.0% | |
| Set-up Time | <2.0s (115VAC input, full load); <1.0s (230VAC input, full load) | | | | | | |
| Hold-up Time | >20ms (115VAC/230VAC input, full load) | | | | | | |
| Temperature Coefficient | ±0.03%/°C | | | | | | |
| Overshoot and Undershoot | <5.0% | | | | | | |
| Input Characteristics | | | | | | | |
| Voltage Range | 85VAC~264VAC, 120VDC~370VDC | | | | | | |
| Frequency Range | 47Hz-63Hz | | | | | | |
| Power Factor (Typical) | PF>0.98/115VAC PF>0.95/230VAC | | | | | | |
| Efficiency (Typical) | 115VAC Input | 80% | 83% | 83% | 84% | 83% | 84% |
| | 230VAC Input | 82% | 86% | 86% | 86% | 86% | 87% |
| AC Current (max) | 2.0A | | | | | | |
| Inrush Current (Typical) | 30A@115VAC Cold start 60A@230VAC Cold start | | | | | | |
| Leakage Current | Input-Output: <0.25mA Input-PG: <3.5mA | | | | | | |
| Protection | | | | | | | |
| Over Load (OLP) | 105%~150% of rated output current, hiccup mode, auto recovery | | | | | | |
| Over Voltage (OVP) | 110%~150% of rated output voltage, shut down, re-power on to recover (5V) | | | | | | |
| Short Circuit (SCP) | Long-term mode, auto recovery | | | | | | |
| Environmental Characteristics | | | | | | | |
| Operating Amb. Temp. & Hum | -25°C~70°C; 20%~90% RH Non-Condensing | | | | | | |
| Storage Temp. & Hum | -30°C~85°C; 10%~95% RH Non-Condensing | | | | | | |
| Safety Standards | UL60950-1; EN60950-1: 2006 | | | | | | |
| Withstand Voltage | Primary-Secondary: 3.0KVAC;≤10mA. Primary-PG: 1.5KVAC;≤10mA. Secondary-PG: 0.5KVDC;≤10mA | | | | | | |
| Isolation Resistance | ≥100M ohms | | | | | | |
| EMI Conduction & Radiation | Compliance to EN55022 Class B | | | | | | |
| Harmonic Current | Compliance to EN61000-3-2, 17625.1-2003 | | | | | | |
| EMS Immunity | Compliance to EN61000-4-2, 3, 4, 5, 6, 8, 11; EN55024, EN61000-6-2 heavy industry level | | | | | | |
| General Characteristics | | | | | | | |
| MTBF (MIL-HDBK-217F) | More than 200,000Hrs (25°C, Full load) | | | | | | |
| Dimension (LxWxH) | 194x99x50mm | | | | | | |
| Packing | 10PCS/CTN. G.W: 9.0kgs | | | | | | |
| Cooling Method | Cooling by free air convection | | | | | | |

MECHANICAL SPECIFICATIONS



| Pin No. | Assignment |
|---------|--------------|
| 1 | AC-L |
| 2 | AC-N |
| 3 | F.G |
| 4,5 | DC output -V |
| 6,7 | DC output +V |

DERATING CURVE



UNIT: mm



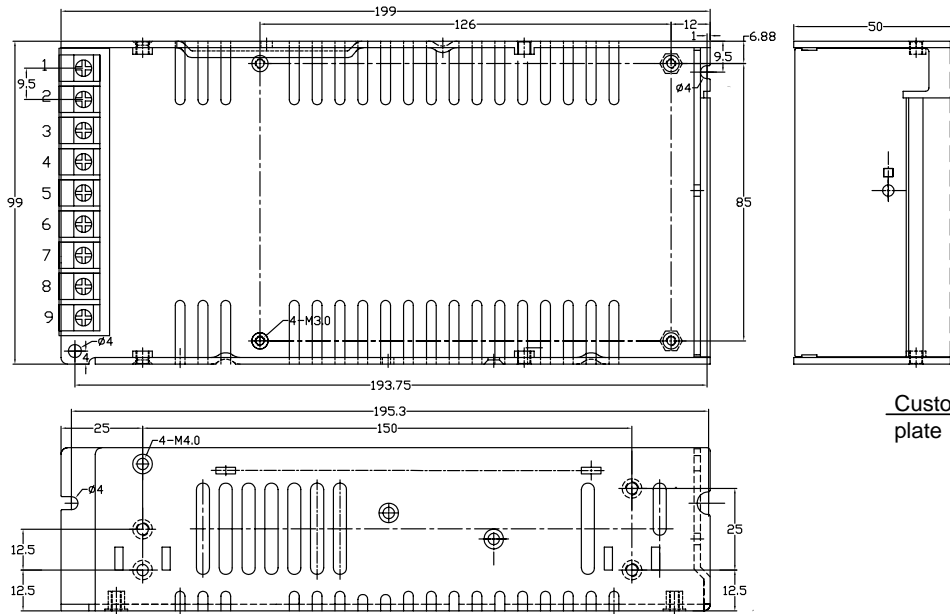
Features:

- Universal AC input/ Full range
- Built-in active PFC function, PF>0.95
- Miniature Size, High Power Density, High Efficiency, and High Reliability
- Output Protections: OLP/OPP/SCP
- Withstand 300VAC Surge Input for 5 Sec
- Operating Altitude up to 5000m
- Wide operating ambient temperature (-20°C~70°C)
- Conformal Coating on PCB Soldering Side
- Fanless Design
- 100% full load burn-in test

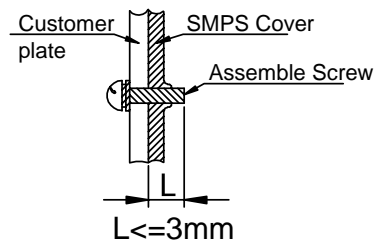


| Model | QPWF-200(L)-5 | QPWF-200(L)-12 | QPWF-200(L)-24 | QPWF-200(L)-48 |
|--------------------------------------|---|----------------|----------------|----------------|
| Output Characteristics | | | | |
| DC Output | 5V | 12V | 24V | 48V |
| Rated Current | 40A | 16.7A | 8.4A | 4.2A |
| Current Range (Note 1) | 0~40A | 0~16.7A | 0~8.4A | 0~4.2A |
| Ripple and Noise (Note 2) | 0~70°C | 200mV | 150mV | 200mV |
| | -20~0°C | 250mV | 200mV | 150mV |
| Voltage ADJ. Range | 3.1V~5.5V | 10.0V~15.5V | 20.0V~27.2V | 42.0V~53.0V |
| Voltage Accuracy | ±2.0% | ±2.0% | ±1.0% | ±1.0% |
| Line Regulation | ±0.5% | ±0.5% | ±0.5% | ±0.5% |
| Load Regulation | ±2.0% | ±2.0% | ±1.0% | ±1.0% |
| Set-up Time | 4.0s (115VAC input) 2.0s (230VAC input) | | | |
| Hold-up Time | 10ms (230VAC input, full load) | | | |
| Temperature Coefficient | ±0.03%/°C | | | |
| Overshoot and Undershoot | 5.0% | | | |
| Input Characteristics | | | | |
| Voltage Range | 90VAC~264VAC | | | |
| Frequency Range | 47Hz~63Hz | | | |
| Power Factor (Typical) | PF>0.98/115VAC PF>0.95/230VAC | | | |
| Efficiency (Typical) 230VAC | 81% | 87% | 88% | 88.5% |
| AC Current (max) | <3.0A | | | |
| Inrush Current (Typical) | <30A@115VAC Cold start <50A@230VAC Cold start | | | |
| Leakage Current | Input-Output: 0.25mA Input-PG: 3.5mA | | | |
| Protection | | | | |
| Over Load (OLP) | 105%~150% of rated output current, hiccup mode, auto recovery | | | |
| Over Power (OPP) | 105%~150% of rated output power, hiccup mode, auto recovery | | | |
| Short Circuit (SCP) | Long-term mode, auto recovery | | | |
| Environmental Characteristics | | | | |
| Operating Amb. Temp. & Hum | -20°C~70°C; 20%~90% RH Non-Condensing | | | |
| Storage Temp. & Hum | -40°C~85°C; 10%~95% RH Non-Condensing | | | |
| Safety Standards | UL60950-1; EN60950-1: 2006 | | | |
| Withstand Voltage | Primary-Secondary: 3.0KVAC; 10mA. Primary-PG: 1.5KVAC; 10mA. Secondary-PG: 0.5KVDC; 10mA | | | |
| Isolation Resistance | 100M ohms | | | |
| EMI Conduction & Radiation | Compliance to EN55022 Class B | | | |
| Harmonic Current | Compliance to EN61000-3-2, Class D | | | |
| EMC Immunity | Compliance to EN61000-4-2, 3, 4, 5, 6, 8, 11; heavy industry level | | | |
| General Characteristics | | | | |
| MTBF (MIL-HDBK-217F) | More than 200,000Hrs (25°C, Full load) | | | |
| Dimension (LxWxH) | QPWF-200: 199x99x50mm QPWF-200L: 199x99x38mm | | | |
| Packing | 20PCS/CTN. G.W: 16kgs | | | |
| Cooling Method | Cooling by free air convection | | | |
| Note | 1. All parameters NOT specially mentioned are measured at rated input, rated load, and 25°C of ambient temperature 2. Measured at 20MHz of bandwidth by using a 12" Twisted pair wire terminated with a 0.1uF & 47uF parallel capacitor 3. The SPS is considered a component which will be installed into final equipment. The equipment must be re-confirmed that it still meets EMC directives. | | | |

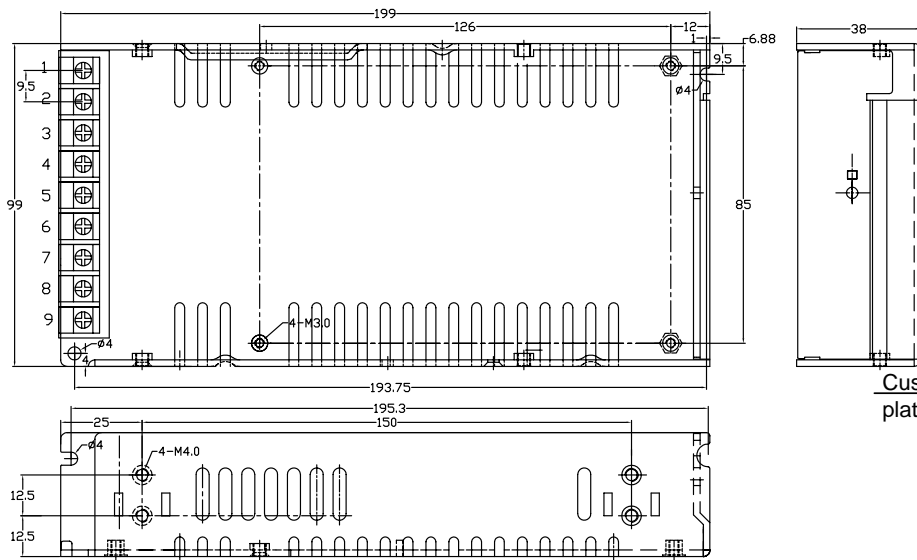
MECHANICAL SPECIFICATIONS QPWF-200 SERIES



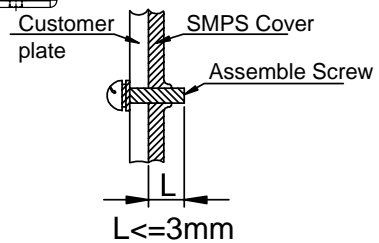
| Pin No. | Assignment |
|---------|--------------|
| 1 | AC-N |
| 2 | AC-L |
| 3 | F.G |
| 4,5,6 | DC output -V |
| 7,8,9 | DC output +V |



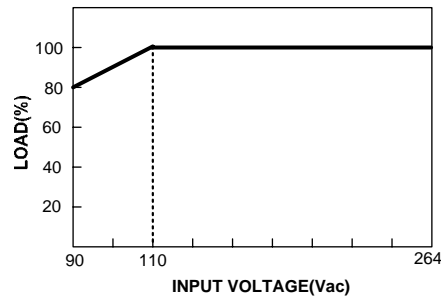
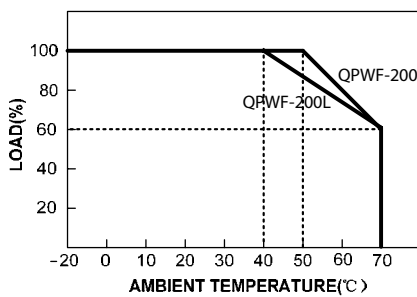
QPWF-200L SERIES



| Pin No. | Assignment |
|---------|--------------|
| 1 | AC-N |
| 2 | AC-L |
| 3 | F.G |
| 4,5,6 | DC output -V |
| 7,8,9 | DC output +V |



DERATING CURVE



UNIT: mm



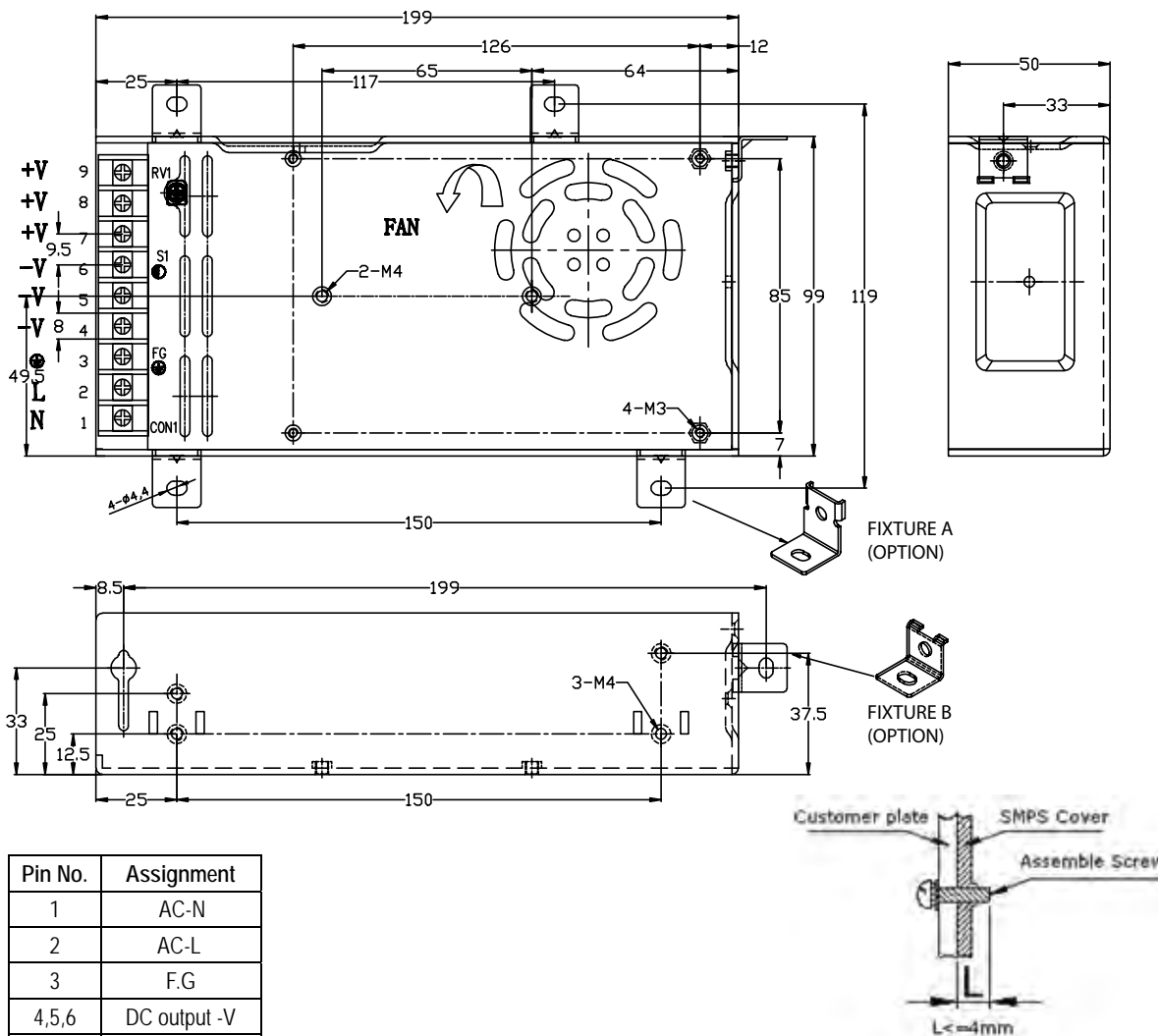
Features:

- Universal AC input/ Full range
- Built-in active PFC function, PF>0.95
- High Efficiency, and High Reliability
- Output Protections: OLP/OPP/SCP
- Withstand 300VAC Surge Input for 5 Sec
- Operating Altitude up to 5000m
- Wide operating ambient temperature (-25°C~70°C)
- Conformal Coating on both sides of PCB
- All using 105°C long life electrolytic capacitors.
- 100% full load burn-in test



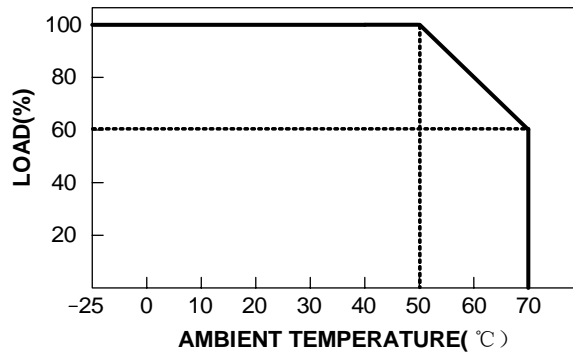
| Model | QGKF-200-5 | QGKF-200-12 | QGKF-200-24 | QGKF-200-48 |
|--------------------------------------|---|-------------|-------------|-------------|
| Output Characteristics | | | | |
| DC Output | 5V | 12V | 24V | 48V |
| Rated Current | 40A | 16.7A | 8.4A | 4.2A |
| Current Range (Note 1) | 0~40A | 0~16.7A | 0~8.4A | 0~4.2A |
| Ripple and Noise (Note 2) | <150mV | <150mV | <200mV | <200mV |
| Voltage ADJ. Range | -5% ~ +10% of rated output voltage | | | |
| Voltage Accuracy | ±1.0% | | | |
| Line Regulation | ±0.5% | | | |
| Load Regulation | ±1.0% | | | |
| Set-up Time | <2.0s (230VAC input, full load) | | | |
| Hold-up Time | >10ms (230VAC input, full load) | | | |
| Temperature Coefficient | ±0.03%/°C | | | |
| Overshoot and Undershoot | <5.0% | | | |
| Input Characteristics | | | | |
| Voltage Range | 85VAC~264VAC, 120VDC~370VDC | | | |
| Frequency Range | 47Hz-63Hz | | | |
| Power Factor (Typical) | PF>0.98/115VAC PF>0.95/230VAC | | | |
| Efficiency (Typical) | 79% | 84% | 86% | 87.5% |
| AC Current (max) | <3.5A | | | |
| Inrush Current (Typical) | <30A@115VAC Cold start <50A@230VAC Cold start | | | |
| Leakage Current | Input-Output: <0.25mA Input-PG: <1.0mA | | | |
| Protection | | | | |
| Over Load (OLP) | 105%~150% of rated output current, hiccup mode, auto recovery | | | |
| Over Power (OPP) | 105%~150% of rated output power, hiccup mode, auto recovery | | | |
| Short Circuit (SCP) | Long-term mode, auto recovery | | | |
| Environmental Characteristics | | | | |
| Operating Amb. Temp. & Hum | -25°C~70°C; 20%~90% RH Non-Condensing | | | |
| Storage Temp. & Hum | -40°C~85°C; 10%-95% RH Non-Condensing | | | |
| Vibration | 10 ~500Hz, 2G 10min/1cycle, period for 60min. Each along X, Y, Z axes | | | |
| Safety Standards | UL60950-1 2nd Ed; IEC 60950-1:2005(2nd Ed); EN60950-1: 2006 | | | |
| Withstand Voltage | Primary-Secondary: 3.0KVAC;≤10mA. Primary-PG: 1.5KVAC;≤10mA. Secondary-PG: 0.5KVDC;≤10mA | | | |
| Isolation Resistance | ≥100M ohms | | | |
| EMI Conduction & Radiation | Compliance to EN55022, EN55024 Class B | | | |
| Harmonic Current | Compliance to EN61000-3-2, -3 | | | |
| EMS Immunity | Compliance to EN61000-4-2, 3, 4, 5, 6, 8, 11; EN55024, EN61000-6-2 heavy industry level | | | |
| General Characteristics | | | | |
| MTBF (MIL-HDBK-217F) | More than 200,000Hrs (25°C, Full load) | | | |
| Dimension (LxWxH) | 199x99x50mm | | | |
| Packing | 12PCS/CTN. G.W: 9.5kgs | | | |
| Cooling Method | Cooling by forced air (built-in DC fan) | | | |
| Note | 1. All parameters NOT specially mentioned are measured at rated input, rated load, and 25°C of ambient temperature 2. Measured at 20MHz of bandwidth by using a 12" Twisted pair wire terminated with a 0.1uF & 47uF parallel capacitor 3. The SPS is considered a component which will be installed into final equipment. The equipment must be re-confirmed that it still meets EMC directives. | | | |

MECHANICAL SPECIFICATIONS



| Pin No. | Assignment |
|---------|--------------|
| 1 | AC-N |
| 2 | AC-L |
| 3 | F.G |
| 4,5,6 | DC output -V |
| 7,8,9 | DC output +V |

DERATING CURVE



UNIT: mm



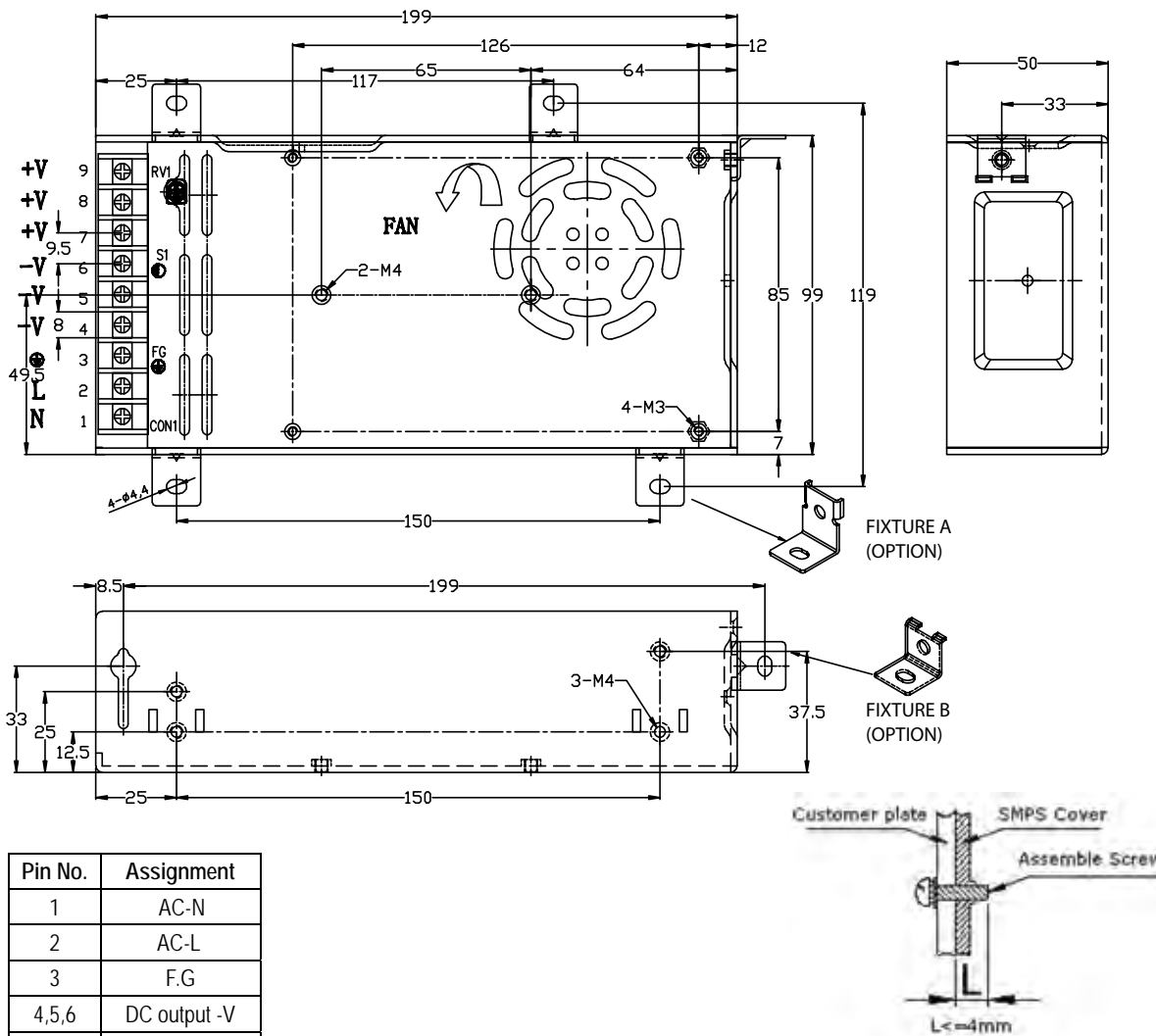
Features:

- Universal AC input/ Full range
- Built-in active PFC function, PF>0.95
- High Efficiency, and High Reliability
- Output Protections: OLP/OPP/SCP
- Withstand 300VAC Surge Input for 5 Sec
- Operating Altitude up to 5000m
- Wide operating ambient temperature (-25°C~70°C)
- Conformal Coating on both sides of PCB
- All using 105°C long life electrolytic capacitors.
- 100% full load burn-in test



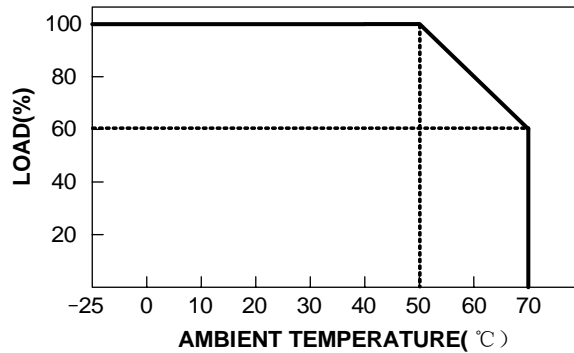
| Model | QGKF-240-5 | QGKF-240-12 | QGKF-240-24 | QGKF-240-48 |
|--------------------------------------|---|-------------|-------------|-------------|
| Output Characteristics | | | | |
| DC Output | 5V | 12V | 24V | 48V |
| Rated Current | 48A | 20A | 10A | 5A |
| Current Range (Note 1) | 0~48A | 0~20A | 0~10A | 0~5A |
| Ripple and Noise (Note 2) | <150mV | <150mV | <200mV | <200mV |
| Voltage ADJ. Range | -5% ~ +10% of rated output voltage | | | |
| Voltage Accuracy | ±1.0% | | | |
| Line Regulation | ±0.5% | | | |
| Load Regulation | ±1.0% | | | |
| Set-up Time | <2.0s (230VAC input, full load) | | | |
| Hold-up Time | >10ms (230VAC input, full load) | | | |
| Temperature Coefficient | ±0.03%/°C | | | |
| Overshoot and Undershoot | <5.0% | | | |
| Input Characteristics | | | | |
| Voltage Range | 85VAC~264VAC, 120VDC~370VDC | | | |
| Frequency Range | 47Hz-63Hz | | | |
| Power Factor (Typical) | PF>0.98/115VAC PF>0.95/230VAC | | | |
| Efficiency (Typical) | 79% | 84% | 86% | 87.5% |
| AC Current (max) | <4.0A | | | |
| Inrush Current (Typical) | <30A@115VAC Cold start <50A@230VAC Cold start | | | |
| Leakage Current | Input-Output: <0.25mA Input-PG: <1.0mA | | | |
| Protection | | | | |
| Over Load (OLP) | 120%~170% of rated output current, hiccup mode, auto recovery | | | |
| Over Power (OPP) | 120%~170% of rated output power, hiccup mode, auto recovery | | | |
| Short Circuit (SCP) | Long-term mode, auto recovery | | | |
| Environmental Characteristics | | | | |
| Operating Amb. Temp. & Hum | -25°C~70°C; 20%~90% RH Non-Condensing | | | |
| Storage Temp. & Hum | -40°C~85°C; 10%-95% RH Non-Condensing | | | |
| Vibration | 10 ~500Hz, 2G 10min/1cycle, period for 60min. Each along X, Y, Z axes | | | |
| Safety Standards | UL60950-1 2nd Ed; IEC 60950-1:2005(2nd Ed); EN60950-1: 2006 | | | |
| Withstand Voltage | Primary-Secondary: 3.0KVAC;≤10mA. Primary-PG: 1.5KVAC;≤10mA. Secondary-PG: 0.5KVDC;≤10mA | | | |
| Isolation Resistance | ≥100M ohms | | | |
| EMI Conduction & Radiation | Compliance to EN55022, EN55024 Class B | | | |
| Harmonic Current | Compliance to EN61000-3-2, -3 | | | |
| EMS Immunity | Compliance to EN61000-4-2, 3, 4, 5, 6, 8, 11; EN55024, EN61000-6-2 heavy industry level | | | |
| General Characteristics | | | | |
| MTBF (MIL-HDBK-217F) | More than 200,000Hrs (25°C, Full load) | | | |
| Dimension (LxWxH) | 199x99x50mm | | | |
| Packing | 12PCS/CTN. G.W: 9.8kgs | | | |
| Cooling Method | Cooling by forced air (built-in DC fan) | | | |
| Note | 1. All parameters NOT specially mentioned are measured at rated input, rated load, and 25°C of ambient temperature 2. Measured at 20MHz of bandwidth by using a 12" Twisted pair wire terminated with a 0.1uF & 47uF parallel capacitor 3. The SPS is considered a component which will be installed into final equipment. The equipment must be re-confirmed that it still meets EMC directives. | | | |

MECHANICAL SPECIFICATIONS



| Pin No. | Assignment |
|---------|--------------|
| 1 | AC-N |
| 2 | AC-L |
| 3 | F.G |
| 4,5,6 | DC output -V |
| 7,8,9 | DC output +V |

DERATING CURVE



UNIT: mm



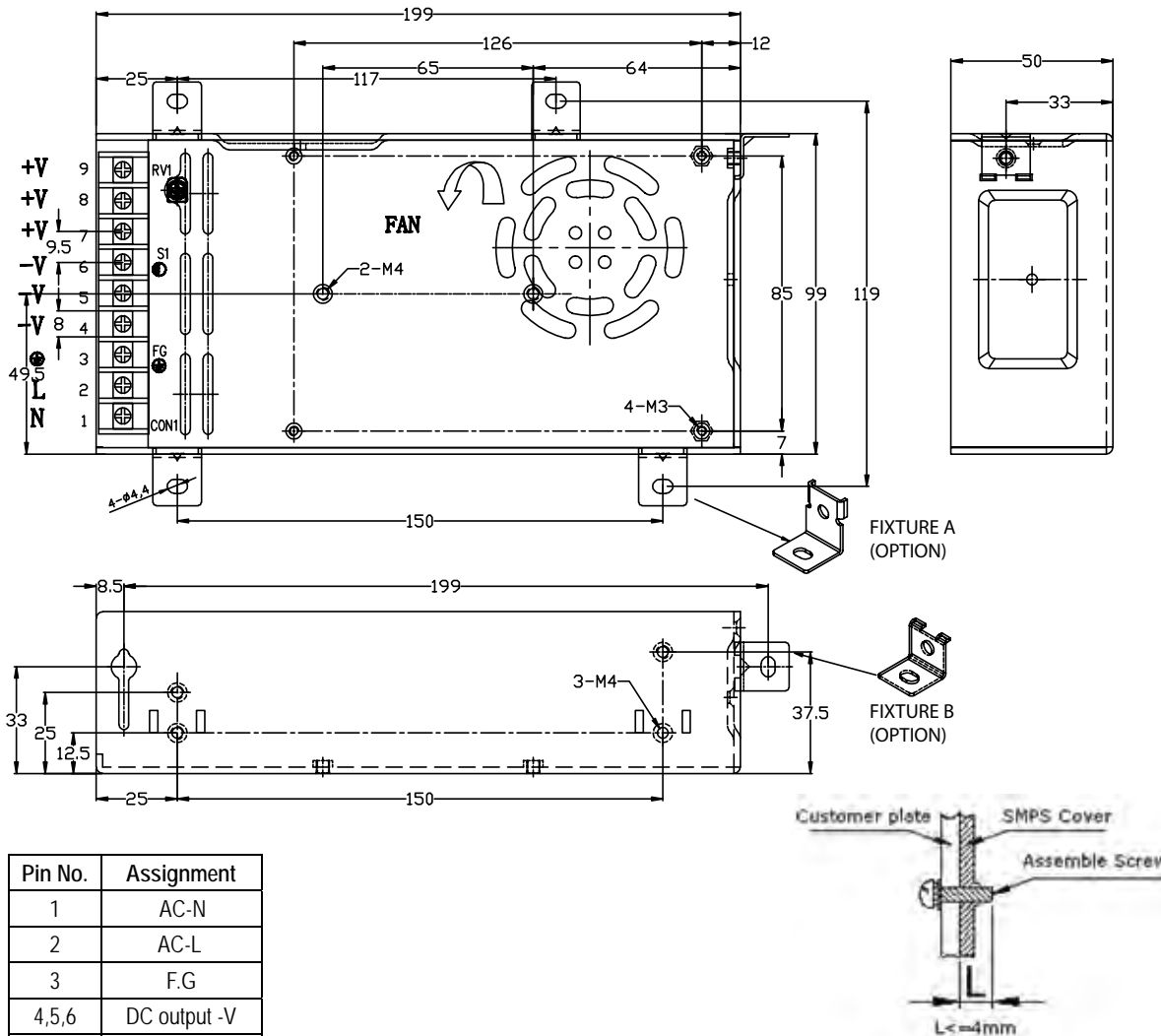
Features:

- Universal AC input/ Full range
- Built-in active PFC function, PF>0.95
- High Efficiency, and High Reliability
- Output Protections: OLP/OPP/SCP
- Withstand 300VAC Surge Input for 5 Sec
- Operating Altitude up to 5000m
- Wide operating ambient temperature (-25°C~70°C)
- Conformal Coating on both sides of PCB
- All using 105°C long life electrolytic capacitors.
- 100% full load burn-in test



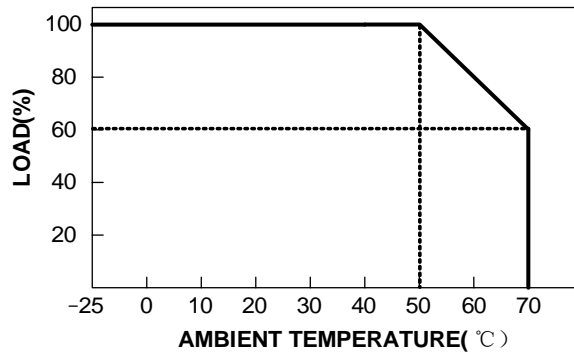
| Model | QGKF-320-5 | QGKF-320-12 | QGKF-320-24 | QGKF-320-48 |
|--------------------------------------|---|-------------|-------------|-------------|
| Output Characteristics | | | | |
| DC Output | 5V | 12V | 24V | 48V |
| Rated Current | 55A | 25A | 13A | 6.7A |
| Current Range (Note 1) | 0~55A | 0~25A | 0~13A | 0~6.7A |
| Ripple and Noise (Note 2) | <150mV | <150mV | <200mV | <200mV |
| Voltage ADJ. Range | -5% ~ +10% of rated output voltage | | | |
| Voltage Accuracy | ±1.0% | | | |
| Line Regulation | ±0.5% | | | |
| Load Regulation | ±1.0% | | | |
| Set-up Time | <2.0s (230VAC input, full load) | | | |
| Hold-up Time | >10ms (230VAC input, full load) | | | |
| Temperature Coefficient | ±0.03%/°C | | | |
| Overshoot and Undershoot | <5.0% | | | |
| Input Characteristics | | | | |
| Voltage Range | 85VAC~264VAC, 120VDC~370VDC | | | |
| Frequency Range | 47Hz-63Hz | | | |
| Power Factor (Typical) | PF>0.98/115VAC PF>0.95/230VAC | | | |
| Efficiency (Typical) | 79% | 84.5% | 87% | 87.5% |
| AC Current (max) | <4.5A | | | |
| Inrush Current (Typical) | <30A@115VAC Cold start <50A@230VAC Cold start | | | |
| Leakage Current | Input-Output: <0.25mA Input-PG: <1.0mA | | | |
| Protection | | | | |
| Over Load (OLP) | 105%~150% of rated output current, hiccup mode, auto recovery | | | |
| Over Power (OPP) | 105%~150% of rated output power, hiccup mode, auto recovery | | | |
| Short Circuit (SCP) | Long-term mode, auto recovery | | | |
| Environmental Characteristics | | | | |
| Operating Amb. Temp. & Hum | -25°C~70°C; 20%~90% RH Non-Condensing | | | |
| Storage Temp. & Hum | -40°C~85°C; 10%-95% RH Non-Condensing | | | |
| Vibration | 10 ~500Hz, 2G 10min/1cycle, period for 60min. Each along X, Y, Z axes | | | |
| Safety Standards | UL60950-1 2nd Ed; IEC 60950-1:2005(2nd Ed); EN60950-1: 2006 | | | |
| Withstand Voltage | Primary-Secondary: 3.0KVAC;≤10mA. Primary-PG: 1.5KVAC;≤10mA. Secondary-PG: 0.5KVDC;≤10mA | | | |
| Isolation Resistance | ≥100M ohms | | | |
| EMI Conduction & Radiation | Compliance to EN55022, EN55024 Class B | | | |
| Harmonic Current | Compliance to EN61000-3-2, -3 | | | |
| EMS Immunity | Compliance to EN61000-4-2, 3, 4, 5, 6, 8, 11; EN55024, EN61000-6-2 heavy industry level | | | |
| General Characteristics | | | | |
| MTBF (MIL-HDBK-217F) | More than 200,000Hrs (25°C, Full load) | | | |
| Dimension (LxWxH) | 199x99x50mm | | | |
| Packing | 12PCS/CTN. G.W: 9.8kgs | | | |
| Cooling Method | Cooling by forced air (built-in DC fan) | | | |
| Note | 1. All parameters NOT specially mentioned are measured at rated input, rated load, and 25°C of ambient temperature 2. Measured at 20MHz of bandwidth by using a 12" Twisted pair wire terminated with a 0.1uF & 47uF parallel capacitor 3. The SPS is considered a component which will be installed into final equipment. The equipment must be re-confirmed that it still meets EMC directives. | | | |

MECHANICAL SPECIFICATIONS



| Pin No. | Assignment |
|---------|--------------|
| 1 | AC-N |
| 2 | AC-L |
| 3 | F.G |
| 4,5,6 | DC output -V |
| 7,8,9 | DC output +V |

DERATING CURVE



UNIT: mm



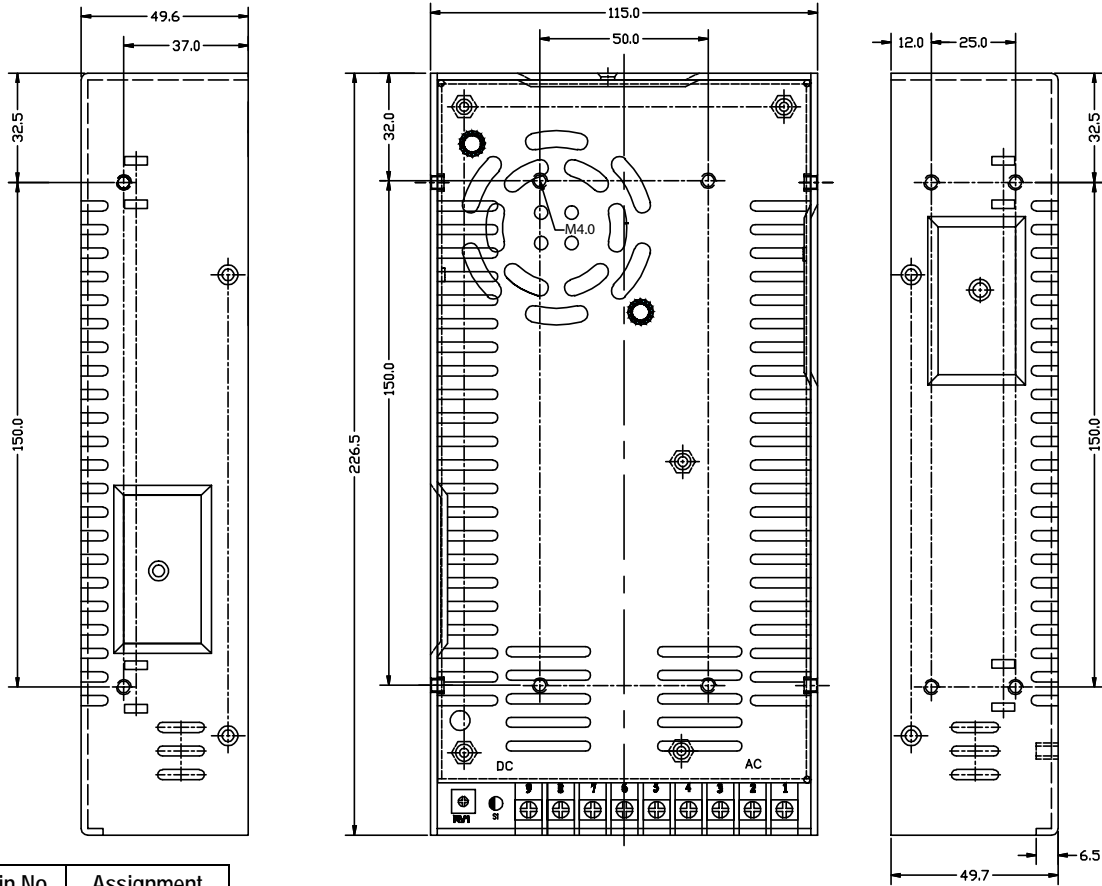
Features:

- Universal AC input/ Full range
- Built-in active PFC function, PF>0.95
- High Efficiency, and High Reliability
- Output Protections: OLP/OTP/OVP/SCP
- Wide operating ambient temperature (-25°C~70°C)
- Conformal Coating on PCB Soldering Side
- All using 105°C long life electrolytic capacitors.
- 100% full load burn-in test



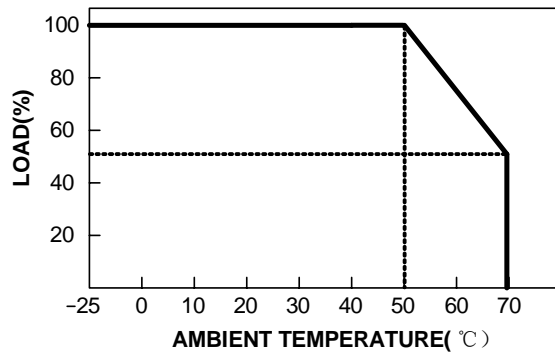
| Model | QPDF-320-3.3 | QPDF-320-4 | QPDF-320-5 | QPDF-320-7.5 | QPDF-320-12 | QPDF-320-24 | QPDF-320-28 | QPDF-320-36 | QPDF-320-48 | |
|--------------------------------------|---|------------|------------|--------------|-------------|-------------|-------------|-------------|-------------|-----|
| Output Characteristics | | | | | | | | | | |
| DC Output | 3.3V | 4V | 5V | 7.5V | 12V | 24V | 28V | 36V | 48V | |
| Rated Current | 60A | 60A | 60A | 40A | 25A | 13A | 11A | 8.8A | 6.7A | |
| Current Range | 0~60A | 0~60A | 0~60A | 0~40A | 0~25A | 0~13A | 0~11A | 0~8.8A | 0~6.7A | |
| Ripple and Noise | 0~65°C | | <150mV | | <150mV | | <150mV | | <240mV | |
| | -20~0°C | | <180mV | | <180mV | | <180mV | | <240mV | |
| Voltage ADJ. Range | 3.1V~3.6V | 3.7V~4.3V | 4.4V~5.3V | 6.6V~8.4V | 10.5V~13.3V | 19.7V~26.4V | 25.7V~30.4V | 33.2V~38.4V | 41.5V~53.1V | |
| Voltage Accuracy | ±2.0% | ±2.0% | ±2.0% | ±2.0% | ±1.0% | ±1.0% | ±1.0% | ±1.0% | ±1.0% | |
| Line Regulation | ±0.5% | ±0.5% | ±0.5% | ±0.5% | ±0.3% | ±0.2% | ±0.2% | ±0.2% | ±0.2% | |
| Load Regulation | ±1.0% | ±1.0% | ±1.0% | ±1.0% | ±0.5% | ±0.5% | ±0.5% | ±0.5% | ±0.5% | |
| Set-up Time | <2.5s (115VAC input, full load) <1.2s(230VAC input, full load) | | | | | | | | | |
| Hold-up Time | 3.3V/4V/5V >14ms (230VAC input, full load) 7.5V/12V/24V/28V/36V/48V >16ms (230VAC input, full load) | | | | | | | | | |
| Temperature Coefficient | ±0.03%/°C | | | | | | | | | |
| Overshoot and Undershoot | <5.0% | | | | | | | | | |
| Input Characteristics | | | | | | | | | | |
| Voltage Range | 88VAC~264VAC, 124VDC~370VDC | | | | | | | | | |
| Frequency Range | 47Hz-63Hz | | | | | | | | | |
| Power Factor (Typical) | PF>0.98/115VAC PF>0.95/230VAC | | | | | | | | | |
| Efficiency (Typical) | 115VAC | 72% | 73% | 73% | 77% | 78% | 79% | 79% | 80% | 81% |
| | 230VAC | 77% | 78% | 79% | 83% | 86% | 87% | 87% | 87% | 88% |
| AC Current (max) | 5.0A | | | | | | | | | |
| Inrush Current (Typical) | <23A@115VAC Cold start <45A@230VAC Cold Start | | | | | | | | | |
| Leakage Current | Input-Output: <0.1mA Input-PG: <0.75mA | | | | | | | | | |
| Protection | | | | | | | | | | |
| Over Load (OLP) | 105%~135% of rated output current, hiccup mode, auto recovery | | | | | | | | | |
| Over Temperature (OTP) | 85°C ± 5°C (heatsink of power transistor); shut down, auto recover after the temperature decreases | | | | | | | | | |
| Over Voltage (OVP) | 110%~150% of rated output voltage, shut down, re-power on to recover | | | | | | | | | |
| Short Circuit (SCP) | Long-term mode, auto recovery | | | | | | | | | |
| Environmental Characteristics | | | | | | | | | | |
| Operating Amb. Temp. & Hum | -25°C~70°C; 20%~90% RH Non-Condensing | | | | | | | | | |
| Storage Temp. & Hum | -40°C~85°C; 10%~95% RH Non-Condensing | | | | | | | | | |
| Safety Standards | UL60950-1; EN60950-1: 2006 | | | | | | | | | |
| Withstand Voltage | Primary-Secondary: 3.0KVAC;≤10mA. Primary-PG: 1.5KVAC;≤10mA. Secondary-PG: 0.5KVDC;≤10mA | | | | | | | | | |
| Isolation Resistance | ≥100M ohms | | | | | | | | | |
| EMI Conduction & Radiation | Compliance to EN55022(CISPR22) Class B | | | | | | | | | |
| Harmonic Current | Compliance to EN61000-3-2, 17625.1-2003 | | | | | | | | | |
| EMS Immunity | Compliance to EN61000-4-2, 3, 4, 5, 6, 8, 11; ENV50204, light industry level, criteria A | | | | | | | | | |
| General Characteristics | | | | | | | | | | |
| MTBF (MIL-HDBK-217F) | More than 300,000Hrs (25°C, Full load) | | | | | | | | | |
| Dimension (LxWxH) | 226.5x115x50mm | | | | | | | | | |
| Packing | 10PCS/CTN. G.W: 11.6kgs | | | | | | | | | |
| Cooling Method | Forced air cooling (built-in DC fan) | | | | | | | | | |

MECHANICAL SPECIFICATIONS



| Pin No. | Assignment |
|---------|--------------|
| 1 | AC-L |
| 2 | AC-N |
| 3 | F.G |
| 4,5,6 | DC output -V |
| 7,8,9 | DC output +V |

DERATING CURVE



UNIT: mm



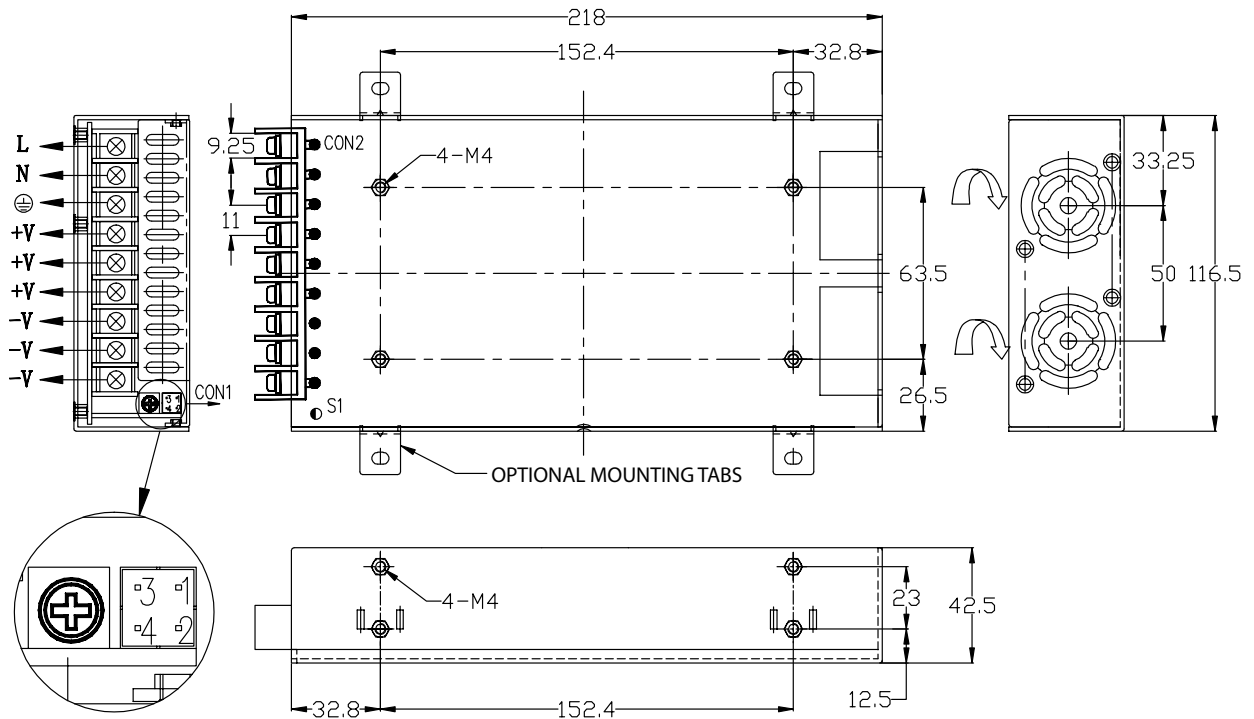
Features:

- Universal AC input/ Full range
- Built-in active PFC function, PF>0.96
- Built-in Fan Speed Control
- Built-in AC Inrush Current Limiting Circuit (<20A)
- Built-in Constant Current Limiting Circuit
- Built-in Remote Sense Function
- High Efficiency, and High Reliability
- Output Protections: OLP/OVP/OTP/SCP
- 1U Low Profile, 41mm
- 100% full load burn-in test

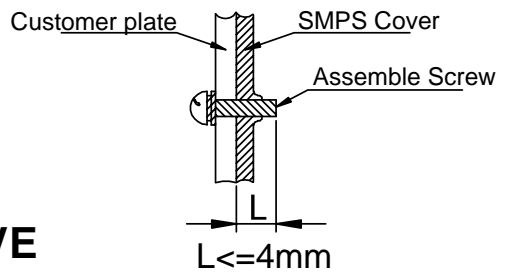


| Model | QPDF-480-12 | QPDF-480-24 | QPDF-480-27 | QPDF-480-36 | QPDF-480-48 |
|--------------------------------------|--|-------------|-------------|-------------|-------------|
| Output Characteristics | | | | | |
| DC Output | 12V | 24V | 27V | 36V | 48V |
| Rated Current | 34A | 22A | 18A | 14A | 11A |
| Current Range | 0~34A | 0~22A | 0~18A | 0~14A | 0~11A |
| Ripple and Noise | 0~70°C | <120mV | <150mV | <150mV | <200mV |
| | -30~0°C | <180mV | <150mV | <150mV | <200mV |
| Voltage ADJ. Range | -5% ~ +10% of rated output voltage | | | | |
| Voltage Accuracy | ±2.0% | ±2.0% | ±2.0% | ±2.0% | ±2.0% |
| Line Regulation | ±0.5% | ±0.5% | ±0.5% | ±0.5% | ±0.2% |
| Load Regulation | ±1.0% | ±1.0% | ±1.0% | ±1.0% | ±1.0% |
| Set-up Time | <1.5s (230VAC input, full load), <3s (115VAC input, full load) | | | | |
| Hold-up Time | >16ms (230VAC input, full load) | | | | |
| Temperature Coefficient | ±0.05%/°C | | | | |
| Overshoot and Undershoot | <5.0% | | | | |
| Input Characteristics | | | | | |
| Voltage Range | 90VAC~264VAC, 127VDC~370VDC | | | | |
| Frequency Range | 47Hz-63Hz | | | | |
| Power Factor (Typical) | PF>0.98/115VAC PF>0.96/230VAC | | | | |
| Efficiency (Typical) | 88% | 89% | 89% | 90% | 90% |
| AC Current (max) | <9.0A | | | | |
| Inrush Current (Typical) | <20A@230VAC Cold start | | | | |
| Leakage Current | Input-Output: 0.25mA Input-PG: 3.50mA | | | | |
| Protection | | | | | |
| Over Load (OLP) | 110%~135% of rated output current, constant current, auto recovery | | | | |
| Over Temperature (OTP) | 105°C ± 5°C (detect on mosfet); shut down, auto recovery after the temperature decreases to 75°C | | | | |
| Over Voltage (OVP) | 110%~150% of rated output voltage, constant voltage, auto recovery | | | | |
| Short Circuit (SCP) | Long-term mode, constant current, auto recovery | | | | |
| Environmental Characteristics | | | | | |
| Operating Amb. Temp. & Hum | -30°C~70°C; 20%~90% RH Non-Condensing | | | | |
| Storage Temp. & Hum | -40°C~85°C; 10%~95% RH Non-Condensing | | | | |
| Safety Standards | IEC 60950-1:2005 (2nd Ed); UL60950-1 2nd Ed; EN60950-1: 2006 | | | | |
| Withstand Voltage | Primary-Secondary: 3.0KVAC; 10mA. Primary-PG: 1.5KVAC; 10mA. Secondary-PG: 0.5KVDC; 10mA | | | | |
| Isolation Resistance | 100M ohms | | | | |
| EMI Conduction & Radiation | Compliance to EN55022, Class B | | | | |
| Harmonic Current | Compliance to EN61000-3-2, Class D | | | | |
| EMS Immunity | Compliance to EN61000-4-2, 3, 4, 5, 6, 8, 11; ENV50204, heavy industry level | | | | |
| General Characteristics | | | | | |
| MTBF (MIL-HDBK-217F) | More than 200,000Hrs (25°C, Full load) | | | | |
| Dimension (LxWxH) | 218x116.5x41mm | | | | |
| Packing | 6PCS/CTN. G.W: 8.7kgs | | | | |
| Cooling Method | Forced air cooling (built-in DC fan) | | | | |

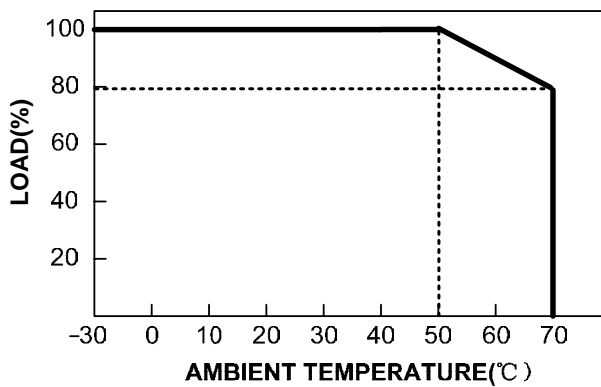
MECHANICAL SPECIFICATIONS



| Pin No. | Assignment | Mating Housing | Terminal |
|---------|-------------------|-------------------------------|--------------------------------|
| 1 | +S (Remote Sense) | HRS DF11-4DS or equivalent | HRS DF11-**SC or equivalent |
| 2 | -S (Remote Sense) | | |
| 3 | DC-OK | | |
| 4 | GND | | |



DERATING CURVE



UNIT: mm



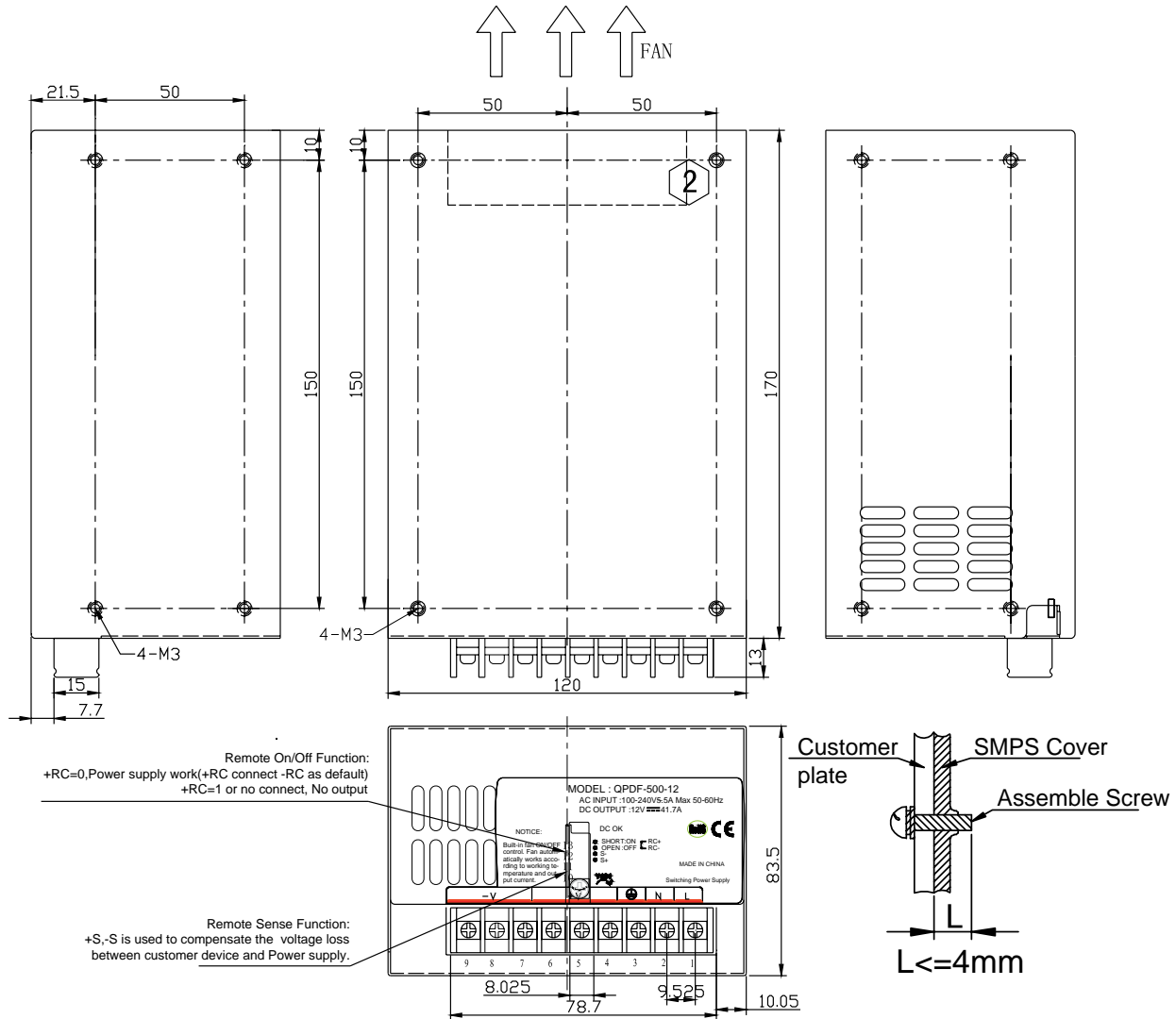
Features:

- Universal AC input/ Full range
- Built-in active PFC function, PF>0.95
- Built-in Cooling Fan ON-OFF Control
- Withstand 300VA Surge Input for 3 seconds
- Built-in Remote On-OFF Control
- Built-in Remote Sense Function
- High Efficiency, and High Reliability
- Output Protections: OLP/OVP/OTP/SCP
- 100% full load burn-in test

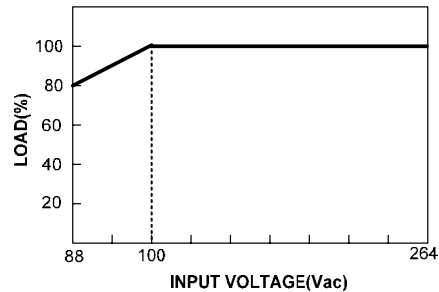
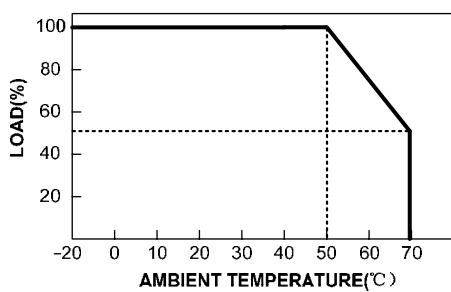


| Model | QPDF-500-12 | QPDF-500-24 | QPDF-500-27.5 | QPDF-500-48 | |
|--------------------------------------|---|-------------|---------------|-------------|-----|
| Output Characteristics | | | | | |
| DC Output | 12V | 24V | 27.5V | 48V | |
| Rated Current | 41.7A | 21A | 18.2A | 10.5A | |
| Current Range | 0-41.7A | 0-21A | 0-18.2A | 0-10.5A | |
| Ripple and Noise | 0~70°C | <150mV | <200mV | <240mV | |
| | -20~0°C | <240mV | <400mV | <480mV | |
| Voltage ADJ. Range | 11.6V-13.2V | 23.5V-27.2V | 26.0V-30.0V | 46.0V-54.0V | |
| Voltage Accuracy | ±2.0% | ±2.0% | ±2.0% | ±2.0% | |
| Line Regulation | ±0.5% | ±0.5% | ±0.5% | ±0.5% | |
| Load Regulation | ±1.0% | ±1.0% | ±1.0% | ±1.0% | |
| Set-up Time | <2.0s (230VAC input, full load), <2.0s (115VAC input, full load) | | | | |
| Hold-up Time | >10ms (230VAC input, full load) | | | | |
| Temperature Coefficient | ±0.03%/°C | | | | |
| Overshoot and Undershoot | <5.0% | | | | |
| Input Characteristics | | | | | |
| Voltage Range | 88VAC-264VAC | | | | |
| Frequency Range | 47Hz-63Hz | | | | |
| Power Factor (Typical) | PF>0.98/115VAC PF>0.95/230VAC | | | | |
| Efficiency (Typical) | 115VAC Input | 85% | 87% | 88% | 89% |
| | 230VAC Input | 88% | 90% | 91% | 92% |
| AC Current (max) | 5.5A | | | | |
| Inrush Current (Typical) | <20A@115VAC Cold Start <40A@230VAC Cold start | | | | |
| Leakage Current | Input-Output: 0.25mA Input-PG: 3.50mA | | | | |
| Protection | | | | | |
| Over Load (OLP) | 110%-150% of rated output current, constant current limiting for 3 sec, then hiccup mode, auto recovery | | | | |
| Over Temperature (OTP) | 95°C ± 10°C (detect on heatsink); shut down, auto recovery after the temperature decreases | | | | |
| Over Voltage (OVP) | 110%-150% of rated output voltage, constant voltage, auto recovery | | | | |
| Fan ON/OFF Control | Output Load >65% or inside temperature >55°C, FAN ON | | | | |
| Environmental Characteristics | | | | | |
| Operating Amb. Temp. & Hum | -20°C-70°C; 20%-90% RH Non-Condensing | | | | |
| Storage Temp. & Hum | -25°C-85°C; 10%-95% RH Non-Condensing | | | | |
| Safety Standards | EN60950-1: 2006 | | | | |
| Withstand Voltage | Primary-Secondary: 3.0KVAC; 10mA. Primary-PG: 1.5KVAC; 10mA. Secondary-PG: 0.5KVDC; 10mA | | | | |
| Isolation Resistance | 100M ohms | | | | |
| EMI Conduction & Radiation | Compliance to EN55022, EN55024, FCC PART 15 Class B | | | | |
| Harmonic Current | Compliance to EN61000-3-2, Class D | | | | |
| EMS Immunity | Compliance to EN61000-4-2, 3, 4, 5, 6, 8, 11; heavy industry level | | | | |
| General Characteristics | | | | | |
| MTBF (MIL-HDBK-217F) | More than 200,000Hrs (25°C, Full load) | | | | |
| Dimension (LxWxH) | 170x120x83.5mm | | | | |
| Packing | 6PCS/CTN. G.W: 12kgs | | | | |
| Cooling Method | Forced air cooling (built-in DC fan) | | | | |

MECHANICAL SPECIFICATIONS



DERATING CURVE



UNIT: mm

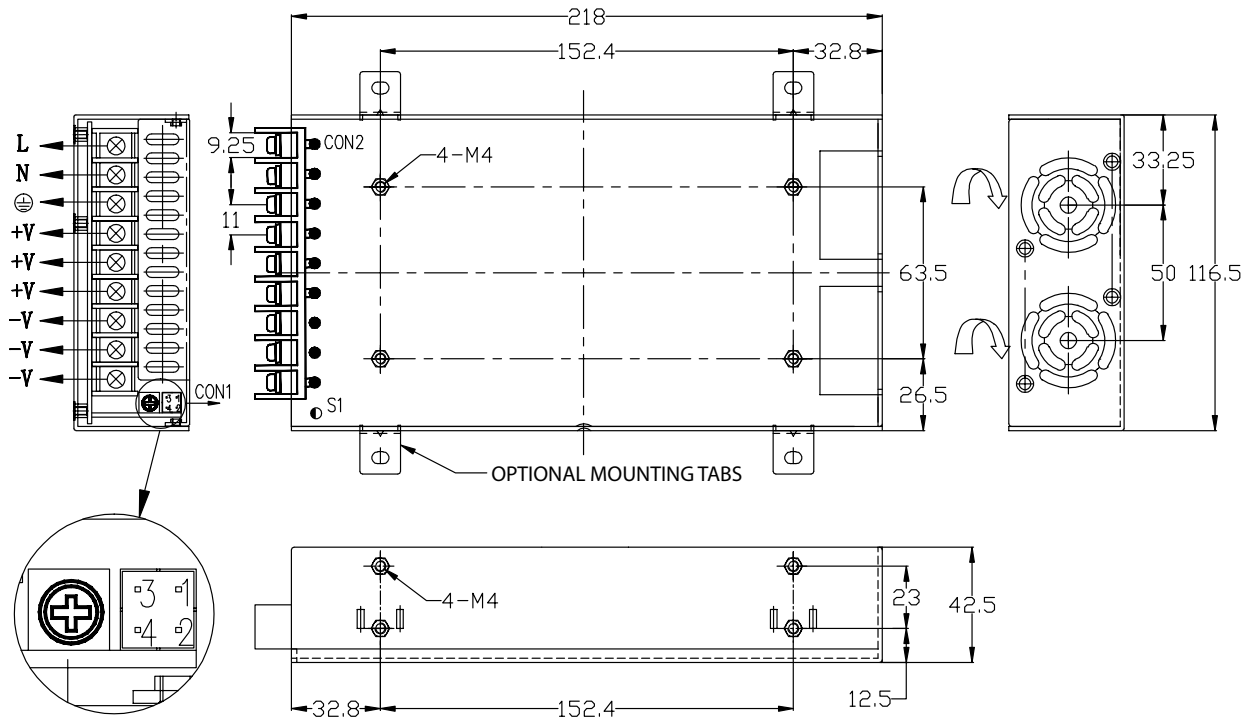
**Features:**

- Universal AC input/ Full range
- Built-in active PFC function, PF>0.96
- Built-in Fan Speed Control
- Built-in AC Inrush Current Limiting Circuit (<20A)
- Built-in Constant Current Limiting Circuit
- Built-in Remote Sense Function
- High Efficiency, and High Reliability
- Output Protections: OLP/OVP/OTP/SCP
- 1U Low Profile, 41mm
- 100% full load burn-in test

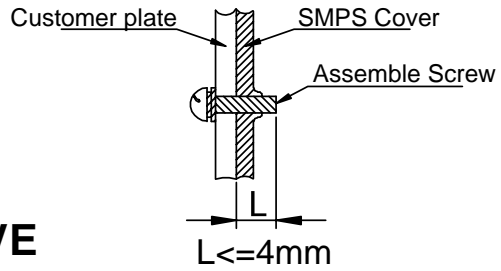


| Model | QPDF-600-12 | QPDF-600-24 | QPDF-600-36 | QPDF-600-48 |
|--------------------------------------|--|-------------|-------------|-------------|
| Output Characteristics | | | | |
| DC Output | 12V | 24V | 36V | 48V |
| Rated Current (100-127VAC) | 34A | 22A | 14A | 11A |
| Rated Current (128-264VAC) | 42A | 26.5A | 17.5A | 13.6A |
| Ripple and Noise | 0~70°C | <120mV | <150mV | <150mV |
| | -30~0°C | <180mV | <150mV | <200mV |
| Voltage ADJ. Range | -5% ~ +10% of rated output voltage | | | |
| Voltage Accuracy | ±2.0% | ±2.0% | ±2.0% | ±2.0% |
| Line Regulation | ±0.5% | ±0.5% | ±0.5% | ±0.2% |
| Load Regulation | ±1.0% | ±1.0% | ±1.0% | ±1.0% |
| Set-up Time | <1.5s (230VAC input, full load), <3s (115VAC input, full load) | | | |
| Hold-up Time | >16ms (230VAC input, full load) | | | |
| Temperature Coefficient | ±0.05%/°C | | | |
| Overshoot and Undershoot | <5.0% | | | |
| Input Characteristics | | | | |
| Voltage Range | 90VAC-264VAC, 127VDC-370VDC | | | |
| Frequency Range | 47Hz-63Hz | | | |
| Power Factor (Typical) | PF>0.98/115VAC PF>0.96/230VAC | | | |
| Efficiency (Typical) | 88% | 89% | 90% | 90% |
| AC Current (max) | <9.0A | | | |
| Inrush Current (Typical) | <20A@230VAC Cold start | | | |
| Leakage Current | Input-Output: 0.25mA Input-PG: 3.50mA | | | |
| Protection | | | | |
| Over Load (OLP) | 110%-135% of rated output current, constant current, auto recovery | | | |
| Over Temperature (OTP) | 105°C ± 5°C (detect on mosfet); shut down, auto recovery after the temperature decreases to 75°C | | | |
| Over Voltage (OVP) | 110%-150% of rated output voltage, constant voltage, auto recovery | | | |
| Short Circuit (SCP) | Long-term mode, constant current, auto recovery | | | |
| Environmental Characteristics | | | | |
| Operating Amb. Temp. & Hum | -30°C~70°C; 20%-90% RH Non-Condensing | | | |
| Storage Temp. & Hum | -40°C~85°C; 10%-95% RH Non-Condensing | | | |
| Safety Standards | IEC 60950-1:2005 (2nd Ed); UL60950-1 2nd Ed; EN60950-1: 2006 | | | |
| Withstand Voltage | Primary-Secondary: 3.0KVAC; 10mA. Primary-PG: 1.5KVAC; 10mA. Secondary-PG: 0.5KVDC; 10mA | | | |
| Isolation Resistance | 100M ohms | | | |
| EMI Conduction & Radiation | Compliance to EN55022, Class B | | | |
| Harmonic Current | Compliance to EN61000-3-2, Class D | | | |
| EMS Immunity | Compliance to EN61000-4-2, 3, 4, 5, 6, 8, 11; ENV50204, heavy industry level | | | |
| General Characteristics | | | | |
| MTBF (MIL-HDBK-217F) | More than 200,000Hrs (25°C, Full load) | | | |
| Dimension (LxWxH) | 218x116.5x41mm | | | |
| Packing | 6PCS/CTN. G.W: 8.7kgs | | | |
| Cooling Method | Forced air cooling (built-in DC fan) | | | |

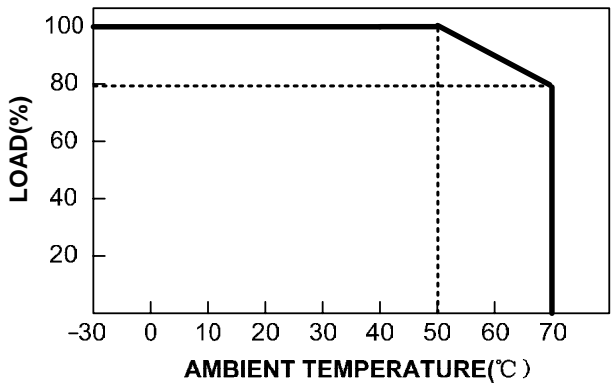
MECHANICAL SPECIFICATIONS



| Pin No. | Assignment | Mating Housing | Terminal |
|---------|-------------------|-------------------------------|--------------------------------|
| 1 | +S (Remote Sense) | HRS DF11-4DS or equivalent | HRS DF11-**SC or equivalent |
| 2 | -S (Remote Sense) | | |
| 3 | DC-OK | | |
| 4 | GND | | |



DERATING CURVE



UNIT: mm

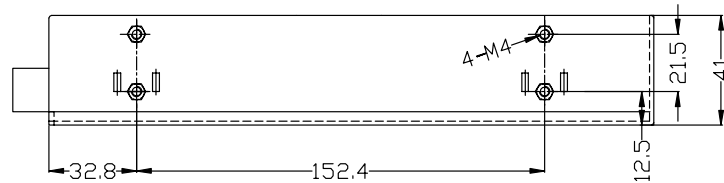
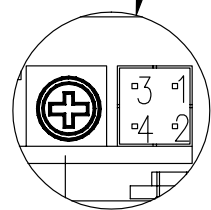
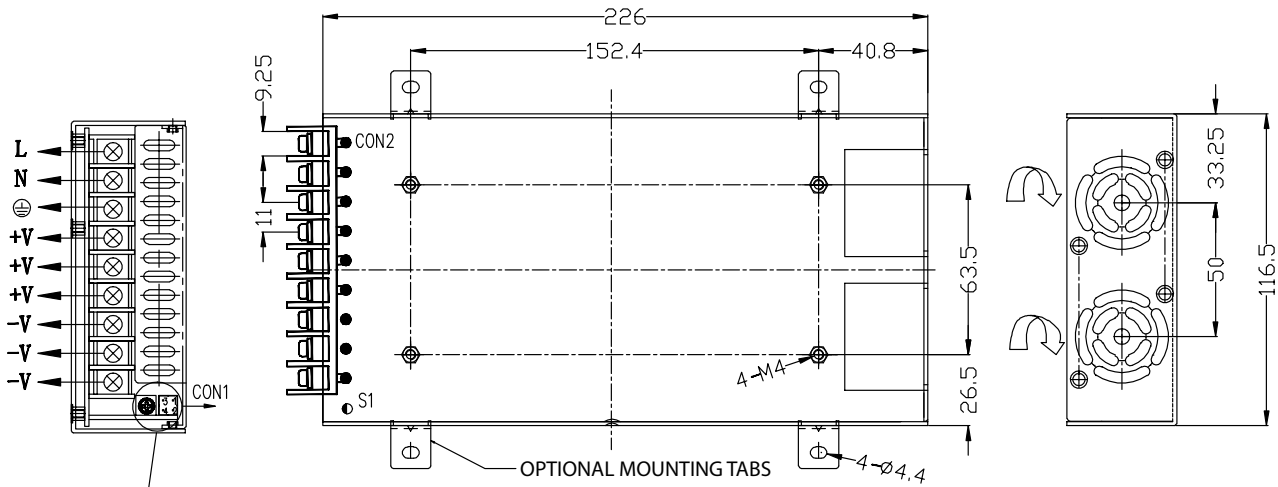
**Features:**

- Universal AC input/ Full range
- Built-in active PFC function, PF>0.96
- Built-in Fan Speed Control
- Built-in AC Inrush Current Limiting Circuit (<20A)
- Built-in Constant Current Limiting Circuit
- Built-in Remote Sense Function
- High Efficiency, and High Reliability
- Output Protections: OLP/OVP/OTP/OPP/SCP
- 1U Low Profile, 41mm
- 100% full load burn-in test

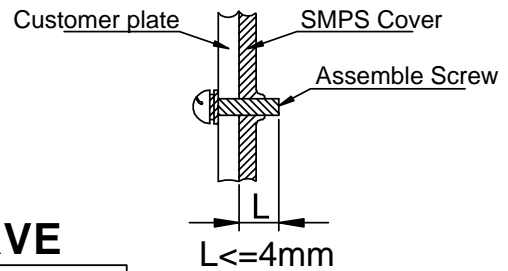


| Model | QPDF-800-24 | QPDF-800-27 | QPDF-800-48 |
|--------------------------------------|--|-------------|-------------|
| Output Characteristics | | | |
| DC Output | 24V | 27V | 48V |
| Rated Current (100-127VAC) | 27A | 23A | 14A |
| Rated Current (128-264VAC) | 33A | 29A | 16.5A |
| Ripple and Noise | <200mV | <240mV | <240mV |
| Voltage ADJ. Range | -5% ~ +10% of rated output voltage | | |
| Voltage Accuracy | ±2.0% | | |
| Line Regulation | ±0.5% | | |
| Load Regulation | ±2.0% | | |
| Set-up Time | <3s (230VAC input, full load) | | |
| Hold-up Time | >8ms (230VAC input, full load) | | |
| Temperature Coefficient | ±0.03%/°C | | |
| Overshoot and Undershoot | <5.0% | | |
| Input Characteristics | | | |
| Voltage Range | 90VAC~264VAC, 127VDC~370VDC | | |
| Frequency Range | 47Hz-63Hz | | |
| Power Factor (Typical) | PF>0.98/115VAC PF>0.96/230VAC | | |
| Efficiency (Typical) | 88% | 88% | 89% |
| AC Current (max) | <12.0A | | |
| Inrush Current (Typical) | <20A@230VAC Cold start | | |
| Leakage Current | Input-Output: 0.25mA Input-PG: 3.5mA | | |
| Protection | | | |
| Over Load (OLP) | 110%-135% of rated output current, constant current, auto recovery | | |
| Over Power (OPP) | 110%-135% of rated output power, constant current, auto recovery | | |
| Over Temperature (OTP) | 105°C ± 5°C (detect on mosfet); shut down, auto recovery after the temperature decreases to 70°C | | |
| Over Voltage (OVP) | 110%-150% of rated output voltage, constant voltage, auto recovery | | |
| Short Circuit (SCP) | Long-term mode, constant current, auto recovery | | |
| Environmental Characteristics | | | |
| Operating Amb. Temp. & Hum | -30°C~70°C; 20%-90% RH Non-Condensing | | |
| Storage Temp. & Hum | -40°C~85°C; 10%-95% RH Non-Condensing | | |
| Safety Standards | IEC 60950-1:2005 (2nd Ed); UL60950-1 2nd Ed; EN60950-1: 2006 | | |
| Withstand Voltage | Primary-Secondary: 3.0KVAC; 10mA. Primary-PG: 1.5KVAC; 10mA. Secondary-PG: 0.5KVDC; 10mA | | |
| Isolation Resistance | 100M ohms | | |
| EMI Conduction & Radiation | Compliance to EN55022, Class B | | |
| Harmonic Current | Compliance to EN61000-3-2, Class D | | |
| EMS Immunity | Compliance to EN61000-4-2, 3, 4, 5, 6, 8, 11; Heavy Industrial Level | | |
| General Characteristics | | | |
| MTBF (MIL-HDBK-217F) | More than 200,000Hrs (25°C, Full load) | | |
| Dimension (LxWxH) | 226x116.5x41mm | | |
| Packing | 6PCS/CTN. G.W: 8.9kgs | | |
| Cooling Method | Forced air cooling (built-in DC fan, the fan speed is controlled by load and internal temp.) | | |

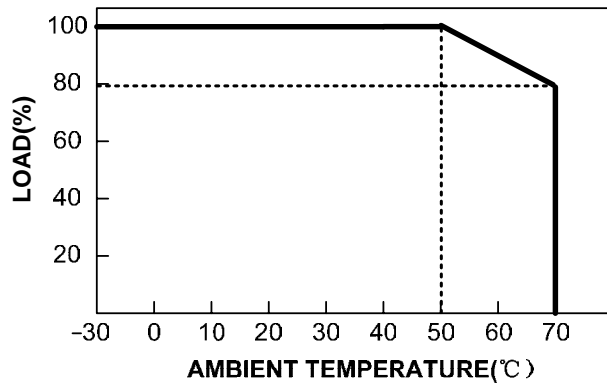
MECHANICAL SPECIFICATIONS



| Pin No. | Assignment | Mating Housing | Terminal |
|---------|-------------------|-------------------------------|--------------------------------|
| 1 | +S (Remote Sense) | HRS DF11-4DS or equivalent | HRS DF11-**SC or equivalent |
| 2 | -S (Remote Sense) | | |
| 3 | DC-OK | | |
| 4 | GND | | |



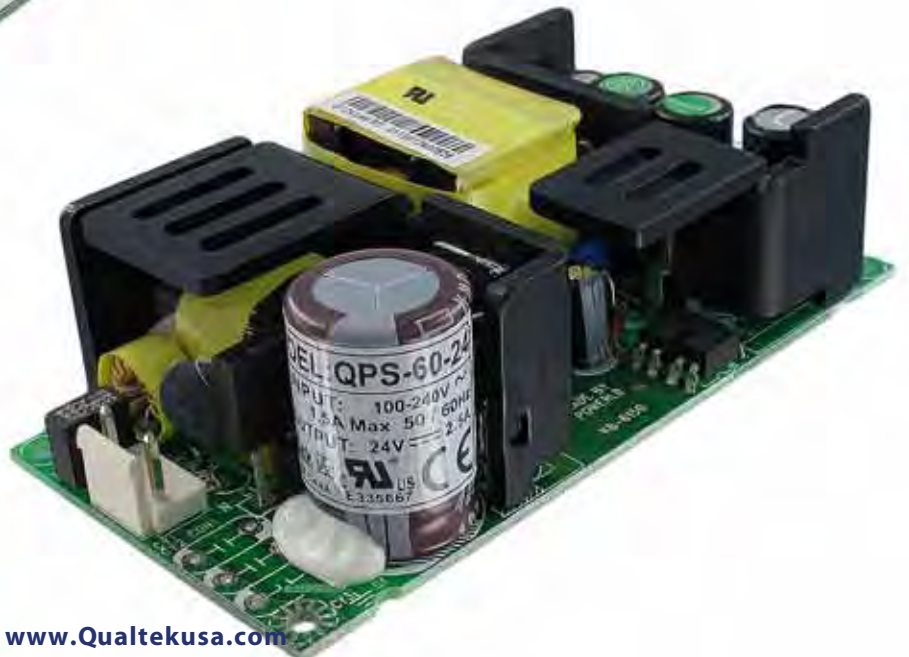
DERATING CURVE



UNIT: mm

AC/DC Open Frame Power Supplies

- Output power: 20W - 125W
- Universal Input
- Compact Size
- High efficiency and reliability
- Available with conformal coating





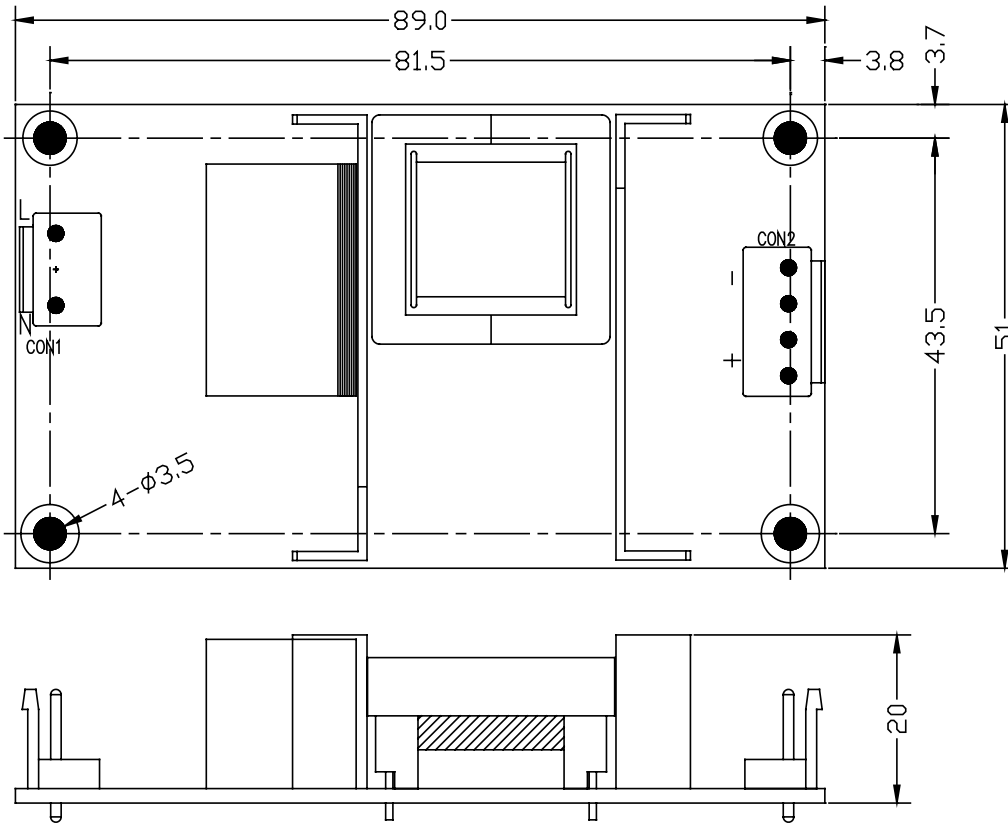
Features:

- Universal AC input/ Full range
- Wide Operating Ambient Temperature (-20°C~60°C)
- High Efficiency, and High Reliability
- Ultra-miniature size, low profile
- Output Protections: OLP/OVP/SCP
- All using 105°C long life electrolytic capacitors.
- 100% full load burn-in test



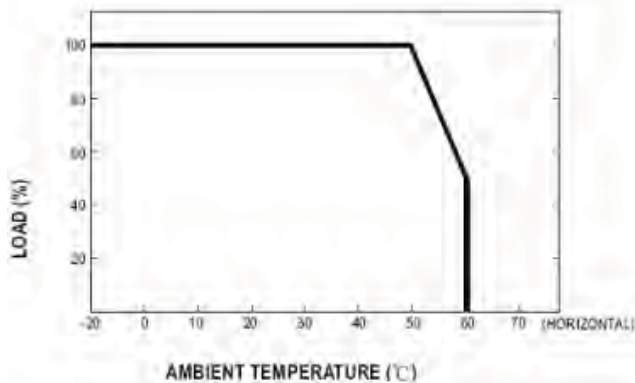
| Model | QPS-20-3.3 | QPS-20-5 | QPS-20-12 | QPS-20-15 | QPS-20-24 | QPS-20-48 |
|--------------------------------------|--|----------|------------|------------|------------|------------|
| Output Characteristics | | | | | | |
| DC Output | 3.3V | 5V | 12V | 15V | 24V | 48V |
| Rated Current | 4A | 4A | 1.67A | 1.34A | 0.84A | 0.42A |
| Current Range | 0~4A | 0~4A | 0~1.67A | 0~1.34A | 0~0.84A | 0~0.42A |
| Ripple and Noise | 0~60°C | <50mV | <50mV | <50mV | <50mV | <100mV |
| | -20~0°C | <75mV | <75mV | <75mV | <75mV | <100mV |
| Voltage ADJ. Range | 3.1~3.6V | 4.4~5.6V | 11.1~13.1V | 13.7~16.1V | 22.0~25.4V | 45.6~50.4V |
| Voltage Accuracy | ±2.0% | ±2.0% | ±2.0% | ±2.0% | ±2.0% | ±2.0% |
| Line Regulation | ±0.5% | ±0.5% | ±0.5% | ±0.5% | ±0.5% | ±0.5% |
| Load Regulation | ±2.0% | ±2.0% | ±2.0% | ±2.0% | ±2.0% | ±2.0% |
| Set-up Time | <2.0s (115VAC input, full load); <1.0s (230VAC input, full load) | | | | | |
| Hold-up Time | >10ms (115VAC input, full load); >20ms (230VAC input, full load) | | | | | |
| Temperature Coefficient | ±0.03%/°C | | | | | |
| Overshoot and Undershoot | <5.0% | | | | | |
| Input Characteristics | | | | | | |
| Voltage Range | 90VAC~264VAC, 127VDC~370VDC | | | | | |
| Frequency Range | 47Hz-63Hz | | | | | |
| Efficiency (Typical) | 115VAC Input | 69% | 76% | 79% | 80% | 80% |
| | 230VAC Input | 68% | 75% | 78% | 79% | 79% |
| AC Current (max) | <0.5A | | | | | |
| Inrush Current (Typical) | 20A@115VAC Cold start 40A@230VAC Cold start | | | | | |
| Leakage Current | Input-Output: <0.35mA Input-PG: <0.75mA | | | | | |
| Protection | | | | | | |
| Over Load (OLP) | 105%~150% of rated output power, hiccup mode, auto recover | | | | | |
| Over Voltage (OVP) | 110%~140% of rated output voltage, constant voltage | | | | | |
| Short Circuit (SCP) | Long-term mode, auto recovery | | | | | |
| Environmental Characteristics | | | | | | |
| Operating Amb. Temp. & Hum | -20°C~60°C; 20%~90% RH Non-Condensing | | | | | |
| Storage Temp. & Hum | -40°C~85°C; 10%~95% RH Non-Condensing | | | | | |
| Safety Standards | UL60950-1; EN60950-1: 2006 | | | | | |
| Withstand Voltage | Primary-Secondary: 3.0KVAC;≤10mA. Primary-PG: 1.5KVAC;≤10mA. Secondary-PG: 0.5KVDC;≤10mA | | | | | |
| Isolation Resistance | ≥100M ohms | | | | | |
| EMI Conduction & Radiation | Compliance to EN55022(CISPR22) Class B | | | | | |
| Harmonic Current | Compliance to EN61000-3-2, 17625.1-2003 | | | | | |
| EMS Immunity | Compliance to EN61000-4-2, 3, 4, 5, 6, 8, 11; ENV50204, light industry level, criteria A | | | | | |
| General Characteristics | | | | | | |
| MTBF (MIL-HDBK-217F) | More than 200,000Hrs (25°C, Full load) | | | | | |
| Dimension (LxWxH) | 89x51x20mm | | | | | |
| Packing | 60PCS/CTN. G.W: 7.6kgs | | | | | |
| Cooling Method | Cooling by free air convection | | | | | |

MECHANICAL SPECIFICATIONS



| ITEM | CONNECTOR | MATING HOUSING | TERMINAL |
|---------------|--|-----------------------------|--|
| AC IN (CON1) | LANDWIN 3961P0300T (CENTER PIN REMOVED) | LANDWIN 3960S OR JST VHR | LANDWIN 3963T011R OR JST SVH-21T-P1.1 |
| DC OUT (CON2) | LANDWIN 3961P0400T | OR MOLEX 51144 | OR MOLEX 50539 |

DERATING CURVE



UNIT: mm



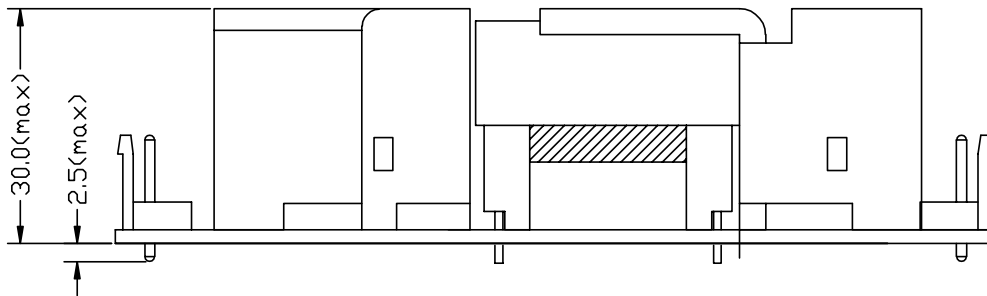
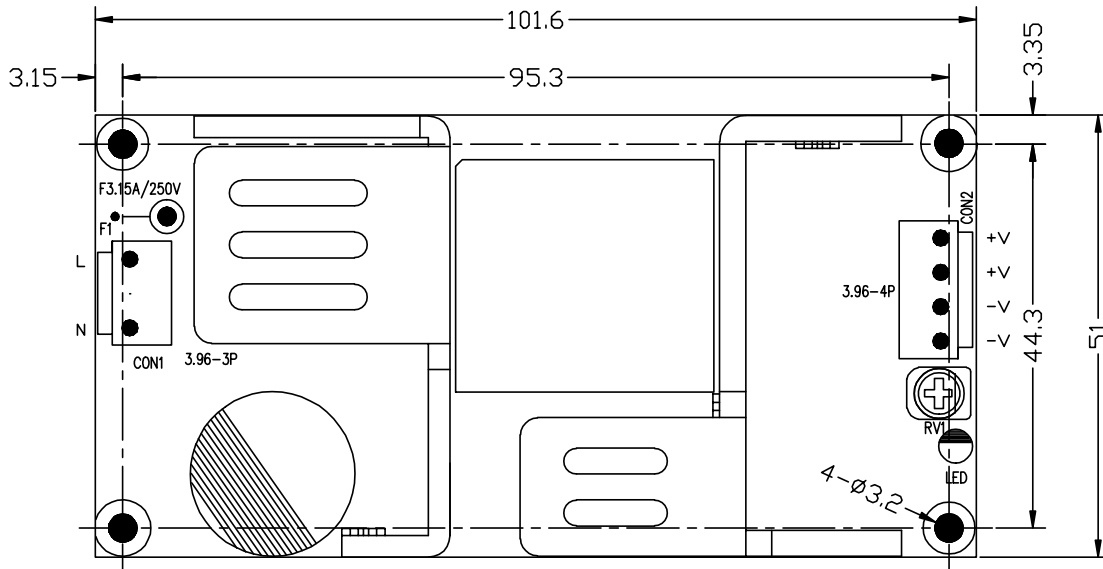
Features:

- Universal AC input/ Full range
- Wide Operating Ambient Temperature (-25°C~70°C)
- High Efficiency, low power consumption
- Output Protections: OLP/OVP/SCP
- All using 105°C long life electrolytic capacitors.
- 100% full load burn-in test



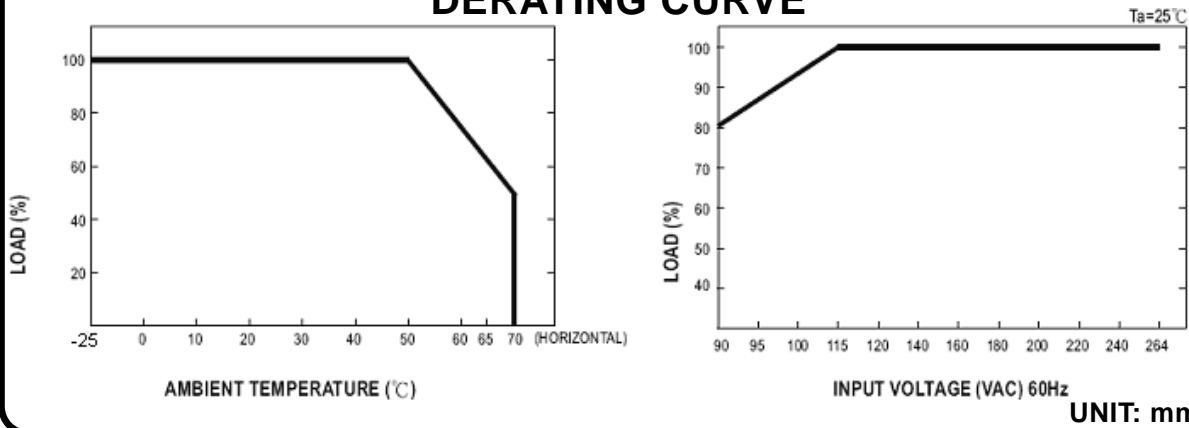
| Model | QPS-60-5 | QPS-60-12 | QPS-60-15 | QPS-60-24 | QPS-60-48 | |
|--------------------------------------|--|------------|------------|------------|------------|-----|
| Output Characteristics | | | | | | |
| DC Output | 5V | 12V | 15V | 24V | 48V | |
| Rated Current | 8A | 4.5A | 3.6A | 2.5A | 1.25A | |
| Current Range | 0~8A | 0~4.5A | 0~3.6A | 0~2.5A | 0~1.25A | |
| Ripple and Noise | 0~70°C | <50mV | <120mV | <120mV | <240mV | |
| | -25~0°C | <200mV | <300mV | <300mV | <360mV | |
| Voltage ADJ. Range | 4.5~5.5V | 11.2~13.4V | 13.8~16.5V | 22.2~27.9V | 45.0~53.2V | |
| Voltage Accuracy | ±3.0% | | | | | |
| Line Regulation | ±0.5% | | | | | |
| Load Regulation | ±2.0% | | | | | |
| Set-up Time | ≤1.0s (230VAC input, full load) | | | | | |
| Hold-up Time | ≥20ms (230VAC input, full load) | | | | | |
| Temperature Coefficient | ±0.03%/°C | | | | | |
| Overshoot and Undershoot | <5.0% | | | | | |
| Input Characteristics | | | | | | |
| Voltage Range | 90VAC~264VAC, 127VDC~370VDC | | | | | |
| Frequency Range | 47Hz-63Hz | | | | | |
| Efficiency (Typical) | 115VAC Input | 79% | 83% | 84% | 87% | 85% |
| | 230VAC Input | 82% | 85% | 85% | 87% | 88% |
| AC Current (max) | <1.5A | | | | | |
| Inrush Current (Typical) | 30A@115VAC Cold start 60A@230VAC Cold start | | | | | |
| Leakage Current | <0.25mA | | | | | |
| Protection | | | | | | |
| Over Load (OLP) | 105%~180% of rated output current, hiccup mode, auto recover | | | | | |
| Over Voltage (OVP) | 110%~150% of rated output voltage, constant voltage | | | | | |
| Short Circuit (SCP) | Long-term mode, auto recovery | | | | | |
| Environmental Characteristics | | | | | | |
| Operating Amb. Temp. & Hum | -25°C~70°C; 20%~90% RH Non-Condensing | | | | | |
| Storage Temp. & Hum | -40°C~85°C; 10%~95% RH Non-Condensing | | | | | |
| Safety Standards | UL60950-1; EN60950-1: 2006 | | | | | |
| Withstand Voltage | Primary-Secondary: 3.0KVAC; ≤10mA. | | | | | |
| Isolation Resistance | ≥100M ohms | | | | | |
| EMI Conduction & Radiation | Compliance to EN55022(CISPR22) Class B | | | | | |
| Harmonic Current | Compliance to EN61000-3-2, -3 | | | | | |
| EMS Immunity | Compliance to EN61000-4-2, 3, 4, 5, 6, 8, 11; ENV50204, light industry level, criteria A | | | | | |
| General Characteristics | | | | | | |
| MTBF (MIL-HDBK-217F) | More than 200,000Hrs (25°C, Full load) | | | | | |
| Dimension (LxWxH) | 101.6x50.8x30mm | | | | | |
| Packing | 60PCS/CTN. G.W: 12kgs | | | | | |
| Cooling Method | Cooling by free air convection | | | | | |

MECHANICAL SPECIFICATIONS



| ITEM | CONNECTOR | MATING HOUSING | TERMINAL |
|---------------|--|-----------------------------|--|
| AC IN (CON1) | LANDWIN 3961P0300T (CENTER PIN REMOVED) | LANDWIN 3960S OR JST VHR | LANDWIN 3963T011R OR JST SVH-21T-P1.1 |
| DC OUT (CON2) | LANDWIN 3961P0400T | OR MOLEX 51144 | OR MOLEX 50539 |

DERATING CURVE





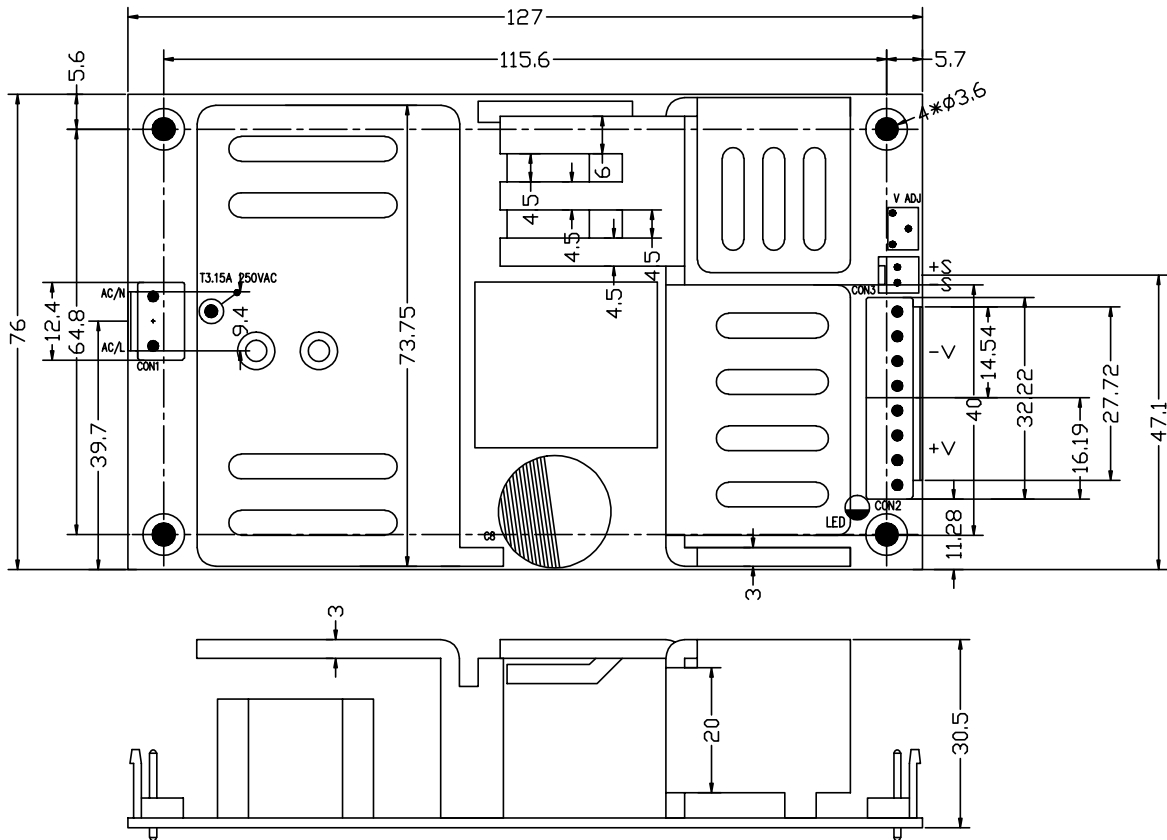
Features:

- Universal AC input/ Full range
- Built-in active PFC function, PF>0.95
- High Efficiency, and High Reliability
- Wide Operating Ambient Temperature (-20°C~70°C)
- Output Protections: OLP/OVP/SCP
- Built-in Remote Sense Function
- All using 105°C long life electrolytic capacitors.
- 100% full load burn-in test



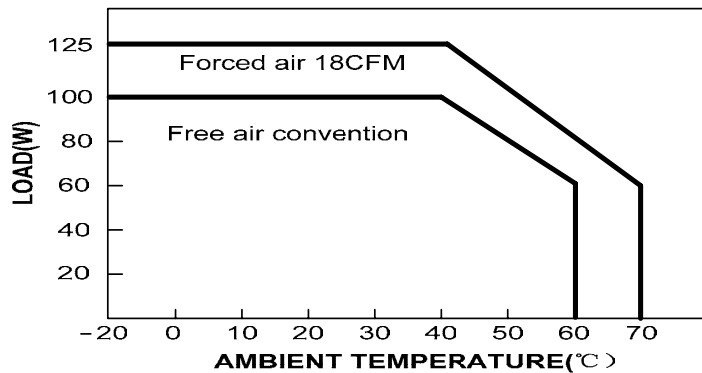
| Model | QPSF-125-5 | QPSF-125-12 | QPSF-125-15 | QPSF-125-24 | QPSF-125-48 | |
|--------------------------------------|--|-------------|-------------|-------------|-------------|-----|
| Output Characteristics | | | | | | |
| DC Output | 5V | 12V | 15V | 24V | 48V | |
| Rated Current | 20A | 10.5A | 8.4A | 5.2A | 2.6A | |
| Current Range | 0~20A | 0~10.5A | 0~8.4A | 0~5.2A | 0~2.6A | |
| Ripple and Noise | <100mV | <100mV | <100mV | <100mV | <150mV | |
| Voltage ADJ. Range | 4.5~5.7V | 10.6~13.4V | 12.9~17.0V | 24.7~27.0V | 43.0~53.7V | |
| Voltage Accuracy | ±2.0% | ±2.0% | ±2.0% | ±2.0% | ±2.0% | |
| Line Regulation | ±0.5% | ±0.5% | ±0.5% | ±0.5% | ±0.5% | |
| Load Regulation | ±2.0% | ±2.0% | ±2.0% | ±2.0% | ±2.0% | |
| Set-up Time | <1.2s (115VAC input, full load); <2.5s (230VAC input, full load) | | | | | |
| Hold-up Time | >20ms (115VAC/230VAC input, full load) | | | | | |
| Temperature Coefficient | ±0.03%/°C | | | | | |
| Overshoot and Undershoot | <5.0% | | | | | |
| Input Characteristics | | | | | | |
| Voltage Range | 90VAC~264VAC, 127VDC~370VDC | | | | | |
| Frequency Range | 47Hz~63Hz | | | | | |
| Power Factor (Typical) | PF>0.98/115VAC PF>0.95/230VAC | | | | | |
| Efficiency (Typical) | 115VAC Input | 83% | 85% | 85% | 86% | 86% |
| | 230VAC Input | 85% | 87% | 87% | 88% | 88% |
| AC Current (max) | <1.5A | | | | | |
| Inrush Current (Typical) | 30A@115VAC Cold start 60A@230VAC Cold start | | | | | |
| Leakage Current | <3.5mA | | | | | |
| Protection | | | | | | |
| Over Load (OLP) | 105%~150% of rated output current, hiccup mode, auto recover | | | | | |
| Over Voltage (OVP) | 120%~150% of rated output voltage, hiccup mode | | | | | |
| Short Circuit (SCP) | Long-term mode, auto recovery | | | | | |
| Environmental Characteristics | | | | | | |
| Operating Amb. Temp. & Hum | -20°C~70°C; 20%~90% RH Non-Condensing | | | | | |
| Storage Temp. & Hum | -40°C~85°C; 10%~95% RH Non-Condensing | | | | | |
| Safety Standards | UL60950-1; EN60950-1: 2006 | | | | | |
| Withstand Voltage | Primary-Secondary: 3.0KVAC;≤10mA. Primary-PG: 1.5KVAC;≤10mA. Secondary-PG: 0.5KVDC;≤10mA | | | | | |
| Isolation Resistance | ≥100M ohms | | | | | |
| EMI Conduction & Radiation | Compliance to EN55022(CISPR22) Class B | | | | | |
| Harmonic Current | Compliance to EN61000-3-2,-3 | | | | | |
| EMS Immunity | Compliance to EN61000-4-2, 3, 4, 5, 6, 8, 11; ENV50204, light industry level, criteria A | | | | | |
| General Characteristics | | | | | | |
| MTBF (MIL-HDBK-217F) | More than 100,000Hrs (25°C, Full load) | | | | | |
| Dimension (LxWxH) | 127x76x30.5mm | | | | | |
| Packing | 21PCS/CTN. G.W: 8.46kgs | | | | | |
| Cooling Method | Cooling by free air convection | | | | | |

MECHANICAL SPECIFICATIONS

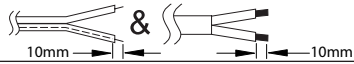
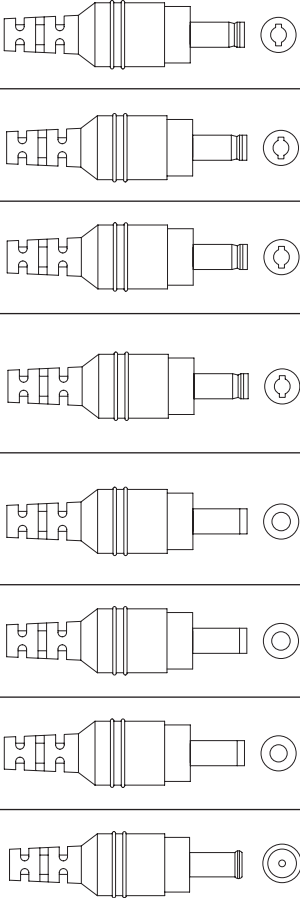
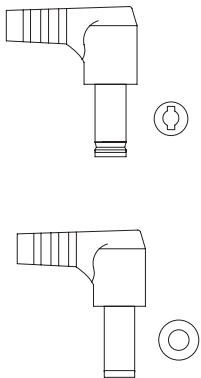


| ITEM | CONNECTOR | MATING HOUSING | TERMINAL |
|---------------------|--|--------------------------------|--|
| AC IN (CON1) | LANDWIN 3961P0300T (CENTER PIN REMOVED) | LANDWIN 3960S OR JST VHR | LANDWIN 3963T011R OR JST SVH-21T-P1.1 |
| DC OUT (CON2) | LANDWIN 3961P0800T | OR MOLEX 51144 | OR MOLEX 50539 |
| REMOTE SENSE (CON3) | LANDWIN 2541P0200T | LANDWIN 2510S OR MOLEX 5051 | LANDWIN 2563T011X OR MOLEX 4809 |

DERATING CURVE



UNIT: mm

| Code | Plug Type | Specification | Outline / Drawing | | |
|------|----------------|-------------------------|--|-------------|---|
| 00 | Strip & Tinned | NC |  | | |
| 01 | Barrel Type | 5.5x2.1x11 |  | | |
| 47 | | 5.5x2.1x9.5 | | | |
| 02 | | 5.5x2.5x11 | | | |
| 48 | | 5.5x2.5x9.5 | | | |
| 03 | | 4.75x1.7x11 | | | |
| 49 | | 4.75x1.7x9.5 | | | |
| 04 | | 4.0x1.7x11 | | | |
| 50 | | 4.0x1.7x9.5 | | | |
| 05 | | 3.5x1.35x11 | | | |
| 51 | | 3.5x1.35x9.5 | | | |
| 06 | | 2.35x0.7x11 | | | |
| 52 | | 2.35x0.7x9.5 | | | |
| 07 | | 6.3x3.0x11 | | | |
| 53 | | 6.3x3.0x9.5 | | | |
| 08 | | 6.5x1.4x11 | | | |
| 54 | | 6.5x1.4x9.5 | | | |
| 11 | | Barrel Type Right Angle | | 5.5x2.1x11 |  |
| 55 | | | | 5.5x2.1x9.5 | |
| 12 | | | | 5.5x2.5x11 | |
| 56 | | | | 5.5x2.5x9.5 | |
| 13 | 4.75x1.7x11 | | | | |
| 57 | 4.75x1.7x9.5 | | | | |
| 14 | 4.0x1.7x11 | | | | |
| 58 | 4.0x1.7x9.5 | | | | |
| 15 | 3.5x1.35x11 | | | | |
| 59 | 3.5x1.35x9.5 | | | | |
| 16 | 2.35x0.7x11 | | | | |
| 60 | 2.35x0.7x9.5 | | | | |
| 17 | 6.3x3.0x11 | | | | |
| 64 | 6.3x3.0x9.5 | | | | |
| 18 | 6.5x1.4x11 | | | | |
| 65 | 6.5x1.4x9.5 | | | | |

| Code | Plug Type | Specification | Outline / Drawing |
|------|---------------------------|-----------------------------------|-------------------|
| 21 | Din (male) | 3Pin | |
| 22 | | 4Pin | |
| 23 | | 5Pin(180) | |
| 24 | | 5Pin(240) | |
| 25 | | 6Pin | |
| 26 | | 7Pin | |
| 27 | | 8Pin | |
| 31 | | Mini-Din (male) | |
| 32 | 4Pin | | |
| 33 | 5Pin | | |
| 34 | 6Pin | | |
| 35 | 7Pin | | |
| 36 | 8Pin | | |
| 41 | Power-Mini Din (male) | 3Pin (Molding) | |
| 42 | | 4Pin (Molding) | |
| 45 | | 3Pin (Assembly/Lock Type) | |
| 46 | | 4Pin (Assembly/Lock Type) | |
| 61 | Interchangeable Connector | 2Pin | |
| 62 | | 2Pin | |
| 63 | | 3Pin | |
| 71 | Switchcraft Locking Type | A:5.5, B:2.5 C:0.375"(9.52mm) | |
| 72 | | A:5.5, B:2.5 C:0.475"(12.06mm) | |
| 73 | | A:5.5, B:2.1 C:0.375"(9.52mm) | |
| 74 | | A:5.5, B:2.1 C:0.475"(12.06mm) | |
| 81 | DC Jack with Screw | A:5.5, B:2.1, C:7.5 | |
| 82 | | A:5.5, B:2.1, C:10.1 | |
| 91 | Cigarette Lighter | | |

AC/DC Desktop Power Supplies

- Output power: 18W - 200W
- Universal input
- Level V efficiency
- Worldwide agency approvals
- Available with a range of input and output plugs





Features:

- Universal AC input/ Full Range
- Energy Efficiency Level V
- ErP Step 2 Compliant
- NRCan and GEMS Compliant
- Output Protections: OVP/SCP/OCP
- No Load Power Consumption <0.3W
- 1 Year Warranty



| Model | QADA-18-4.5 | QADA-18-5 | QADA-18-7 | QADA-18-7.5 | QADA-18-9 | QADA-18-10 | QADA-18-12 | QADA-18-13.5 | QADA-18-15 | QADA-18-16 | QADA-18-18 | QADA-18-20 | QADA-18-24 |
|--------------------------------------|---|-----------|-----------|-------------|-----------|------------|------------|--------------|------------|------------|------------|------------|------------|
| Output Characteristics | | | | | | | | | | | | | |
| DC Output | 4.5V | 5V | 7V | 7.5V | 9V | 10V | 12V | 13.5V | 15V | 16V | 18V | 20V | 24V |
| Rated Current | 3.5A | 3.5A | 2.5A | 2.5A | 2.2A | 1.9A | 1.6A | 1.4A | 1.3A | 1.2A | 1.1A | 1.0A | 0.8A |
| Ripple and Noise | ±2% Vo @ Rated Load | | | | | | | | | | | | |
| Load Regulation (Typ.) | ±5% | | | | | | | | | | | | |
| Transient Response (Typ.) | 0.5mS for 50% Load Change | | | | | | | | | | | | |
| Hold-up Time (Typ.) | 10mS @ Rated Load | | | | | | | | | | | | |
| Output Protection | Short Circuit, Over Voltage, Over Current | | | | | | | | | | | | |
| Ferrite Core | No | | | | | | | | | | | | |
| Input Characteristics | | | | | | | | | | | | | |
| Voltage Range | 100VAC~240VAC | | | | | | | | | | | | |
| Frequency Range | 50Hz-60Hz | | | | | | | | | | | | |
| Efficiency | Energy Star Level V, ErP Step 2, NRCan & GEMS Compliant | | | | | | | | | | | | |
| AC Current (max) | 0.48A | | | | | | | | | | | | |
| Input Protection | Internal Primary Current Fuse, Inrush Limiting | | | | | | | | | | | | |
| Leakage Current | 0.25mA (2 Conductor) | | | | | | | | | | | | |
| Environmental Characteristics | | | | | | | | | | | | | |
| Operating Temperature | 0°C~40°C | | | | | | | | | | | | |
| Operating Relative Humidity | 20% RH to 80% RH | | | | | | | | | | | | |
| Storage Temperature | -20°C~80°C, 10% RH to 90% RH | | | | | | | | | | | | |
| Topology | Switching Flyback | | | | | | | | | | | | |
| Dielectric Withstand | 3000VAC Primary-Secondary | | | | | | | | | | | | |
| EMI Conduction & Radiation | Compliance to EN55022 Class B | | | | | | | | | | | | |
| Harmonic Current | Compliance to EN61000-3-2, 3 | | | | | | | | | | | | |
| EMS Immunity | EN61000-4-2, 3, 4, 5, 6, 8, 11 | | | | | | | | | | | | |
| Characteristics | | | | | | | | | | | | | |
| MTBF | 300,000Hrs (25°C, Telecordia SR-332) | | | | | | | | | | | | |
| Dimension (LxWxH) | 88x50x34mm | | | | | | | | | | | | |
| Weight | 144g | | | | | | | | | | | | |

PART NUMBER SYSTEM

QADA - 18 - 12 - 08 BB

SERIES

OUTPUT WATTAGE

OUTPUT VOLTAGE

INPUT RECEPTACLE

08



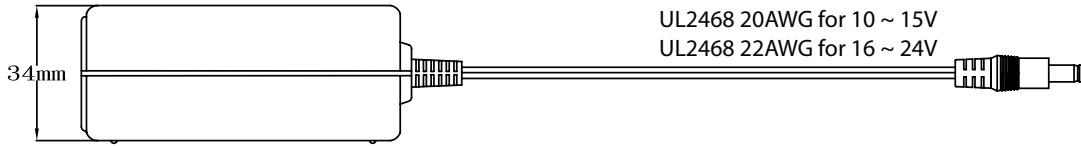
IEC 60320 C8

OUTPUT CONNECTOR

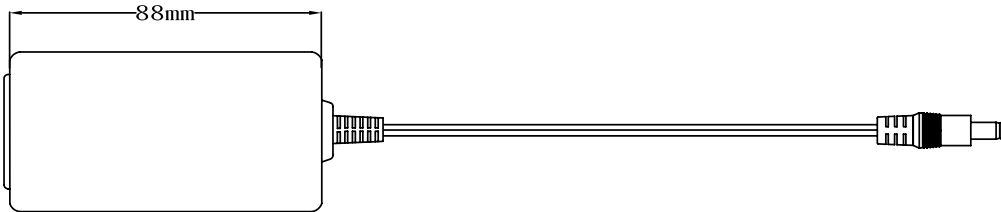
Please Reference Output Plug Type Page 49-50

MECHANICAL SPECIFICATIONS

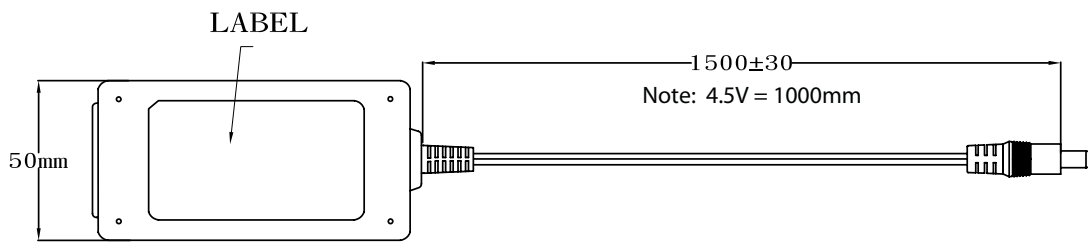
UL2468 18AWG for 4.5 ~ 9V
UL2468 20AWG for 10 ~ 15V
UL2468 22AWG for 16 ~ 24V



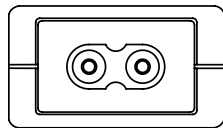
SIDE VIEW



TOP VIEW

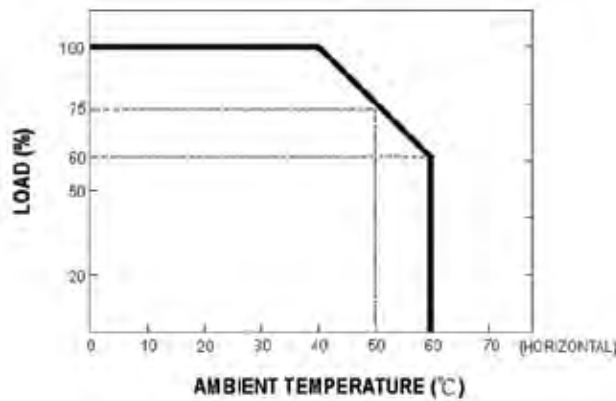


BOTTOM VIEW



FRONT-VIEW

DERATING CURVE



UNIT: mm



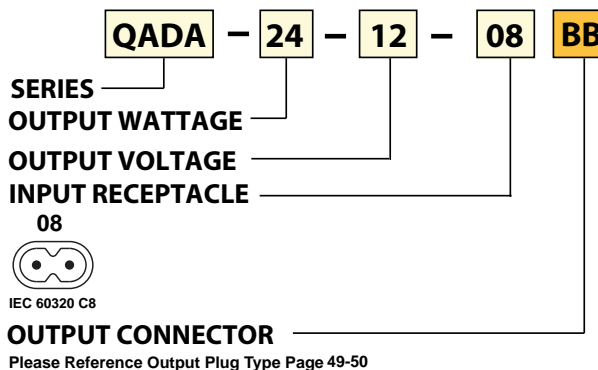
Features:

- Universal AC input/ Full Range
- Energy Efficiency Level V
- ErP Step 2 Compliant
- NRCan and GEMS Compliant
- Output Protections: OVP/SCP/OCV
- No Load Power Consumption <0.3W
- 1 Year Warranty

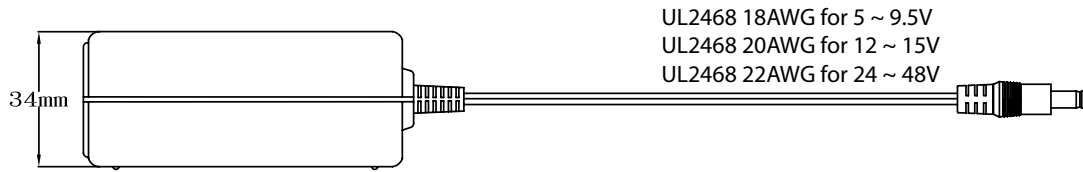


| Model | QADA-24-5 | QADA-24-5.9 | QADA-24-7 | QADA-24-7.5 | QADA-24-9 | QADA-24-9.5 | QADA-24-12 | QADA-24-15 | QADA-24-24 | QADA-24-48 |
|--------------------------------------|---|-------------|-----------|-------------|-----------|-------------|------------|------------|------------|------------|
| Output Characteristics | | | | | | | | | | |
| DC Output | 5V | 5.9V | 7V | 7.5V | 9V | 9.5V | 12V | 15V | 24V | 48V |
| Rated Current | 4.0A | 3.5A | 3.0A | 3.0A | 2.5A | 2.5A | 2.0A | 1.6A | 1.0A | 0.5A |
| Ripple and Noise | ±2% Vo @ Rated Load | | | | | | | | | |
| Load Regulation (Typ.) | ±5% | | | | | | | | | |
| Transient Response (Typ.) | 0.5mS for 50% Load Change | | | | | | | | | |
| Hold-up Time (Typ.) | 10mS @ Rated Load | | | | | | | | | |
| Output Protection | Short Circuit, Over Voltage, Over Current | | | | | | | | | |
| Ferrite Core | No | | | | | | | | | |
| Input Characteristics | | | | | | | | | | |
| Voltage Range | 100VAC-240VAC | | | | | | | | | |
| Frequency Range | 50Hz-60Hz | | | | | | | | | |
| Efficiency | Energy Star Level V, ErP Step 2, NRCan & GEMS Compliant | | | | | | | | | |
| AC Current (max) | 0.58A | | | | | | | | | |
| Input Protection | Internal Primary Current Fuse, Inrush Limiting | | | | | | | | | |
| Leakage Current | 0.25mA (2 Conductor) | | | | | | | | | |
| Environmental Characteristics | | | | | | | | | | |
| Operating Temperature | 0°C-40°C | | | | | | | | | |
| Operating Relative Humidity | 20% RH to 80% RH | | | | | | | | | |
| Storage Temperature | -20°C-80°C, 10% RH to 90% RH | | | | | | | | | |
| Topology | Switching Flyback | | | | | | | | | |
| Dielectric Withstand | 3000VAC Primary-Secondary | | | | | | | | | |
| EMI Conduction & Radiation | Compliance to EN55022 Class B | | | | | | | | | |
| Harmonic Current | Compliance to EN61000-3-2, 3 | | | | | | | | | |
| EMS Immunity | EN61000-4-2, 3, 4, 5, 6, 8, 11 | | | | | | | | | |
| Characteristics | | | | | | | | | | |
| MTBF | 300,000Hrs (25°C, Telecordia SR-332) | | | | | | | | | |
| Dimension (LxWxH) | 88x50x34mm | | | | | | | | | |
| Weight | 166g | | | | | | | | | |

PART NUMBER SYSTEM



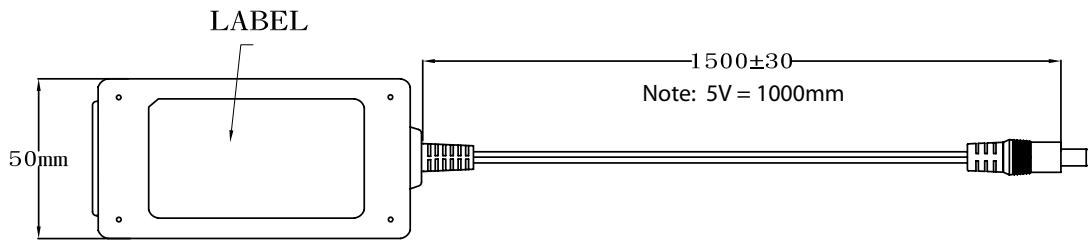
MECHANICAL SPECIFICATIONS



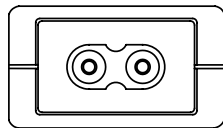
SIDE VIEW



TOP VIEW

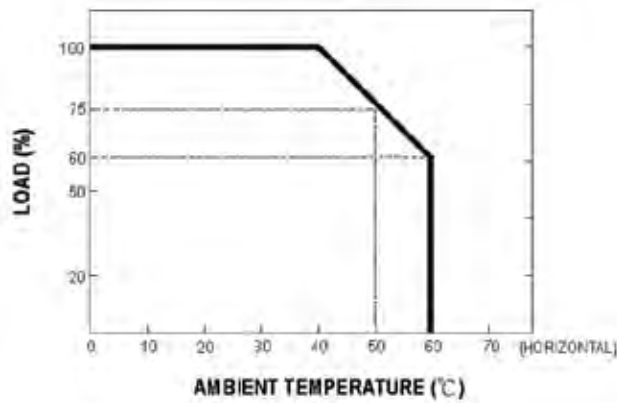


BOTTOM VIEW



FRONT-VIEW

DERATING CURVE



UNIT: mm



Features:

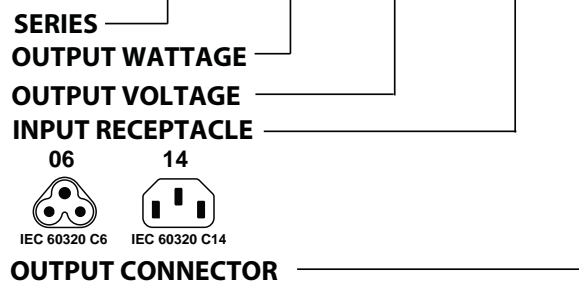
- Universal AC input/ Full Range
- Energy Efficiency Level V
- ErP Step 2 Compliant
- NRCan and GEMS Compliant
- Output Protections: OVP/SCP/OC
- No Load Power Consumption <0.3W
- 1 Year Warranty



| Model | QADB-24-5 | QADB-24-5.9 | QADB-24-7 | QADB-24-7.5 | QADB-24-9 | QADB-24-9.5 | QADB-24-12 | QADB-24-15 | QADB-24-24 | QADB-24-48 |
|--------------------------------------|---|-------------|-----------|-------------|-----------|-------------|------------|------------|------------|------------|
| Output Characteristics | | | | | | | | | | |
| DC Output | 5V | 5.9V | 7V | 7.5V | 9V | 9.5V | 12V | 15V | 24V | 48V |
| Rated Current | 4.0A | 3.5A | 3.0A | 3.0A | 2.5A | 2.5A | 2.0A | 1.6A | 1.0A | 0.5A |
| Ripple and Noise | ±2% Vo @ Rated Load | | | | | | | | | |
| Load Regulation (Typ.) | ±5% | | | | | | | | | |
| Transient Response (Typ.) | 0.5mS for 50% Load Change | | | | | | | | | |
| Hold-up Time (Typ.) | 10mS @ Rated Load | | | | | | | | | |
| Output Protection | Short Circuit, Over Voltage, Over Current | | | | | | | | | |
| Ferrite Core | No | | | | | | | | | |
| Input Characteristics | | | | | | | | | | |
| Voltage Range | 100VAC-240VAC | | | | | | | | | |
| Frequency Range | 50Hz-60Hz | | | | | | | | | |
| Efficiency | Energy Star Level V, ErP Step 2, NRCan & GEMS Compliant | | | | | | | | | |
| AC Current (max) | 0.58A | | | | | | | | | |
| Input Protection | Internal Primary Current Fuse, Inrush Limiting | | | | | | | | | |
| Leakage Current | 3.5mA | | | | | | | | | |
| Environmental Characteristics | | | | | | | | | | |
| Operating Temperature | 0°C-40°C | | | | | | | | | |
| Operating Relative Humidity | 20% RH to 80% RH | | | | | | | | | |
| Storage Temperature | -20°C-80°C, 10% RH to 90% RH | | | | | | | | | |
| Topology | Switching Flyback | | | | | | | | | |
| Dielectric Withstand | 3000VAC Primary-Secondary | | | | | | | | | |
| EMI Conduction & Radiation | Compliance to EN55022 Class B | | | | | | | | | |
| Harmonic Current | Compliance to EN61000-3-2, 3 | | | | | | | | | |
| EMS Immunity | IEC61000-4-2, 3, 4, 5, 6, 8, 11 | | | | | | | | | |
| Characteristics | | | | | | | | | | |
| MTBF | 300,000Hrs (25°C, Telecordia SR-332) | | | | | | | | | |
| Dimension (LxWxH) | 100x50x33mm | | | | | | | | | |
| Weight | 165g | | | | | | | | | |

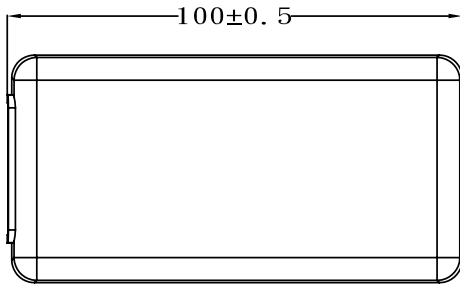
PART NUMBER SYSTEM

QADB - 24 - 12 - AA BB



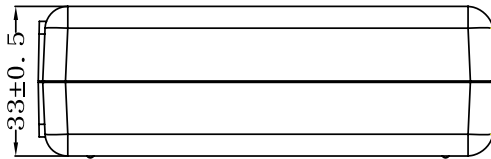
Please Reference Output Plug Type Page 49-50

MECHANICAL SPECIFICATIONS

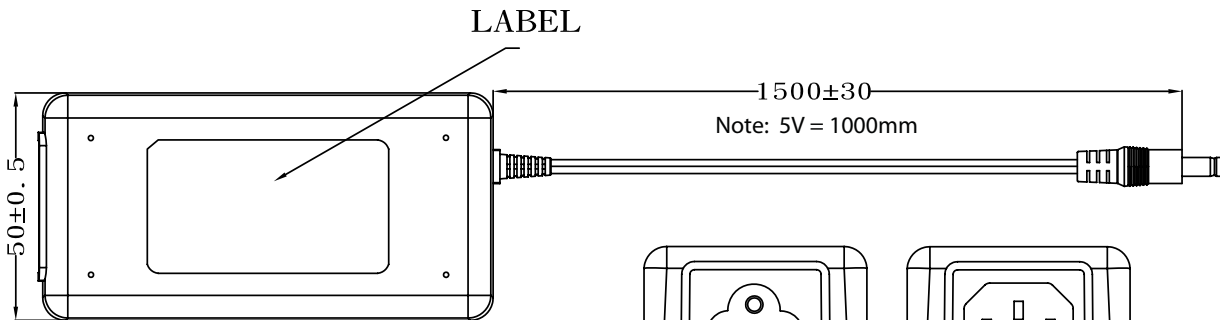


TOP VIEW

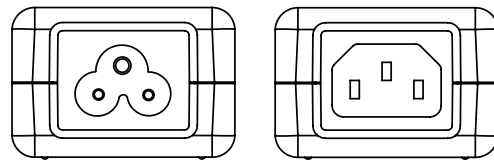
UL2468 18AWG for 5 ~ 9.5V
UL2468 20AWG for 12 ~ 48V



SIDE VIEW

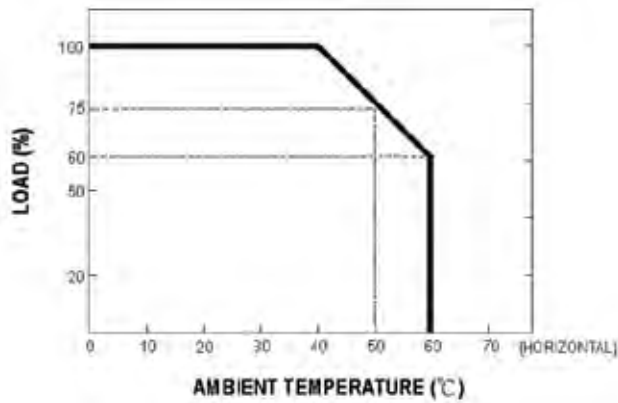


BOTTOM VIEW



FRONT-VIEW

DERATING CURVE



UNIT: mm



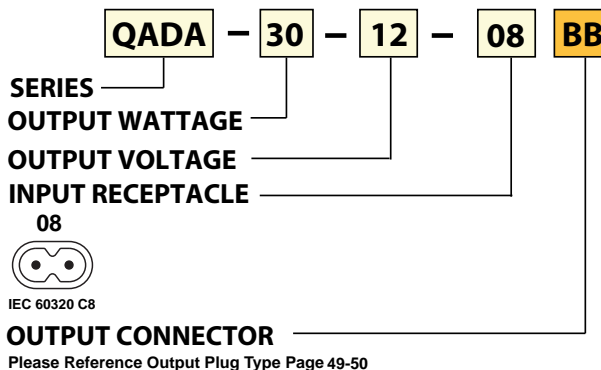
Features:

- Universal AC input/ Full Range
- Energy Efficiency Level V
- ErP Step 2 Compliant
- NRCan and GEMS Compliant
- Output Protections: OVP/SCP/OCP
- No Load Power Consumption <0.3W
- 1 Year Warranty

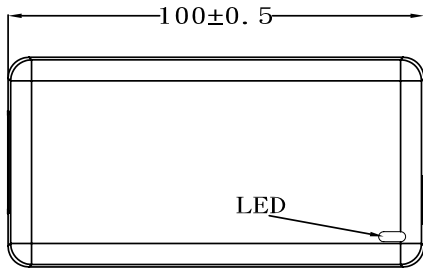


| Model | QADA-30-5 | QADA-30-7.5 | QADA-30-8.4 | QADA-30-8.5 | QADA-30-9 | QADA-30-12 | QADA-30-13.5 | QADA-30-15 | QADA-30-18 | QADA-30-24 |
|--------------------------------------|---|-------------|-------------|-------------|-----------|------------|--------------|------------|------------|------------|
| Output Characteristics | | | | | | | | | | |
| DC Output | 5V | 7.5V | 8.4V | 8.5V | 9V | 12V | 13.5V | 15V | 18V | 24V |
| Rated Current | 5.0A | 4.0A | 3.58A | 3.53A | 3.34A | 2.5A | 2.22A | 2.0A | 1.67A | 1.25A |
| Ripple and Noise | ±2% Vo @ Rated Load | | | | | | | | | |
| Load Regulation (Typ.) | ±5% | | | | | | | | | |
| Transient Response (Typ.) | 0.5mS for 50% Load Change | | | | | | | | | |
| Hold-up Time (Typ.) | 10mS @ Rated Load | | | | | | | | | |
| Output Protection | Short Circuit, Over Voltage, Over Current | | | | | | | | | |
| Ferrite Core | Yes | | | | | | | | | |
| Input Characteristics | | | | | | | | | | |
| Voltage Range | 100VAC~240VAC | | | | | | | | | |
| Frequency Range | 50Hz-60Hz | | | | | | | | | |
| Efficiency | Energy Star Level V, ErP Step 2, NRCan & GEMS Compliant | | | | | | | | | |
| AC Current (max) | 0.70A | | | | | | | | | |
| Input Protection | Internal Primary Current Fuse, Inrush Limiting | | | | | | | | | |
| Leakage Current | 0.25mA (2 Conductor) | | | | | | | | | |
| Environmental Characteristics | | | | | | | | | | |
| Operating Temperature | 0°C~40°C | | | | | | | | | |
| Operating Relative Humidity | 20% RH to 80% RH | | | | | | | | | |
| Storage Temperature | -20°C~80°C, 10% RH to 90% RH | | | | | | | | | |
| Topology | Switching Flyback | | | | | | | | | |
| Dielectric Withstand | 3000VAC Primary-Secondary | | | | | | | | | |
| EMI Conduction & Radiation | Compliance to EN55022 Class B | | | | | | | | | |
| Harmonic Current | Compliance to EN61000-3-2, 3 | | | | | | | | | |
| EMS Immunity | EN61000-4-2, 3, 4, 5, 6, 8, 11 | | | | | | | | | |
| Characteristics | | | | | | | | | | |
| MTBF | 300,000Hrs (25°C, Telecordia SR-332) | | | | | | | | | |
| Dimension (LxWxH) | 101x51x34mm | | | | | | | | | |
| Weight | 210g | | | | | | | | | |

PART NUMBER SYSTEM

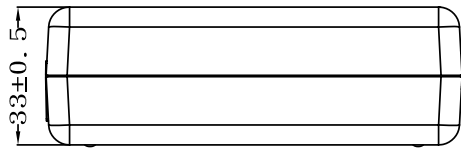


MECHANICAL SPECIFICATIONS



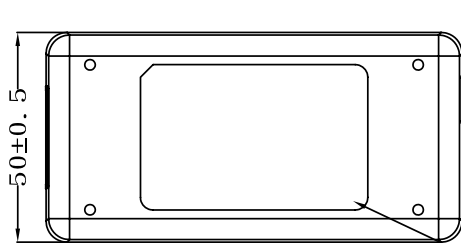
TOP VIEW

UL1165 16AWG for 5 ~ 7.5V
 UL2468 18AWG for 8.4 ~ 13.5V
 UL2468 20AWG for 15 ~ 24V



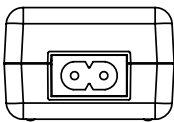
SIDE VIEW

80±5



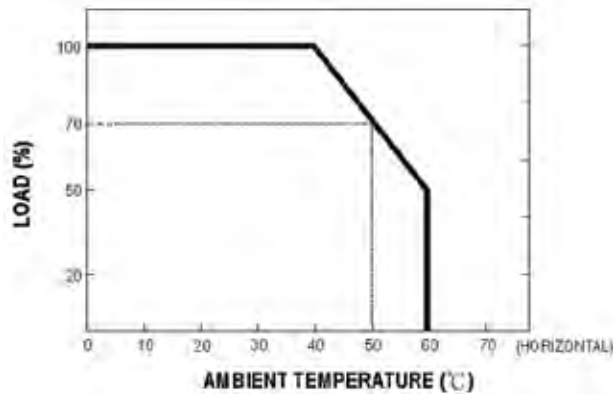
BOTTOM VIEW

1500±30
 Note: 5V = 1000mm



FRONT-VIEW

DERATING CURVE



UNIT: mm



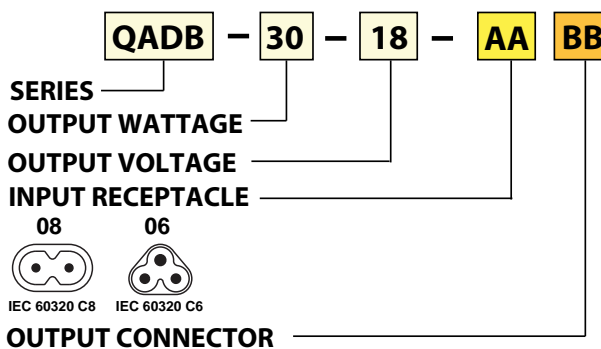
Features:

- Universal AC input/ Full Range
- Energy Efficiency Level V
- ErP Step 2 Compliant
- Output Protections: OVP/SCP/OCP
- No Load Power Consumption <0.3W
- 1 Year Warranty



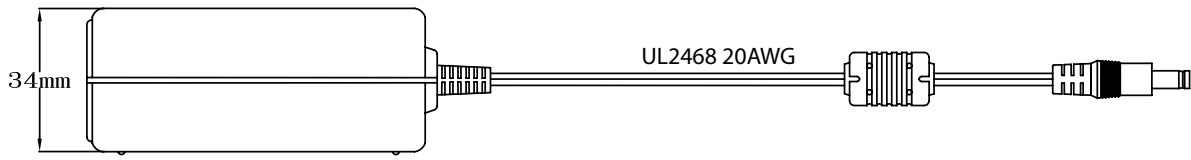
| Model | QADB-30-18 | QADB-40-18 | QADB-30-18.5 | QADB-40-18.5 | QADB-30-19 | QADB-40-19 | QADB-30-19.5 | QADB-40-19.5 | QADB-30-20 | QADB-40-20 |
|--------------------------------------|--|------------|--------------|--------------|------------|------------|--------------|--------------|------------|------------|
| Output Characteristics | | | | | | | | | | |
| DC Output | 18V | 18V | 18.5V | 18.5V | 19V | 19V | 19.5V | 19.5V | 20V | 20V |
| Rated Current | 1.66A | 2.20A | 1.62A | 2.16A | 1.57A | 2.10A | 1.53A | 2.05A | 1.50A | 2.00A |
| Ripple and Noise | ±3% Vo @ Rated Load | | | | | | | | | |
| Load Regulation (Typ.) | ±5% | | | | | | | | | |
| Transient Response (Typ.) | 0.5mS for 50% Load Change | | | | | | | | | |
| Hold-up Time (Typ.) | 10mS @ Rated Load | | | | | | | | | |
| Output Protection | Short Circuit, Over Voltage, Over Current | | | | | | | | | |
| Ferrite Core | Yes | | | | | | | | | |
| Input Characteristics | | | | | | | | | | |
| Voltage Range | 100VAC-240VAC | | | | | | | | | |
| Frequency Range | 50Hz-60Hz | | | | | | | | | |
| Efficiency | Energy Star Level V, ErP Step 2 | | | | | | | | | |
| AC Current (max) | 1.0A | | | | | | | | | |
| Input Protection | Internal Primary Current Fuse, Inrush Limiting | | | | | | | | | |
| Leakage Current | 0.25mA (2 Conductor), 3.5mA (3 Conductor) | | | | | | | | | |
| Environmental Characteristics | | | | | | | | | | |
| Operating Temperature | 0°C-40°C | | | | | | | | | |
| Operating Relative Humidity | 20% RH to 80% RH | | | | | | | | | |
| Storage Temperature | -20°C-80°C, 10% RH to 90% RH | | | | | | | | | |
| Topology | Switching Flyback | | | | | | | | | |
| Dielectric Withstand | 3000VAC Primary-Secondary | | | | | | | | | |
| EMI Conduction & Radiation | Compliance to EN55022 Class B | | | | | | | | | |
| Harmonic Current | Compliance to EN61000-3-2, 3 | | | | | | | | | |
| EMS Immunity | EN61000-4-2, 3, 4, 5, 6, 8, 11 | | | | | | | | | |
| Characteristics | | | | | | | | | | |
| MTBF | 300,000Hrs (25°C, Telecordia SR-332) | | | | | | | | | |
| Dimension (LxWxH) | 88x35x27mm | | | | | | | | | |
| Weight | 140g | | | | | | | | | |

PART NUMBER SYSTEM



Please Reference Output Plug Type Page 49-50

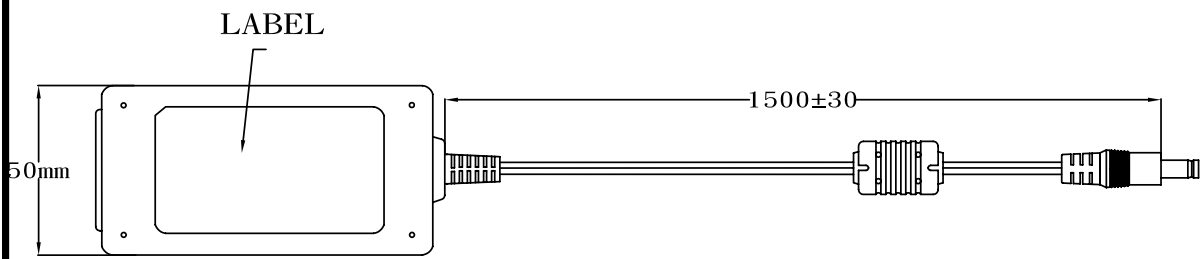
MECHANICAL SPECIFICATIONS



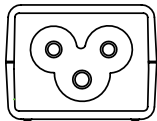
SIDE VIEW



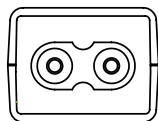
TOP VIEW



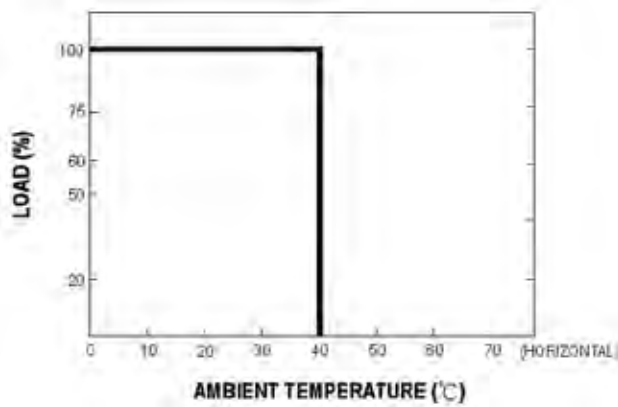
BOTTOM VIEW



FRONT-VIEW



DERATING CURVE



UNIT: mm



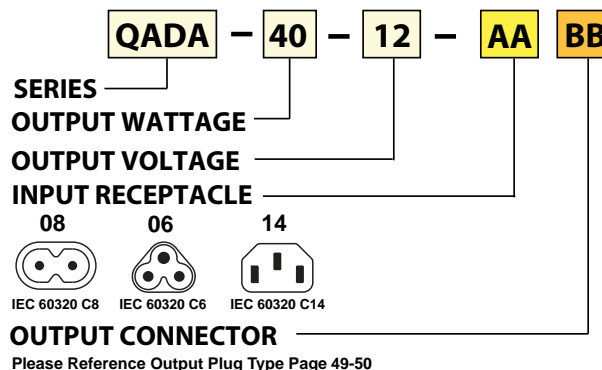
Features:

- Universal AC input/ Full Range
- Energy Efficiency Level V
- ErP Step 2 Compliant
- NRCan and GEMS Compliant
- Output Protections: OVP/SCP/OCP
- No Load Power Consumption <0.3W
- 1 Year Warranty



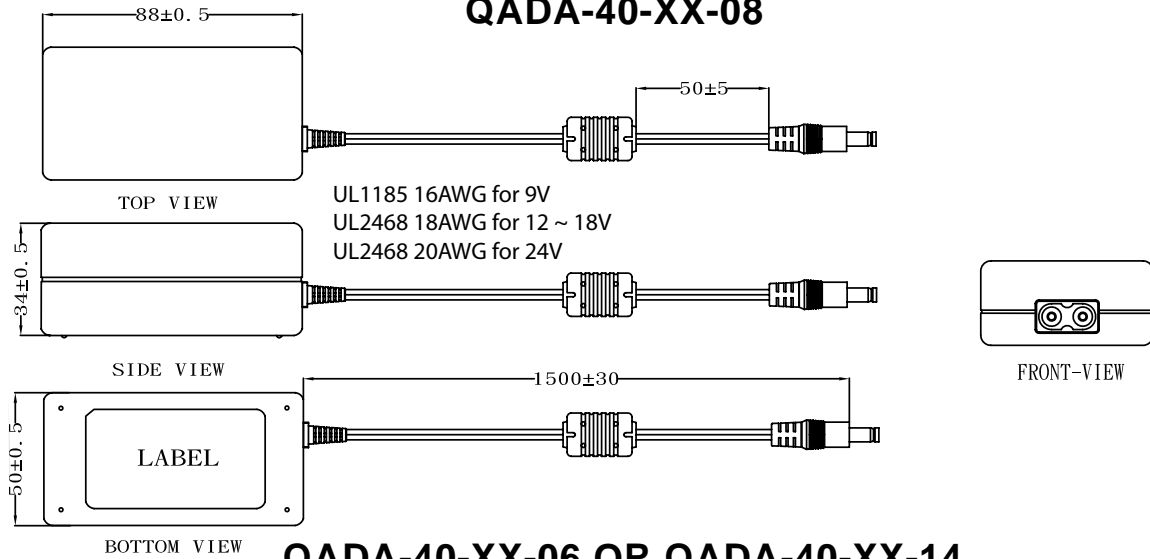
| Model | QADA-40-9 | QADA-40-12 | QADA-40-15 | QADA-40-16 | QADA-40-18 | QADA-40-24 |
|--------------------------------------|--|------------|------------|------------|------------|------------|
| Output Characteristics | | | | | | |
| DC Output | 9V | 12V | 15V | 16V | 18V | 24V |
| Rated Current | 4.0A | 3.0A | 2.6A | 2.5A | 2.2A | 1.67A |
| Ripple and Noise | ±2% Vo @ Rated Load | | | | | |
| Load Regulation (Typ.) | ±5% | | | | | |
| Transient Response (Typ.) | 0.5mS for 50% Load Change | | | | | |
| Hold-up Time (Typ.) | 10mS @ Rated Load | | | | | |
| Output Protection | Short Circuit, Over Voltage, Over Current | | | | | |
| Ferrite Core | Yes | | | | | |
| Input Characteristics | | | | | | |
| Voltage Range | 100VAC~240VAC | | | | | |
| Frequency Range | 50Hz-60Hz | | | | | |
| Efficiency | Energy Star Level V, ErP Step 2, NRCan & GEMS Compliant | | | | | |
| AC Current (max) | 1.0A | | | | | |
| Input Protection | Internal Primary Current Fuse, Inrush Limiting | | | | | |
| Leakage Current | 0.25mA (2 Conductor), 3.5mA (3 Conductor) | | | | | |
| Environmental Characteristics | | | | | | |
| Operating Temperature | 0°C~40°C | | | | | |
| Operating Relative Humidity | 20% RH to 80% RH | | | | | |
| Storage Temperature | -20°C~80°C, 10% RH to 90% RH | | | | | |
| Topology | Switching Flyback | | | | | |
| Dielectric Withstand | 3000VAC Primary-Secondary | | | | | |
| EMI Conduction & Radiation | Compliance to EN55022 Class B | | | | | |
| Harmonic Current | Compliance to EN61000-3-2, 3 | | | | | |
| EMS Immunity | EN61000-4-2, 3, 4, 5, 6, 8, 11 | | | | | |
| Characteristics | | | | | | |
| MTBF | 300,000Hrs (25°C, Telecordia SR-332) | | | | | |
| Dimension (LxWxH) | 88x50x34 (QADA-40-XX-08, with C8 Inlet), 100x50x34mm (QADA-40-XX-06, or QADA-40-XX-14, with C6 or C14 Inlet) | | | | | |
| Weight | 200g (QADA-40-XX-08, with C8 Inlet), 230g (QADA-40-XX-06, or QADA-40-XX-14, with C6 or C14 Inlet) | | | | | |

PART NUMBER SYSTEM

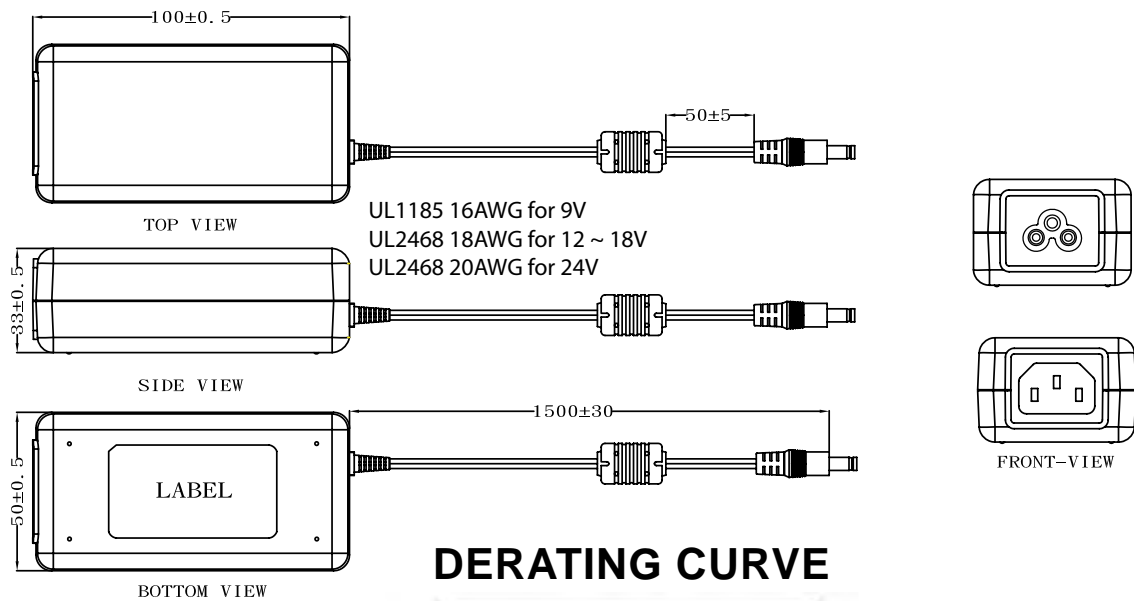


MECHANICAL SPECIFICATIONS

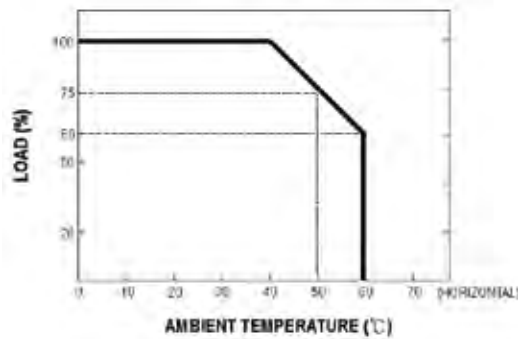
QADA-40-XX-08



QADA-40-XX-06 OR QADA-40-XX-14



DERATING CURVE



UNIT: mm



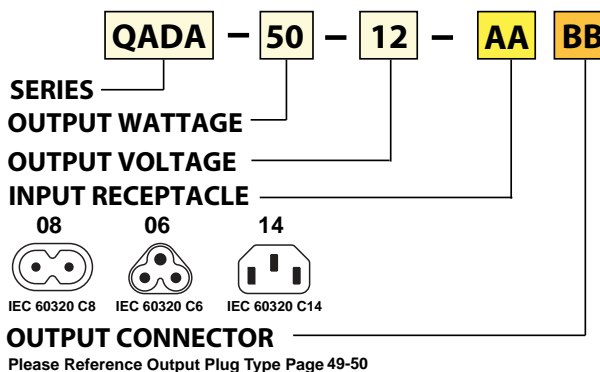
Features:

- Universal AC input/ Full Range
- Energy Efficiency Level V
- ErP Step 2 Compliant
- NRCan and GEMS Compliant
- Output Protections: OVP/SCP/OCP
- No Load Power Consumption <0.3W
- 1 Year Warranty

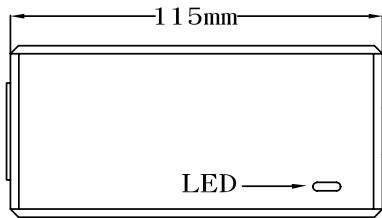


| Model | QADA-50-9 | QADA-50-12 | QADA-50-13.5 | QADA-50-15 | QADA-50-18 | QADA-50-19 | QADA-50-20 | QADA-50-24 | QADA-50-48 |
|--------------------------------------|---|------------|--------------|------------|------------|------------|------------|------------|------------|
| Output Characteristics | | | | | | | | | |
| DC Output | 9V | 12V | 13.5V | 15V | 18V | 19V | 20V | 24V | 48V |
| Rated Current | 5.0A | 4.20A | 3.71A | 3.34A | 2.78A | 2.64A | 2.50A | 2.10A | 1.05A |
| Ripple and Noise | ±2% Vo @ Rated Load | | | | | | | | |
| Load Regulation (Typ.) | ±5% | | | | | | | | |
| Transient Response (Typ.) | 0.5mS for 50% Load Change | | | | | | | | |
| Hold-up Time (Typ.) | 10mS @ Rated Load | | | | | | | | |
| Output Protection | Short Circuit, Over Voltage, Over Current | | | | | | | | |
| Ferrite Core | Yes | | | | | | | | |
| Input Characteristics | | | | | | | | | |
| Voltage Range | 100VAC~240VAC | | | | | | | | |
| Frequency Range | 50Hz-60Hz | | | | | | | | |
| Efficiency | Energy Star Level V, ErP Step 2, NRCan & GEMS Compliant | | | | | | | | |
| AC Current (max) | 1.2A | | | | | | | | |
| Input Protection | Internal Primary Current Fuse, Inrush Limiting | | | | | | | | |
| Leakage Current | 0.25mA (2 Conductor), 3.5mA (3 Conductor) | | | | | | | | |
| Environmental Characteristics | | | | | | | | | |
| Operating Temperature | 0°C~40°C | | | | | | | | |
| Operating Relative Humidity | 20% RH to 80% RH | | | | | | | | |
| Storage Temperature | -20°C~80°C, 10% RH to 90% RH | | | | | | | | |
| Topology | Switching Flyback | | | | | | | | |
| Dielectric Withstand | 3000VAC Primary-Secondary | | | | | | | | |
| EMI Conduction & Radiation | Compliance to EN55022 Class B | | | | | | | | |
| Harmonic Current | Compliance to EN61000-3-2, 3 | | | | | | | | |
| EMS Immunity | EN61000-4-2, 3, 4, 5, 6, 8, 11 | | | | | | | | |
| Characteristics | | | | | | | | | |
| MTBF | 300,000Hrs (25°C, Telecordia SR-332) | | | | | | | | |
| Dimension (LxWxH) | 115x53x38mm | | | | | | | | |
| Weight | 278g | | | | | | | | |

PART NUMBER SYSTEM

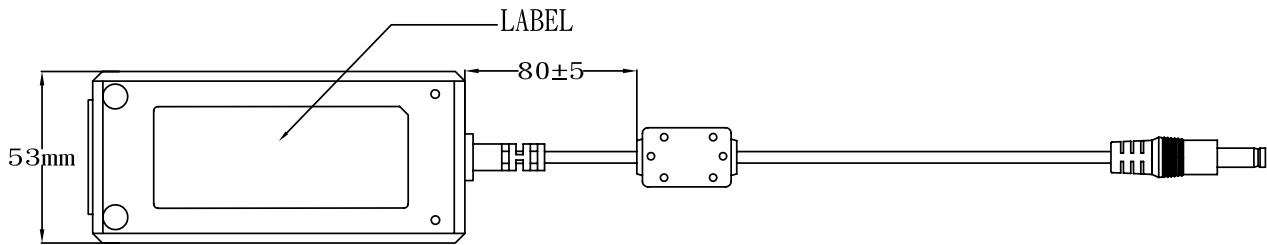


MECHANICAL SPECIFICATIONS

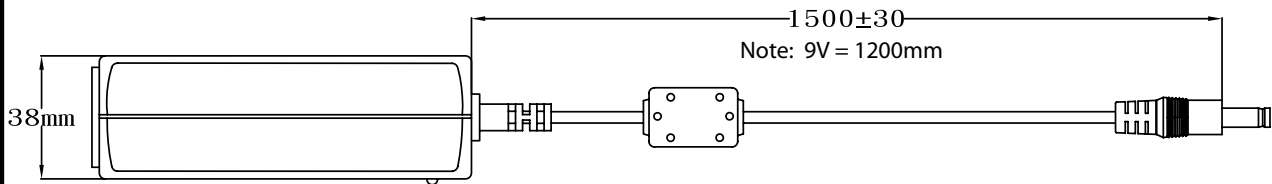


TOP-VIEW

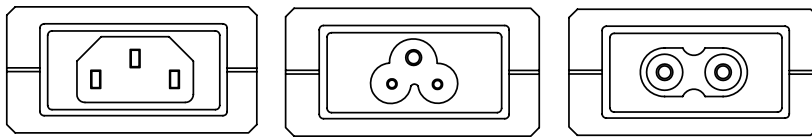
UL1185 16AWG for 9V
 UL2468 16AWG for 12V
 UL2468 18AWG for 13.5~24V
 UL2468 20AWG for 48V



BOTTOM-VIEW

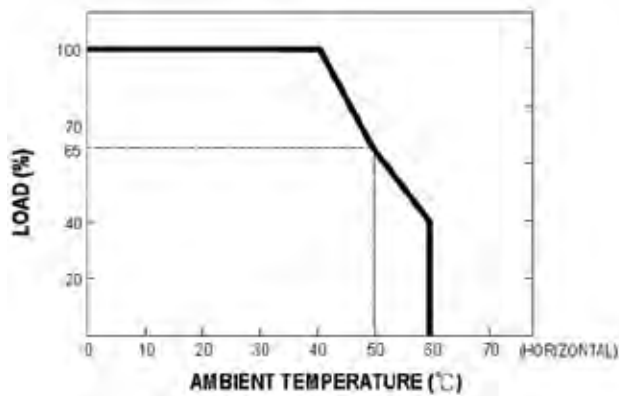


SIDE-VIEW



FRONT-VIEW

DERATING CURVE



UNIT: mm



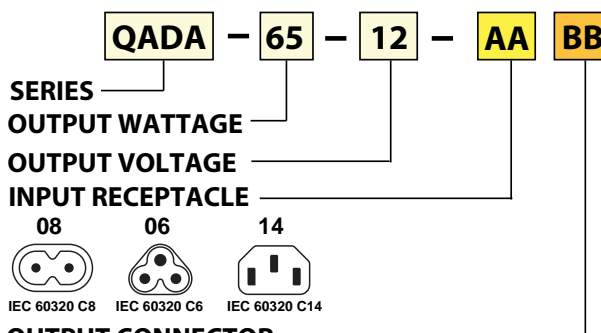
Features:

- Universal AC input/ Full Range
- Energy Efficiency Level V
- ErP Step 2 Compliant
- NRCan and GEMS Compliant
- Output Protections: OVP/SCP/OC
- No Load Power Consumption <0.5W
- 1 Year Warranty



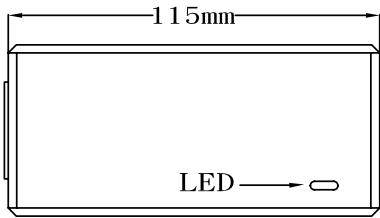
| Model | QADA-65-12 | QADA-65-15 | QADA-65-16 | QADA-65-18 | QADA-65-19 | QADA-72-19 | QADA-65-20 | QADA-65-24 | QADA-72-24 | QADA-65-30 | QADA-65-32 | QADA-65-48 |
|--------------------------------------|---|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|
| Output Characteristics | | | | | | | | | | | | |
| DC Output | 12V | 15V | 16V | 18V | 19V | 19V | 20V | 24V | 24V | 30V | 32V | 48V |
| Rated Current | 5.0A | 4.34A | 4.07A | 3.62A | 3.43A | 3.79A | 3.25A | 2.71A | 3.00A | 2.17A | 2.04A | 1.36A |
| Ripple and Noise | ±2% Vo @ Rated Load | | | | | | | | | | | |
| Load Regulation (Typ.) | ±5% | | | | | | | | | | | |
| Transient Response (Typ.) | 0.5mS for 50% Load Change | | | | | | | | | | | |
| Hold-up Time (Typ.) | 10mS @ Rated Load | | | | | | | | | | | |
| Output Protection | Short Circuit, Over Voltage, Over Current | | | | | | | | | | | |
| Ferrite Core | Yes | | | | | | | | | | | |
| Input Characteristics | | | | | | | | | | | | |
| Voltage Range | 100VAC-240VAC | | | | | | | | | | | |
| Frequency Range | 50Hz-60Hz | | | | | | | | | | | |
| Efficiency | Energy Star Level V, ErP Step 2, NRCan & GEMS Compliant | | | | | | | | | | | |
| AC Current (max) | 1.4A (65W), 1.6A (72W) | | | | | | | | | | | |
| Input Protection | Internal Primary Current Fuse, Inrush Limiting | | | | | | | | | | | |
| Leakage Current | 0.25mA (2 Conductor), 3.5mA (3 Conductor) | | | | | | | | | | | |
| Environmental Characteristics | | | | | | | | | | | | |
| Operating Temperature | 0°C-40°C | | | | | | | | | | | |
| Operating Relative Humidity | 20% RH to 80% RH | | | | | | | | | | | |
| Storage Temperature | -20°C-80°C, 10% RH to 90% RH | | | | | | | | | | | |
| Topology | Switching Flyback | | | | | | | | | | | |
| Dielectric Withstand | 3000VAC Primary-Secondary | | | | | | | | | | | |
| EMI Conduction & Radiation | Compliance to EN55022 Class B | | | | | | | | | | | |
| Harmonic Current | Compliance to EN61000-3-2, 3 | | | | | | | | | | | |
| EMS Immunity | IEC61000-4-2, 3, 4, 5, 6, 8, 11 | | | | | | | | | | | |
| Characteristics | | | | | | | | | | | | |
| MTBF | 300,000Hrs (25°C, Telecordia SR-332) | | | | | | | | | | | |
| Dimension (LxWxH) | 115x53x38mm | | | | | | | | | | | |
| Weight | 310g | | | | | | | | | | | |

PART NUMBER SYSTEM



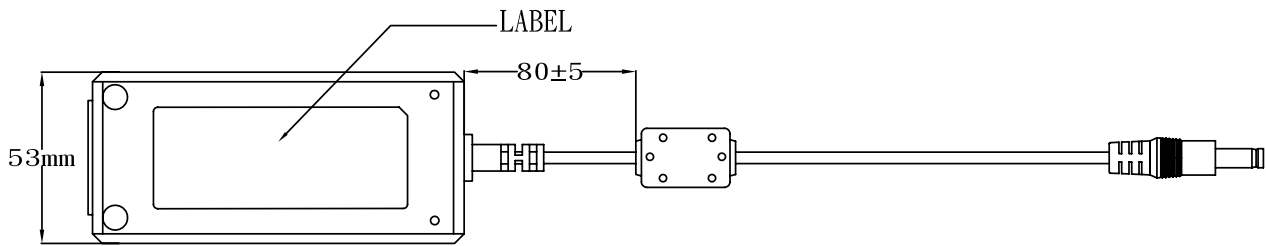
OUTPUT CONNECTOR Please Reference Output Plug Type Page 49-50

MECHANICAL SPECIFICATIONS

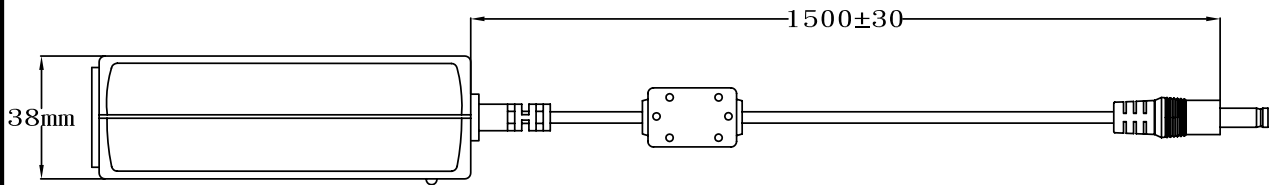


TOP-VIEW

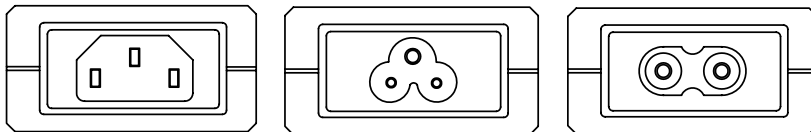
UL1185 16AWG for 12 ~ 16V
 UL2468 18AWG for 18 ~ 32V
 UL2468 20AWG for 48V



BOTTOM-VIEW

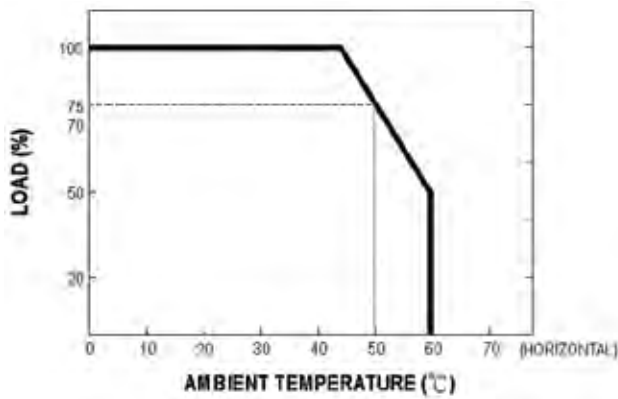


SIDE-VIEW



FRONT-VIEW

DERATING CURVE



UNIT: mm



Features:

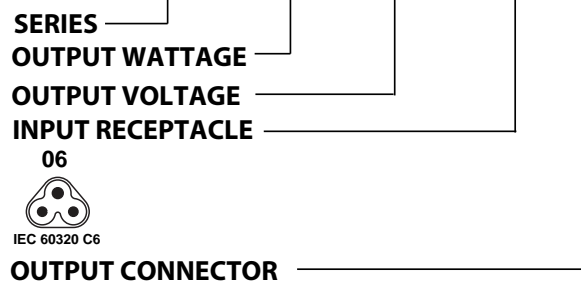
- Universal AC input/ Full Range
- Energy Efficiency Level V
- ErP Step 2 Compliant
- NRCan Compliant
- Output Protections: OVP/SCP/OC
- No Load Power Consumption <0.21W
- 1 Year Warranty



| Model | QADB-65-15 | QADB-65-16 | QADB-65-18 | QADB-65-18.5 | QADB-65-19 | QADB-65-20 | QADB-65-24 |
|--------------------------------------|--|------------|------------|--------------|------------|------------|------------|
| Output Characteristics | | | | | | | |
| DC Output | 15V | 16V | 18V | 18.5V | 19V | 20V | 24V |
| Rated Current | 4.34A | 4.07A | 3.62A | 3.52A | 3.43A | 3.25A | 2.71A |
| Ripple and Noise | ±2% Vo @ Rated Load | | | | | | |
| Load Regulation (Typ.) | ±5% | | | | | | |
| Transient Response (Typ.) | 0.5mS for 50% Load Change | | | | | | |
| Hold-up Time (Typ.) | 10mS @ Rated Load | | | | | | |
| Output Protection | Short Circuit, Over Voltage, Over Current | | | | | | |
| Ferrite Core | No | | | | | | |
| Input Characteristics | | | | | | | |
| Voltage Range | 100VAC-240VAC | | | | | | |
| Frequency Range | 50Hz-60Hz | | | | | | |
| Efficiency | Energy Star Level V, ErP Step 2, NRCan Compliant | | | | | | |
| AC Current (max) | 1.4A | | | | | | |
| Input Protection | Internal Primary Current Fuse, Inrush Limiting | | | | | | |
| Leakage Current | 3.5mA | | | | | | |
| Environmental Characteristics | | | | | | | |
| Operating Temperature | 0°C-40°C | | | | | | |
| Operating Relative Humidity | 20% RH to 80% RH | | | | | | |
| Storage Temperature | -20°C-80°C, 10% RH to 90% RH | | | | | | |
| Topology | Switching Flyback | | | | | | |
| Dielectric Withstand | 3000VAC Primary-Secondary | | | | | | |
| EMI Conduction & Radiation | Compliance to EN55022 Class B | | | | | | |
| Harmonic Current | Compliance to EN61000-3-2, 3 | | | | | | |
| EMS Immunity | IEC61000-4-2, 3, 4, 5, 6, 8, 11 | | | | | | |
| Characteristics | | | | | | | |
| MTBF | 300,000Hrs (25°C, Telecordia SR-332) | | | | | | |
| Dimension (LxWxH) | 108x46x32mm | | | | | | |
| Weight | 248g | | | | | | |

PART NUMBER SYSTEM

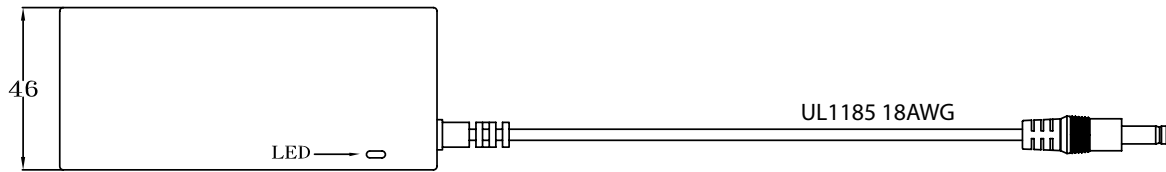
QADB - 65 - 15 - 06 BB



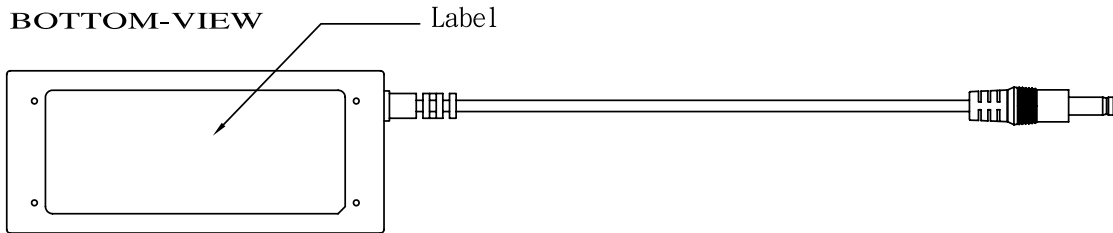
Please Reference Output Plug Type Page 49-50

MECHANICAL SPECIFICATIONS

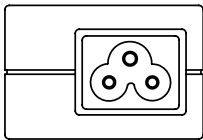
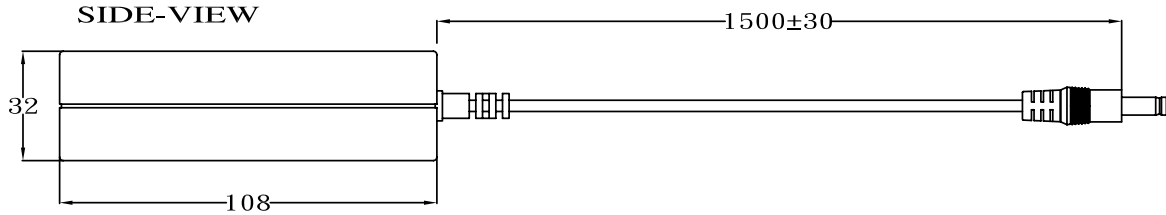
TOP-VIEW



BOTTOM-VIEW

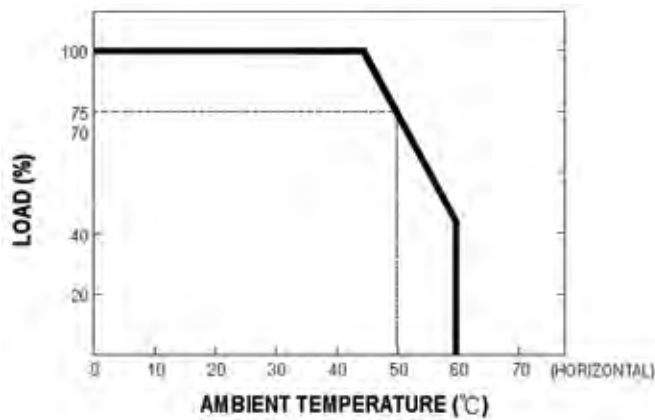


SIDE-VIEW



FRONT-VIEW

DERATING CURVE



UNIT: mm



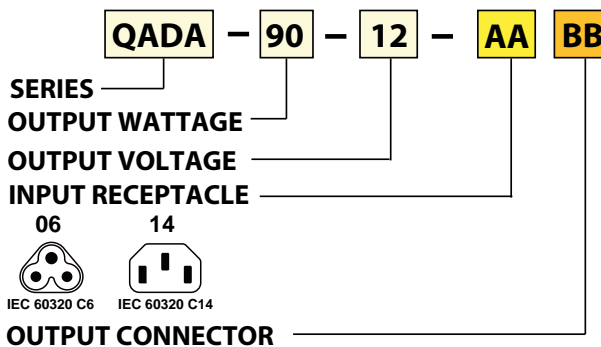
Features:

- Universal AC input/ Full Range
- Energy Efficiency Level V
- ErP Step 2 Compliant
- NRCan Compliant
- Output Protections: OVP/SCP/OC
- No Load Power Consumption <0.5W
- 1 Year Warranty



| Model | QADA-90-12 | QADA-90-15 | QADA-90-16 | QADA-90-18 | QADA-90-19 | QADA-90-20 | QADA-90-24 | QADA-90-30 | QADA-90-48 |
|--------------------------------------|---|------------|------------|------------|------------|------------|------------|------------|------------|
| Output Characteristics | | | | | | | | | |
| DC Output | 12V | 15V | 16V | 18V | 19V | 20V | 24V | 30V | 48V |
| Rated Current | 7.0A | 6.00A | 5.63A | 5.00A | 4.74A | 4.50A | 3.75A | 3.00A | 1.88A |
| Ripple and Noise | ±2% Vo @ Rated Load | | | | | | | | |
| Load Regulation (Typ.) | ±5% | | | | | | | | |
| Transient Response (Typ.) | 0.5mS for 50% Load Change | | | | | | | | |
| Hold-up Time (Typ.) | 10mS @ Rated Load | | | | | | | | |
| Output Protection | Short Circuit, Over Voltage, Over Current | | | | | | | | |
| Ferrite Core | Yes | | | | | | | | |
| Input Characteristics | | | | | | | | | |
| Voltage Range | 100VAC-240VAC | | | | | | | | |
| Frequency Range | 50Hz-60Hz | | | | | | | | |
| Efficiency | Energy Star Level V, ErP Step 2, NRCan Compliant | | | | | | | | |
| AC Current (max) | 1.2A | | | | | | | | |
| Input Protection | Internal Primary Current Fuse, Inrush Limiting | | | | | | | | |
| Leakage Current | 3.5mA | | | | | | | | |
| Environmental Characteristics | | | | | | | | | |
| Operating Temperature | 0°C-40°C | | | | | | | | |
| Operating Relative Humidity | 20% RH to 80% RH | | | | | | | | |
| Storage Temperature | -20°C-80°C, 10% RH to 90% RH | | | | | | | | |
| Topology | Switching Flyback | | | | | | | | |
| Dielectric Withstand | 3000VAC Primary-Secondary | | | | | | | | |
| EMI Conduction & Radiation | Compliance to EN55022 Class B | | | | | | | | |
| Harmonic Current | Compliance to EN61000-3-2, 3 | | | | | | | | |
| EMS Immunity | IEC61000-4-2, 3, 4, 5, 6, 8, 11 | | | | | | | | |
| Characteristics | | | | | | | | | |
| MTBF | 300,000Hrs (25°C, Telecordia SR-332) | | | | | | | | |
| Dimension (LxWxH) | 139x61x36mm (QADA-90-XX-06, with C6 Inlet), 151x64x36mm (QADA-90-XX-14, with C14 Inlet) | | | | | | | | |
| Weight | 460g (REF) | | | | | | | | |

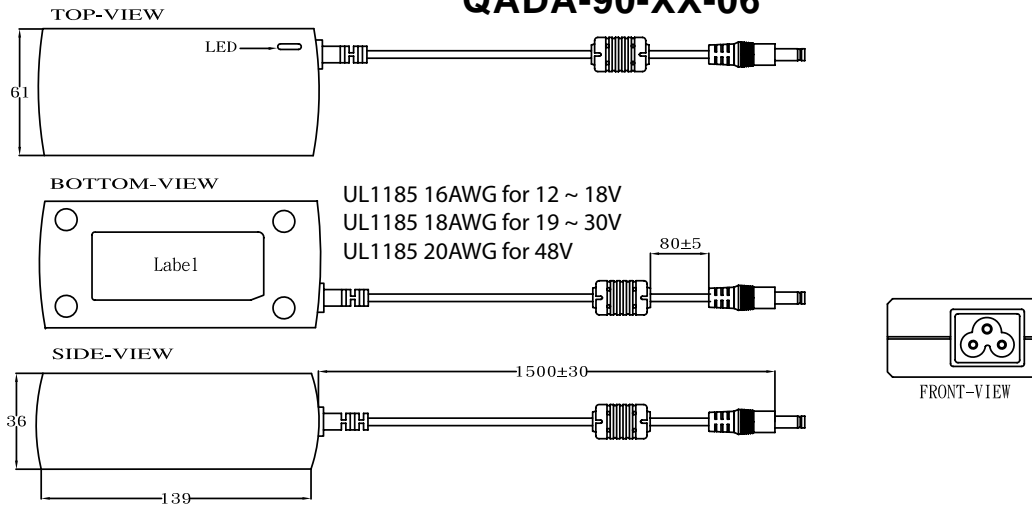
PART NUMBER SYSTEM



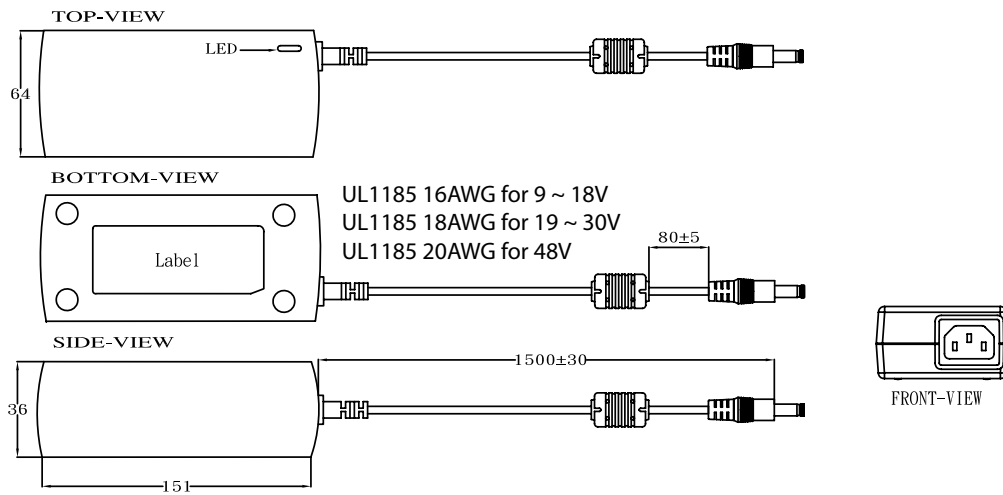
Please Reference Output Plug Type Page 49-50

MECHANICAL SPECIFICATIONS

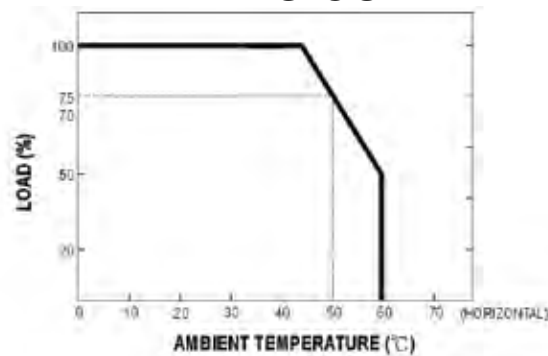
QADA-90-XX-06



QADA-90-XX-14



DERATING CURVE



UNIT: mm



Features:

- Universal AC input/ Full Range
- Energy Efficiency Level V
- ErP Step 2 Compliant
- NRCan Compliant
- Output Protections: OVP/SCP/OCP/OTP
- No Load Power Consumption <0.5W
- 1 Year Warranty



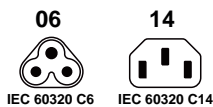
| Model | QADA-120-12 | QADA-120-15 | QADA-120-16 | QADA-120-18 | QADA-120-19 | QADA-120-20 | QADA-120-24 | QADA-120-30 | QADA-120-48 |
|--------------------------------------|--|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|
| Output Characteristics | | | | | | | | | |
| DC Output | 12V | 15V | 16V | 18V | 19V | 20V | 24V | 30V | 48V |
| Rated Current | 9.00A | 8.00A | 7.50A | 6.60A | 6.30A | 6.00A | 5.00A | 4.00A | 2.50A |
| Ripple and Noise | ±2% Vo @ Rated Load | | | | | | | | |
| Load Regulation (Typ.) | ±5% | | | | | | | | |
| Transient Response (Typ.) | 0.5mS for 50% Load Change | | | | | | | | |
| Hold-up Time (Typ.) | 10mS @ Rated Load | | | | | | | | |
| Output Protection | Short Circuit, Over Voltage, Over Current, Over Temp | | | | | | | | |
| Ferrite Core | Yes | | | | | | | | |
| Input Characteristics | | | | | | | | | |
| Voltage Range | 100VAC-240VAC | | | | | | | | |
| Frequency Range | 50Hz-60Hz | | | | | | | | |
| Efficiency | Energy Star Level V, ErP Step 2, NRCan Compliant | | | | | | | | |
| AC Current (max) | 1.6A | | | | | | | | |
| Input Protection | Internal Primary Current Fuse, Inrush Limiting | | | | | | | | |
| Leakage Current | 3.5mA | | | | | | | | |
| Environmental Characteristics | | | | | | | | | |
| Operating Temperature | 0°C-40°C | | | | | | | | |
| Operating Relative Humidity | 20% RH to 80% RH | | | | | | | | |
| Storage Temperature | -20°C-80°C, 10% RH to 90% RH | | | | | | | | |
| Topology | Switching Flyback | | | | | | | | |
| Dielectric Withstand | 3000VAC Primary-Secondary | | | | | | | | |
| EMI Conduction & Radiation | Compliance to EN55022 Class B | | | | | | | | |
| Harmonic Current | Compliance to EN61000-3-2, 3 | | | | | | | | |
| EMS Immunity | EN61000-4-2, 3, 4, 5, 6, 8, 11 | | | | | | | | |
| Characteristics | | | | | | | | | |
| MTBF | 300,000Hrs (25°C, Telecordia SR-332) | | | | | | | | |
| Dimension (LxWxH) | 168x66x39 | | | | | | | | |
| Weight | 590g | | | | | | | | |

* Note: 12V and 24V only

PART NUMBER SYSTEM

QADA - **120** - **12** - **AA** **BB**

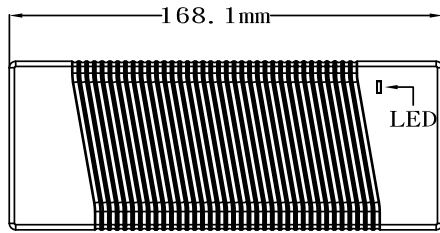
SERIES
OUTPUT WATTAGE
OUTPUT VOLTAGE
INPUT RECEPTACLE



OUTPUT CONNECTOR

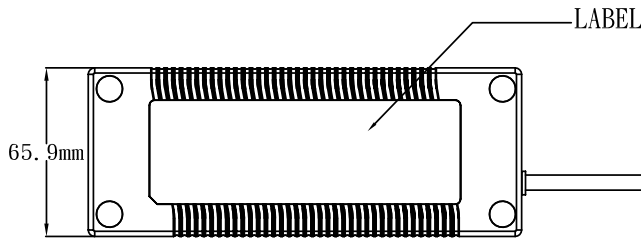
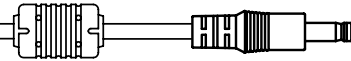
Please Reference Output Plug Type Page 49-50

MECHANICAL SPECIFICATIONS



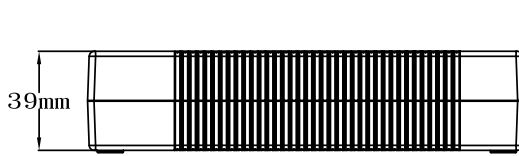
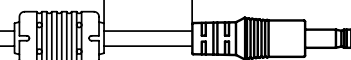
TOP-VIEW

UL1185 14AWG for 12 ~ 15V
 UL1185 16AWG for 16 ~ 30V
 UL1185 18AWG for 48V



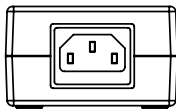
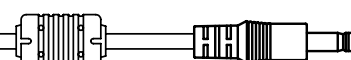
BOTTOM-VIEW

100±5

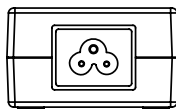


SIDE-VIEW

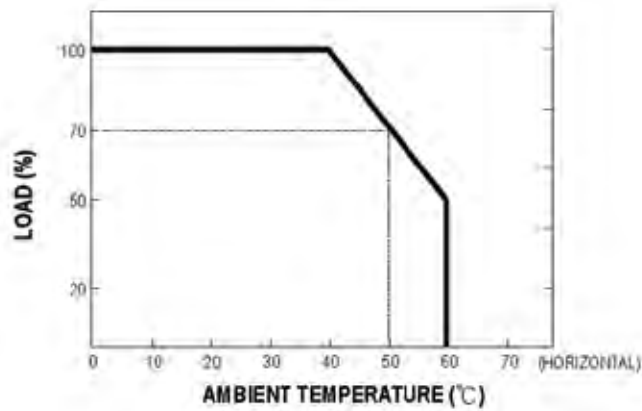
1500±30



FRONT-VIEW



DERATING CURVE



UNIT: mm



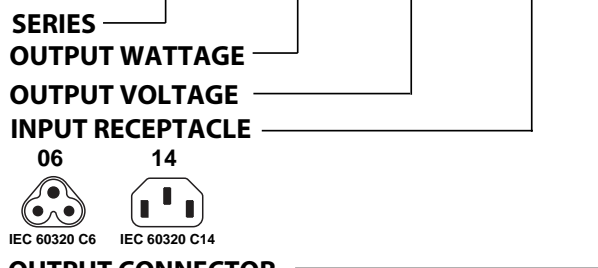
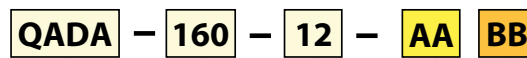
Features:

- Universal AC input/ Full Range
- Energy Efficiency Level V
- ErP Step 2 Compliant
- NRCan Compliant
- Output Protections: OVP/SCP/OC/OTP
- No Load Power Consumption <0.5W
- 1 Year Warranty



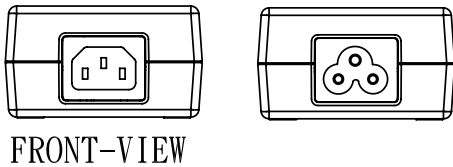
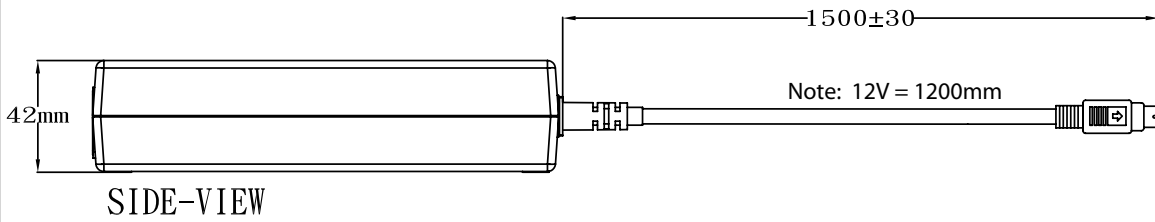
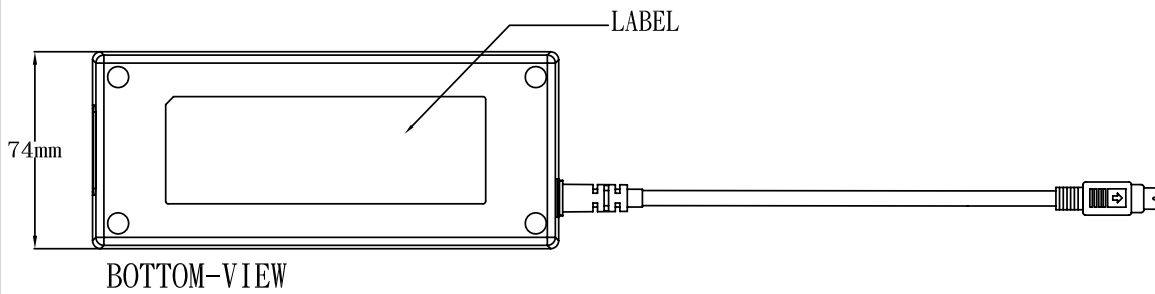
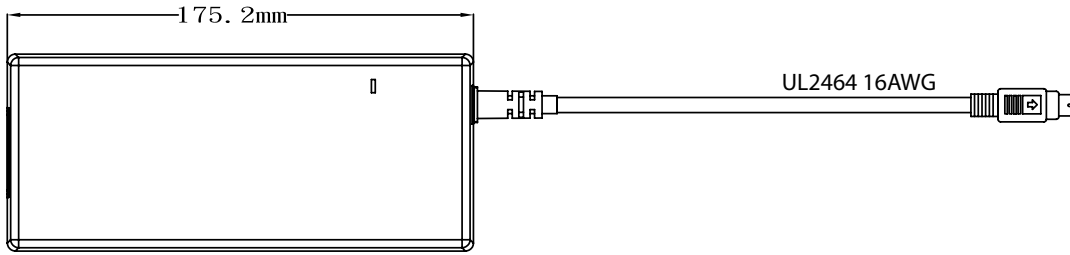
| Model | QADA-160-12 | QADA-160-19 | QADA-160-24 | QADA-160-48 |
|--------------------------------------|--|-------------|-------------|-------------|
| Output Characteristics | | | | |
| DC Output | 12V | 19V | 24V | 48V |
| Rated Current | 12.5A | 8.4A | 6.6A | 3.3A |
| Ripple and Noise | ±2% Vo @ Rated Load | | | |
| Load Regulation (Typ.) | ±5% | | | |
| Transient Response (Typ.) | 0.5mS for 50% Load Change | | | |
| Hold-up Time (Typ.) | 10mS @ Rated Load | | | |
| Output Protection | Short Circuit, Over Voltage, Over Current, Over Temp | | | |
| Ferrite Core | No | | | |
| Input Characteristics | | | | |
| Voltage Range | 100VAC-240VAC | | | |
| Frequency Range | 50Hz-60Hz | | | |
| Efficiency | Energy Star Level V, ErP Step 2, NRCan Compliant | | | |
| AC Current (max) | 2.2A | | | |
| Input Protection | Internal Primary Current Fuse | | | |
| Leakage Current | 3.5mA | | | |
| Environmental Characteristics | | | | |
| Operating Temperature | 0°C-40°C | | | |
| Operating Relative Humidity | 20% RH to 80% RH | | | |
| Storage Temperature | -20°C-80°C, 10% RH to 90% RH | | | |
| Topology | LLC | | | |
| Dielectric Withstand | 3000VAC Primary-Secondary | | | |
| EMI Conduction & Radiation | Compliance to EN55022 Class B | | | |
| Harmonic Current | Compliance to EN61000-3-2, 3 | | | |
| EMS Immunity | IEC61000-4-2, 3, 4, 5, 6, 8, 11 | | | |
| Characteristics | | | | |
| MTBF | 300,000Hrs (25°C, Telecordia SR-332) | | | |
| Dimension (LxWxH) | 175x74x42 | | | |
| Weight | 700g | | | |

PART NUMBER SYSTEM

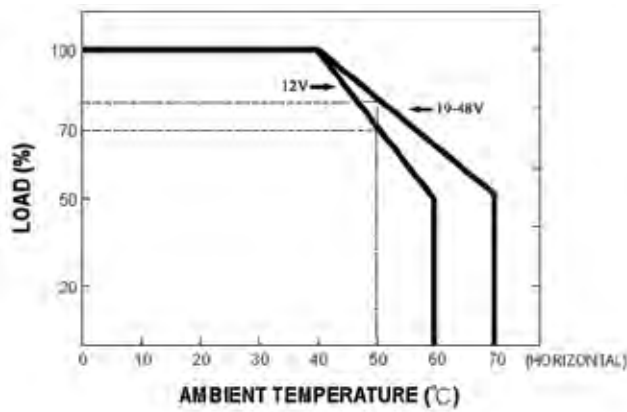


Please Reference Output Plug Type Page 49-50

MECHANICAL SPECIFICATIONS



DERATING CURVE



UNIT: mm



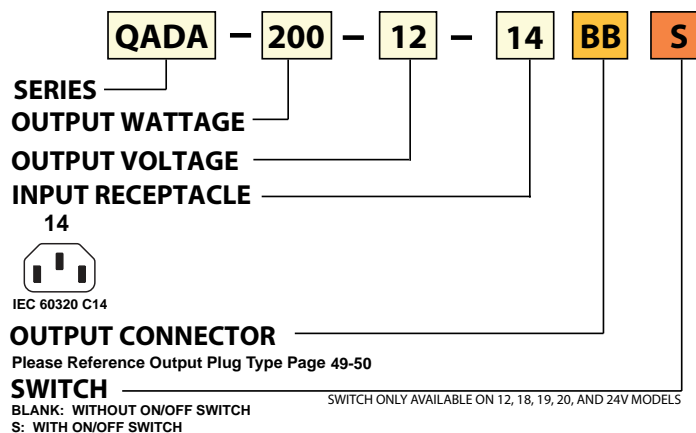
Features:

- Universal AC input/ Full Range
- Energy Efficiency Level V
- ErP Step 2 Compliant
- NRCan Compliant
- Output Protections: OVP/SCP/OC/OTP
- No Load Power Consumption <0.5W
- 1 Year Warranty



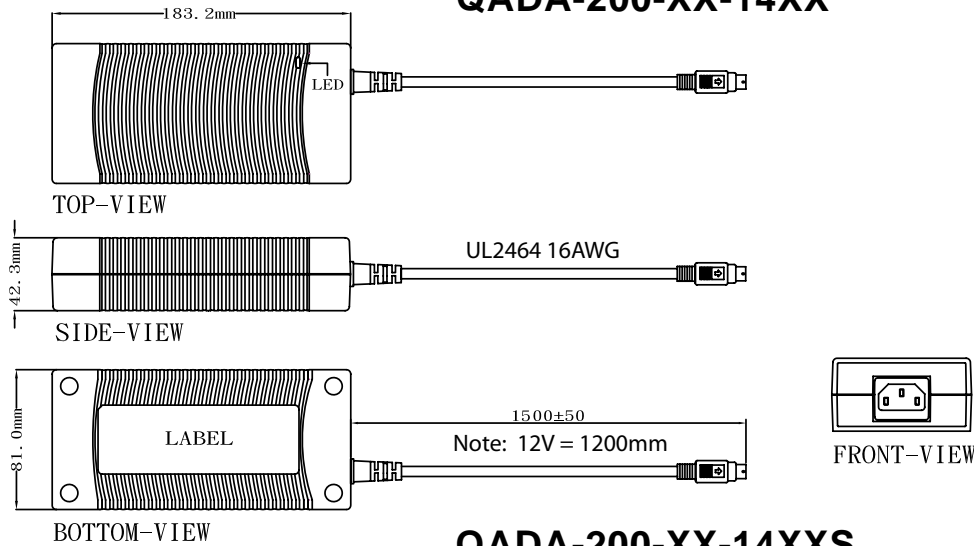
| Model | QADA-200-12 | QADA-200-13.5 | QADA-200-18 | QADA-200-19 | QADA-200-20 | QADA-200-24 | QADA-200-48 |
|--------------------------------------|---|---------------|-------------|-------------|-------------|-------------|-------------|
| Output Characteristics | | | | | | | |
| DC Output | 12V | 13.5V | 18V | 19V | 20V | 24V | 48V |
| Rated Current | 16.0A | 14.0A | 11.0A | 10.5A | 10.0A | 8.3A | 4.2A |
| Ripple and Noise | ±2% Vo @ Rated Load | | | | | | |
| Load Regulation (Typ.) | ±5% | | | | | | |
| Transient Response (Typ.) | 0.5mS for 50% Load Change | | | | | | |
| Hold-up Time (Typ.) | 10mS @ Rated Load | | | | | | |
| Output Protection | Short Circuit, Over Voltage, Over Current, Over Temp | | | | | | |
| Ferrite Core | No | | | | | | |
| Input Characteristics | | | | | | | |
| Voltage Range | 100VAC-240VAC | | | | | | |
| Frequency Range | 50Hz-60Hz | | | | | | |
| Efficiency | Energy Star Level V, ErP Step 2, NRCan Compliant | | | | | | |
| AC Current (max) | 2.8A | | | | | | |
| Input Protection | Internal Primary Current Fuse | | | | | | |
| Leakage Current | 3.5mA | | | | | | |
| Environmental Characteristics | | | | | | | |
| Operating Temperature | 0°C-40°C | | | | | | |
| Operating Relative Humidity | 20% RH to 80% RH | | | | | | |
| Storage Temperature | -20°C-80°C, 10% RH to 90% RH | | | | | | |
| Topology | LLC | | | | | | |
| Dielectric Withstand | 3000VAC Primary-Secondary | | | | | | |
| EMI Conduction & Radiation | Compliance to EN55022 Class B | | | | | | |
| Harmonic Current | Compliance to EN61000-3-2, 3 | | | | | | |
| EMS Immunity | EN61000-4-2, 3, 4, 5, 6, 8, 11 | | | | | | |
| Characteristics | | | | | | | |
| MTBF | 300,000Hrs (25°C, Telecordia SR-332) | | | | | | |
| Dimension (LxWxH) | 183x81x42mm (without switch), 203x81x42 (with switch) | | | | | | |
| Weight | 850g | | | | | | |

PART NUMBER SYSTEM

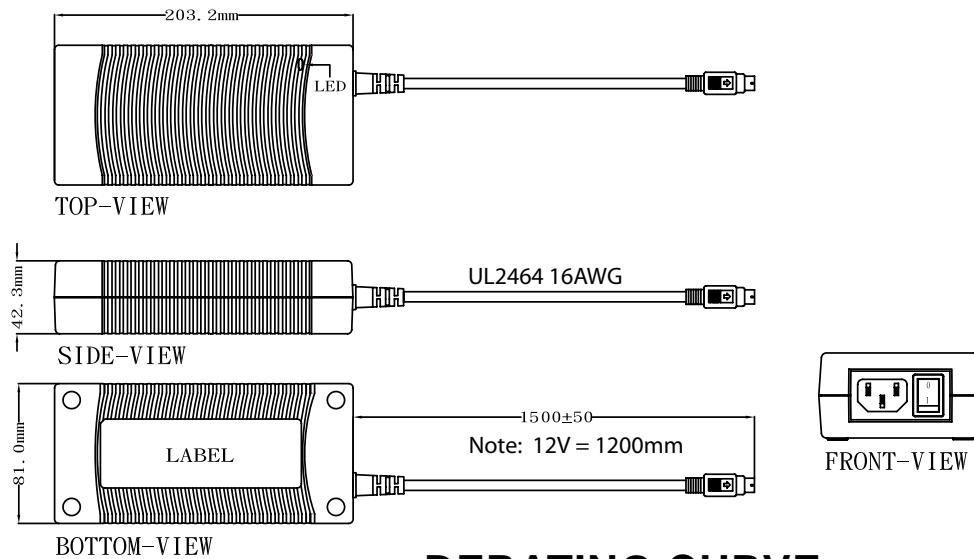


MECHANICAL SPECIFICATIONS

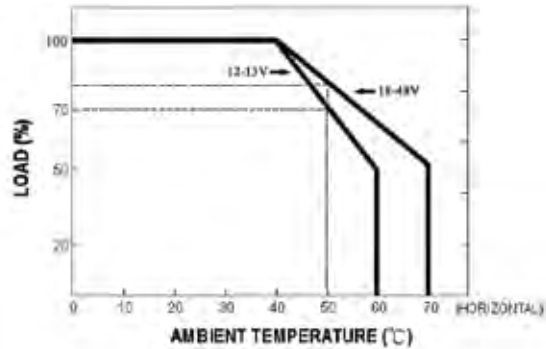
QADA-200-XX-14XX



QADA-200-XX-14XXS



DERATING CURVE



UNIT: mm

AC/DC Wall Mount Power Supplies

- Output power: 5W - 36W
- Universal Input
- Level V efficiency
- Worldwide agency approvals
- Available with interchangeable plugs





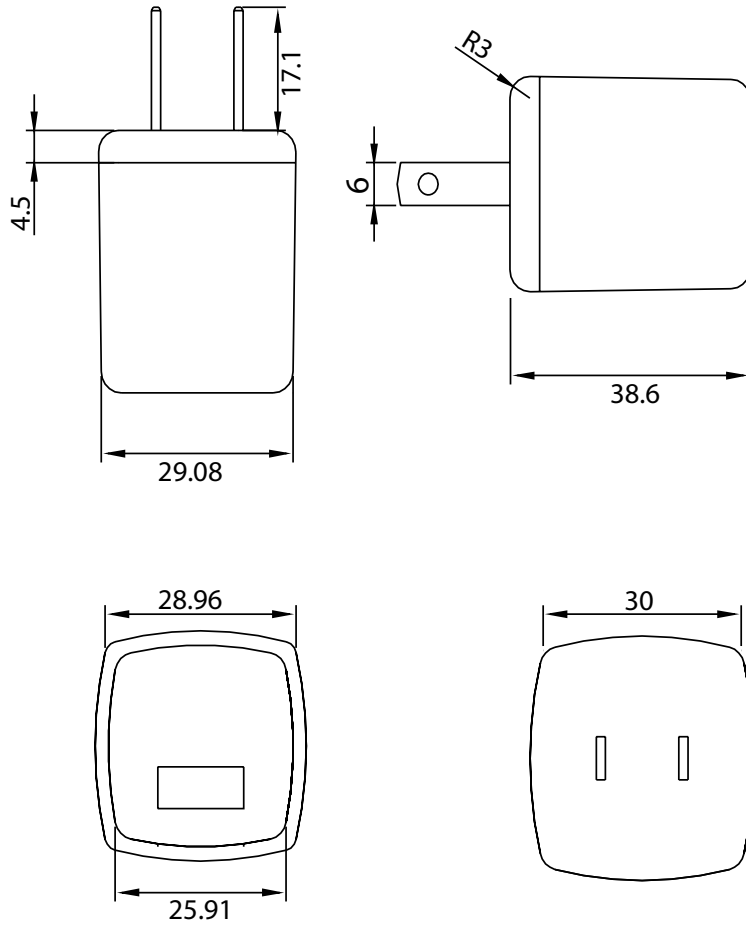
Features:

- Universal AC input/ Full range
- 2 Pole USA Plug (NEMA 1-15P)
- Wide Operating Ambient Temperature (-20°C-40°C)
- Pass LPS
- High Efficiency, and High Reliability
- Output Protections: OLP/OVP/SCP
- No Load Power Consumption <0.3W



| Model | QFAW-05-05 | QFAW-06-06 |
|--------------------------------------|--|------------|
| Output Characteristics | | |
| DC Output | 5V | 6V |
| Rated Current | 1A | 1A |
| Current Range | 0~1A | 0~1A |
| Ripple and Noise (max) | 50mV | |
| Voltage Accuracy | ±10% | |
| Line Regulation | ±1.0% | |
| Load Regulation | ±5.0% | |
| Set-up Time | <3.0s (100VAC input, full load) | |
| Hold-up Time | >10ms (100VAC input, full load) | |
| Input Characteristics | | |
| Voltage Range | 90VAC~264VAC | |
| Frequency Range | 47Hz-63Hz | |
| Efficiency(Typical) | 60% | 60% |
| AC Current (max) | 0.3A | |
| Inrush Current (Typical) | 30A@100VAC Cold start, 75A@240VAC Cold start | |
| Protection | | |
| Over Load (OLP) | Shutdown, auto recovery | |
| Over Voltage (OVP) | Shutdown, auto recovery | |
| Short Circuit (SCP) | Shutdown, auto restart | |
| Environmental Characteristics | | |
| Operating Amb. Temp. & Hum | -20°C-40°C; 20%-90% RH Non-Condensing | |
| Storage Temp. & Hum | -20°C-75°C; 0%-90% RH Non-Condensing | |
| Safety Standards | UL60950-1 | |
| EMI Conduction & Radiation | Compliance to FCC part 15 Class B | |
| General Characteristics | | |
| MTBF | More than 50,000Hrs (25°C, Full load) | |
| Dimension (LxWxH) | 38.6x30x30mm | |

MECHANICAL SPECIFICATIONS



UNIT: mm



Features:

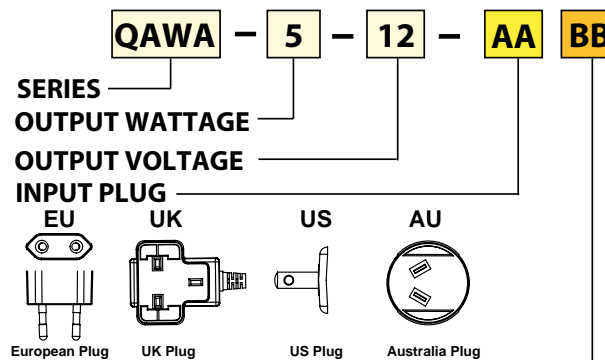
- Universal AC input/ Full Range
- Energy Efficiency Level V
- ErP Step 2 Compliant
- NRCan and GEMS Compliant
- Output Protections: OVP/SCP/OC
- No Load Power Consumption <0.1W
- 1 Year Warranty



| Model | QAWA-5-3 | QAWA-5-3.3 | QAWA-5-4.2 | QAWA-5-4.5 | QAWA-5-5 | QAWA-5-6 | QAWA-5-7.5 | QAWA-5-9 | QAWA-5-12 | QAWA-5-15 |
|--------------------------------------|--|------------|------------|------------|----------|----------|------------|----------|-----------|-----------|
| Output Characteristics | | | | | | | | | | |
| DC Output | 3V | 3.3V | 4.2V | 4.5V | 5V | 6V | 7.5V | 9V | 12V | 15V |
| Rated Current | 1.5A | 1.5A | 1.5A | 1.5A | 1.5A | 1.2A | 1.0A | 0.6A | 0.6A | 0.5A |
| Ripple and Noise | ±2% Vo @ Rated Load | | | | | | | | | |
| Load Regulation (Typ.) | ±5% | | | | | | | | | |
| Transient Response (Typ.) | 0.5mS for 50% Load Change | | | | | | | | | |
| Hold-up Time (Typ.) | 10mS @ Rated Load | | | | | | | | | |
| Output Protection | Short Circuit, Over Voltage, Over Current | | | | | | | | | |
| Ferrite Core | Yes | | | | | | | | | |
| Input Characteristics | | | | | | | | | | |
| Voltage Range | 100VAC-240VAC | | | | | | | | | |
| Frequency Range | 50Hz-60Hz | | | | | | | | | |
| Efficiency | Energy Star Level V, ErP Step 2, NRCan & GEMS Compliant | | | | | | | | | |
| AC Current (max) | 0.19A | | | | | | | | | |
| Input Protection | Internal Primary Current Fuse, Inrush Limiting | | | | | | | | | |
| Leakage Current | 0.25mA | | | | | | | | | |
| Environmental Characteristics | | | | | | | | | | |
| Operating Temperature | 0°C-40°C | | | | | | | | | |
| Operating Relative Humidity | 20% RH to 80% RH | | | | | | | | | |
| Storage Temperature | -20°C-80°C, 10% RH to 90% RH | | | | | | | | | |
| Topology | Switching Flyback | | | | | | | | | |
| Dielectric Withstand | 3000VAC Primary-Secondary | | | | | | | | | |
| EMI Conduction & Radiation | Compliance to EN55022 Class B | | | | | | | | | |
| Harmonic Current | Compliance to EN61000-3-2, 3 | | | | | | | | | |
| EMS Immunity | IEC61000-4-2, 3, 4, 5, 6, 8, 11 | | | | | | | | | |
| Characteristics | | | | | | | | | | |
| MTBF | 300,000Hrs (25°C, Telecordia SR-332) | | | | | | | | | |
| Dimension (LxWxH) | 57x43x26mm (US), 52x28x60mm (EU), 52x49x48mm (UK), 52x41x50 (AU) | | | | | | | | | |
| Weight | 92g (US), 96g (EU), 100g (UK), 94g (AU) | | | | | | | | | |

Note: Safety Approvals
 EU: CB, GS, CE, LPS
 UK: CB, CE, LPS
 US: CB, UL, cUL, FCC, PSE, BSMI, LPS
 AU: CB, RCM, LPS

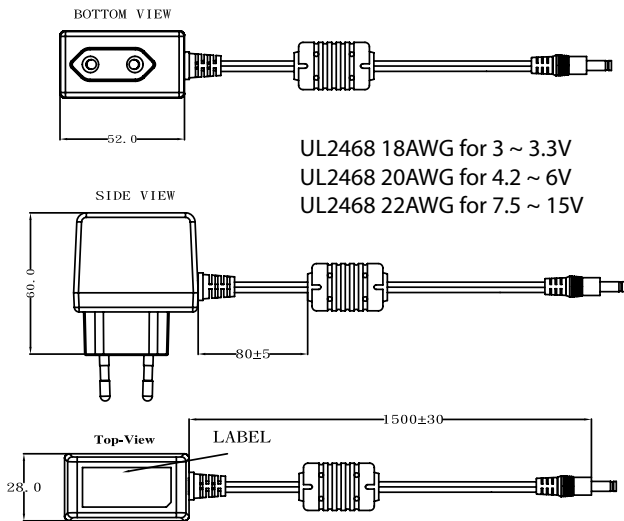
PART NUMBER SYSTEM



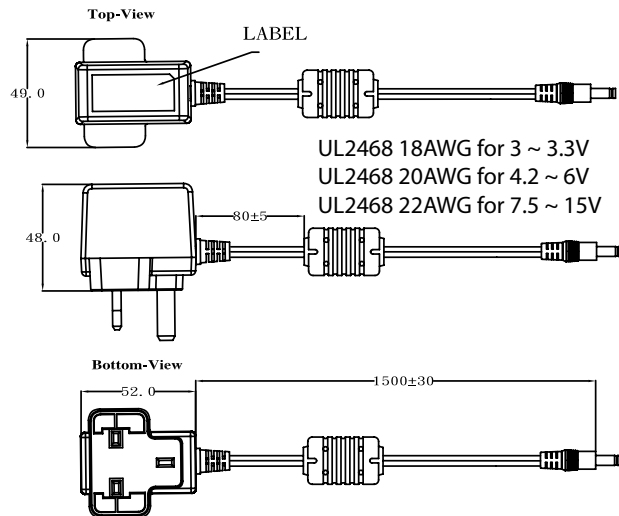
Please Reference Output Plug Type Page 49-50

MECHANICAL SPECIFICATIONS

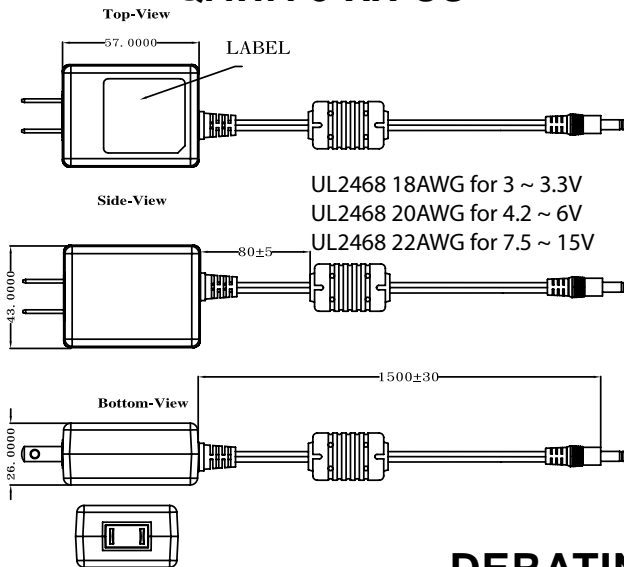
QAWA-5-XX-EU



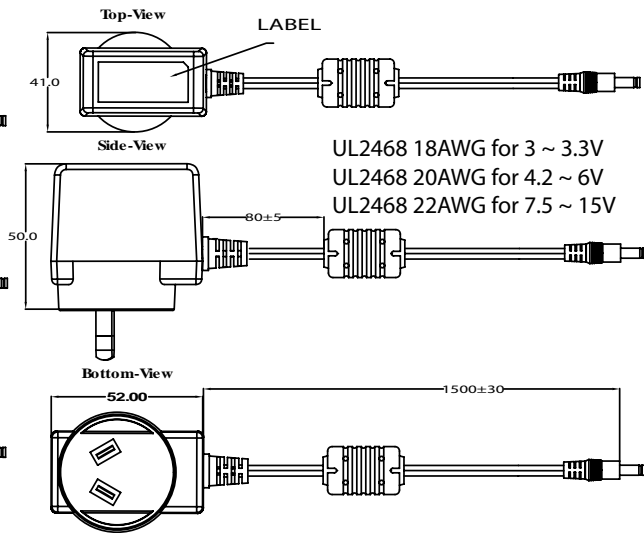
QAWA-5-XX-UK



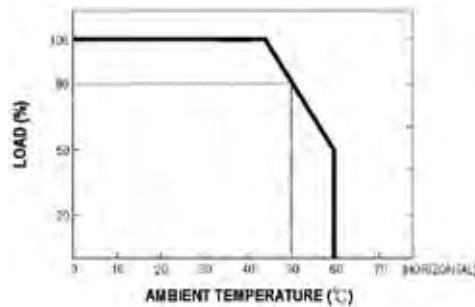
QAWA-5-XX-US



QAWA-5-XX-AU



DERATING CURVE



UNIT: mm



Features:

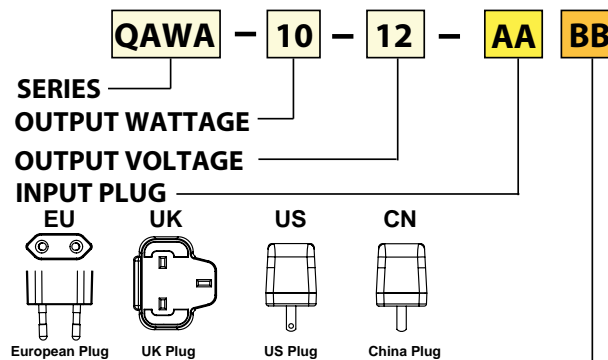
- Universal AC input/ Full Range
- Energy Efficiency Level V
- ErP Step 2 Compliant
- NRCan Compliant
- Output Protections: OVP/SCP/OC
- No Load Power Consumption <0.3W
- 1 Year Warranty



| Model | QAWA-10-3.3 | QAWA-10-4.5 | QAWA-10-5 | QAWA-10-6 | QAWA-10-7.5 | QAWA-10-8.4 | QAWA-10-9 | QAWA-10-12 | QAWA-10-13.5 | QAWA-10-15 | QAWA-10-18 | QAWA-10-24 |
|--------------------------------------|--|-------------|-----------|-----------|-------------|-------------|-----------|------------|--------------|------------|------------|------------|
| Output Characteristics | | | | | | | | | | | | |
| DC Output | 3.3V | 4.5V | 5V | 6V | 7.5V | 8.4V | 9V | 12V | 13.5V | 15V | 18V | 24V |
| Rated Current | 2.0A | 2.0A | 2.0A | 2.0A | 1.4A | 1.3A | 1.2A | 1.0A | 0.8A | 0.8A | 0.66A | 0.5A |
| Ripple and Noise | ±2% Vo @ Rated Load | | | | | | | | | | | |
| Load Regulation (Typ.) | ±5% | | | | | | | | | | | |
| Transient Response (Typ.) | 0.5mS for 50% Load Change | | | | | | | | | | | |
| Hold-up Time (Typ.) | 10mS @ Rated Load | | | | | | | | | | | |
| Output Protection | Short Circuit, Over Voltage, Over Current | | | | | | | | | | | |
| Ferrite Core | Yes | | | | | | | | | | | |
| Input Characteristics | | | | | | | | | | | | |
| Voltage Range | 100VAC-240VAC | | | | | | | | | | | |
| Frequency Range | 50Hz-60Hz | | | | | | | | | | | |
| Efficiency | Energy Star Level V, ErP Step 2, NRCan Compliant | | | | | | | | | | | |
| AC Current (max) | 0.31A | | | | | | | | | | | |
| Input Protection | Internal Primary Current Fuse, Inrush Limiting | | | | | | | | | | | |
| Leakage Current | 0.25mA | | | | | | | | | | | |
| Environmental Characteristics | | | | | | | | | | | | |
| Operating Temperature | 0°C-40°C | | | | | | | | | | | |
| Operating Relative Humidity | 20% RH to 80% RH | | | | | | | | | | | |
| Storage Temperature | -20°C-80°C, 10% RH to 90% RH | | | | | | | | | | | |
| Topology | Switching Flyback | | | | | | | | | | | |
| Dielectric Withstand | 3000VAC Primary-Secondary | | | | | | | | | | | |
| EMI Conduction & Radiation | Compliance to EN55022 Class B | | | | | | | | | | | |
| Harmonic Current | Compliance to EN61000-3-2, 3 | | | | | | | | | | | |
| EMS Immunity | EN61000-4-2, 3, 4, 5, 6, 8, 11 | | | | | | | | | | | |
| Characteristics | | | | | | | | | | | | |
| MTBF | 300,000Hrs (25°C, Telecordia SR-332) | | | | | | | | | | | |
| Dimension (LxWxH) | 72x34x59mm (US), 72x34x50mm (EU), 72x50x72mm (UK), 72x34x58 (CN) | | | | | | | | | | | |
| Weight | 126g (US), 128g (EU), 130g (UK), 126g (CN) | | | | | | | | | | | |

Note: Safety Approvals
 EU: CB, GS, CE, LPS
 UK: CB, CE, LPS
 US: CB, UL, cUL, FCC, PSE, BSMI, LPS
 CN: CB, CCC, LPS

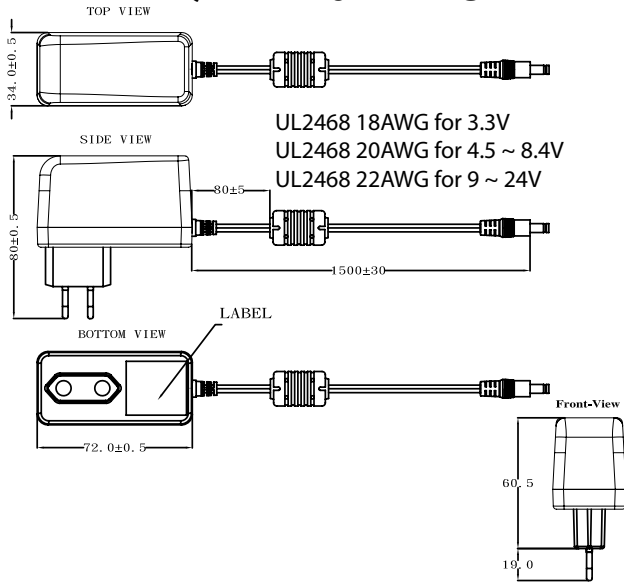
PART NUMBER SYSTEM



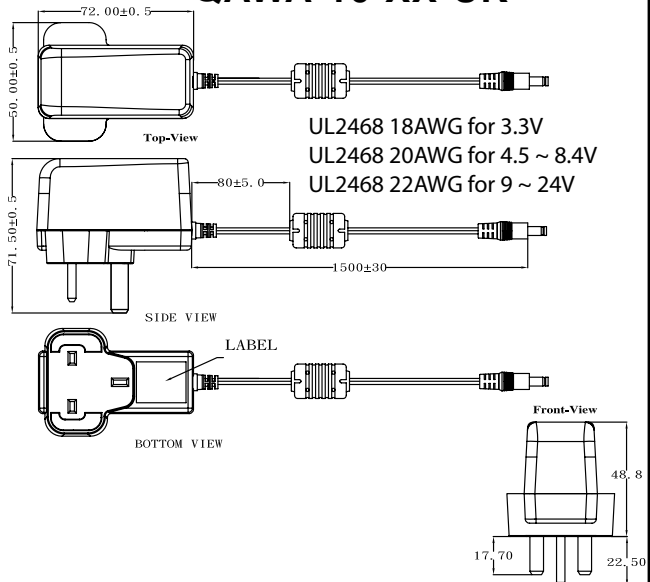
Please Reference Output Plug Type Page 49-50

MECHANICAL SPECIFICATIONS

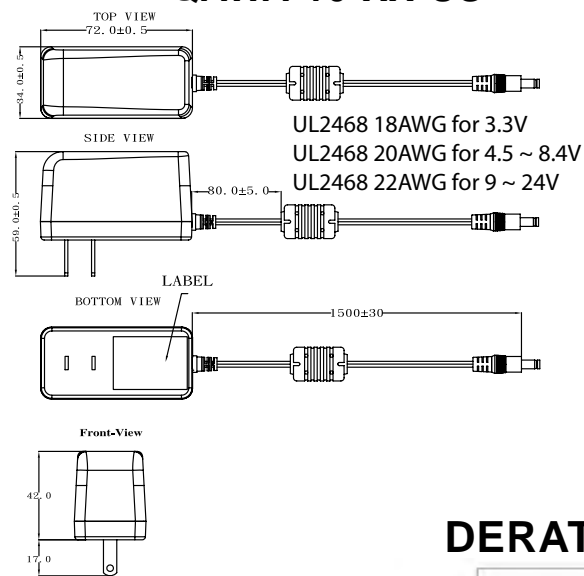
QAWA-10-XX-EU



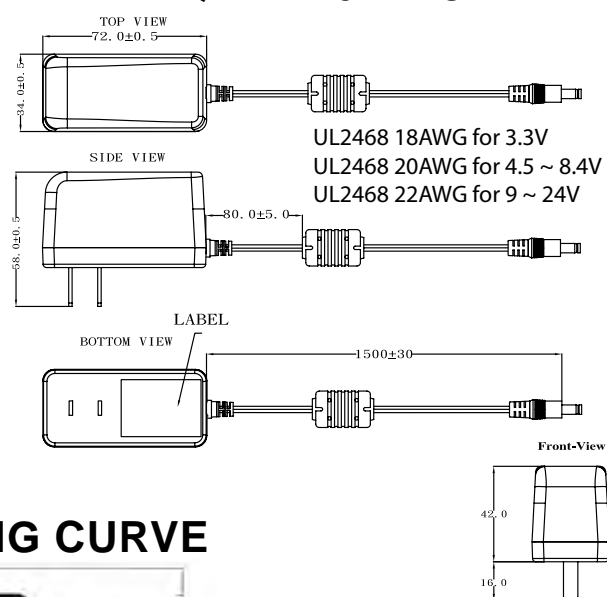
QAWA-10-XX-UK



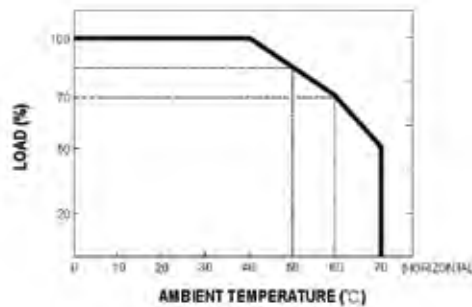
QAWA-10-XX-US



QAWA-10-XX-CN



DERATING CURVE



UNIT: mm



Features:

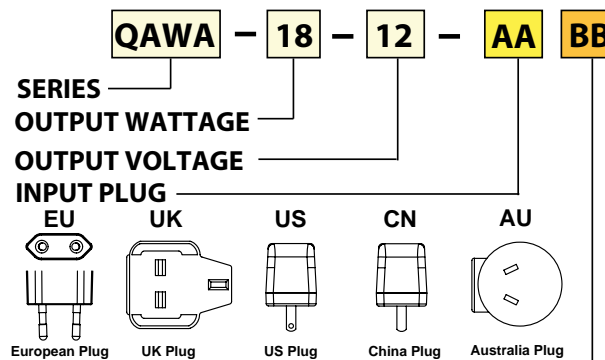
- Universal AC input/ Full Range
- Energy Efficiency Level V
- ErP Step 2 Compliant
- NRCan and GEMS Compliant
- Output Protections: OVP/SCP/OC
- No Load Power Consumption <0.3W
- 1 Year Warranty



| Model | QAWA-18-4.5 | QAWA-18-5 | QAWA-18-5.9 | QAWA-18-7 | QAWA-18-7.5 | QAWA-18-9 | QAWA-18-10 | QAWA-18-12 | QAWA-18-13.5 | QAWA-18-15 | QAWA-18-16 | QAWA-18-18 | QAWA-18-20 | QAWA-18-24 |
|--------------------------------------|---|-----------|-------------|-----------|-------------|-----------|------------|------------|--------------|------------|------------|------------|------------|------------|
| Output Characteristics | | | | | | | | | | | | | | |
| DC Output | 4.5V | 5V | 5.9V | 7V | 7.5V | 9V | 10V | 12V | 13.5V | 15V | 16V | 18V | 20V | 24V |
| Rated Current | 3.5A | 3.5A | 3.0A | 2.5A | 2.5A | 2.2A | 1.9A | 1.6A | 1.4A | 1.3A | 1.2A | 1.1A | 1.0A | 0.8A |
| Ripple and Noise | ±2% Vo @ Rated Load | | | | | | | | | | | | | |
| Load Regulation (Typ.) | ±5% | | | | | | | | | | | | | |
| Transient Response (Typ.) | 0.5mS for 50% Load Change | | | | | | | | | | | | | |
| Hold-up Time (Typ.) | 10mS @ Rated Load | | | | | | | | | | | | | |
| Output Protection | Short Circuit, Over Voltage, Over Current | | | | | | | | | | | | | |
| Ferrite Core | No | | | | | | | | | | | | | |
| Input Characteristics | | | | | | | | | | | | | | |
| Voltage Range | 100VAC-240VAC | | | | | | | | | | | | | |
| Frequency Range | 50Hz-60Hz | | | | | | | | | | | | | |
| Efficiency | Energy Star Level V, ErP Step 2, NRCan & GEMS Compliant | | | | | | | | | | | | | |
| AC Current (max) | 0.48A | | | | | | | | | | | | | |
| Input Protection | Internal Primary Current Fuse, Inrush Limiting | | | | | | | | | | | | | |
| Leakage Current | 0.25mA | | | | | | | | | | | | | |
| Environmental Characteristics | | | | | | | | | | | | | | |
| Operating Temperature | 0°C-40°C | | | | | | | | | | | | | |
| Operating Relative Humidity | 20% RH to 80% RH | | | | | | | | | | | | | |
| Storage Temperature | -20°C-80°C, 10% RH to 90% RH | | | | | | | | | | | | | |
| Topology | Switching Flyback | | | | | | | | | | | | | |
| Dielectric Withstand | 3000VAC Primary-Secondary | | | | | | | | | | | | | |
| EMI Conduction & Radiation | Compliance to EN55022 Class B | | | | | | | | | | | | | |
| Harmonic Current | Compliance to EN61000-3-2, 3 | | | | | | | | | | | | | |
| EMS Immunity | EN61000-4-2, 3, 4, 5, 6, 8, 11 | | | | | | | | | | | | | |
| Characteristics | | | | | | | | | | | | | | |
| MTBF | 300,000Hrs (25°C, Telectordia SR-332) | | | | | | | | | | | | | |
| Dimension (LxWxH) | 72x34x69mm (US), 72x34x90mm (EU), 72x50x81mm (UK), 72x40x78 (AU), 72x34x69 (CN) | | | | | | | | | | | | | |
| Weight | 148g (US), 154g (EU), 158g (UK), 150g (AU), 148g (CN) | | | | | | | | | | | | | |

Note: Safety Approvals
 EU: CB, GS, CE, LPS
 UK: CB, CE, LPS
 US: CB, UL, cUL, FCC, PSE, BSMI, LPS
 AU: CB, RCM, LPS
 CN: CB, CCC, LPS

PART NUMBER SYSTEM

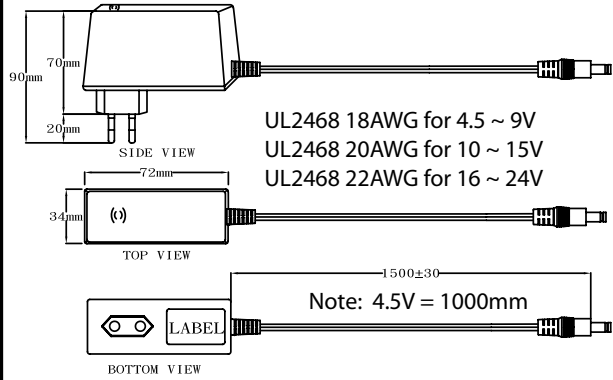


OUTPUT CONNECTOR

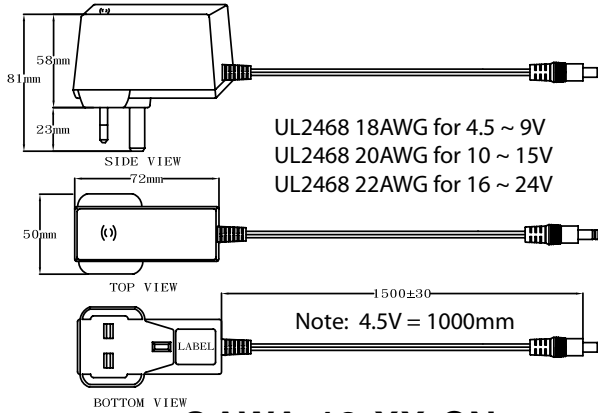
Please Reference Output Plug Type Page 49-50

MECHANICAL SPECIFICATIONS

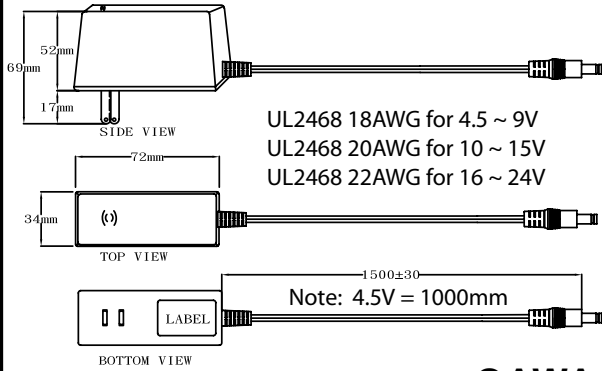
QAWA-18-XX-EU



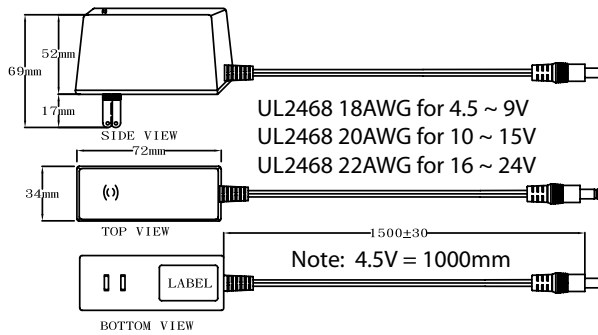
QAWA-18-XX-UK



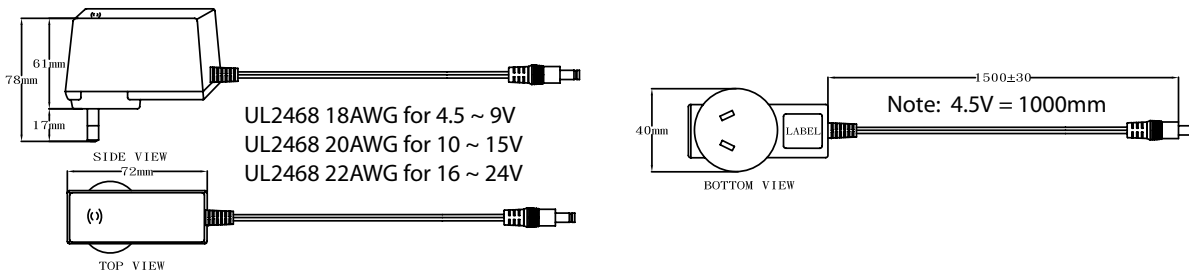
QAWA-18-XX-US



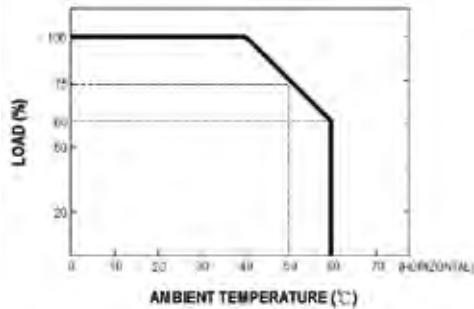
QAWA-18-XX-CN



QAWA-18-XX-AU



DERATING CURVE



UNIT: mm



Features:

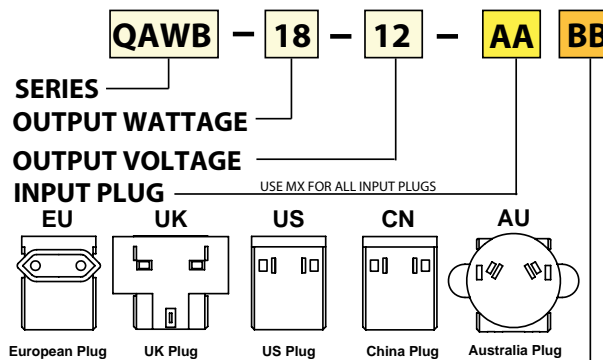
- Universal AC input/ Full Range
- Energy Efficiency Level V
- ErP Step 2 Compliant
- NRCan and GEMS Compliant
- Output Protections: OVP/SCP/OCP
- No Load Power Consumption <0.3W
- 1 Year Warranty



| Model | QAWB-18-4.5 | QAWB-18-5 | QAWB-18-5.9 | QAWB-18-7 | QAWB-18-7.5 | QAWB-18-9 | QAWB-18-10 | QAWB-18-12 | QAWB-18-13.5 | QAWB-18-15 | QAWB-18-16 | QAWB-18-18 | QAWB-18-20 | QAWB-18-24 |
|--------------------------------------|---|-----------|-------------|-----------|-------------|-----------|------------|------------|--------------|------------|------------|------------|------------|------------|
| Output Characteristics | | | | | | | | | | | | | | |
| DC Output | 4.5V | 5V | 5.9V | 7V | 7.5V | 9V | 10V | 12V | 13.5V | 15V | 16V | 18V | 20V | 24V |
| Rated Current | 3.5A | 3.5A | 3.0A | 2.5A | 2.5A | 2.2A | 1.9A | 1.6A | 1.4A | 1.3A | 1.2A | 1.1A | 1.0A | 0.8A |
| Ripple and Noise | ±2% Vo @ Rated Load | | | | | | | | | | | | | |
| Load Regulation (Typ.) | ±5% | | | | | | | | | | | | | |
| Transient Response (Typ.) | 0.5mS for 50% Load Change | | | | | | | | | | | | | |
| Hold-up Time (Typ.) | 10mS @ Rated Load | | | | | | | | | | | | | |
| Output Protection | Short Circuit, Over Voltage, Over Current | | | | | | | | | | | | | |
| Ferrite Core | No | | | | | | | | | | | | | |
| Input Characteristics | | | | | | | | | | | | | | |
| Voltage Range | 100VAC-240VAC | | | | | | | | | | | | | |
| Frequency Range | 50Hz-60Hz | | | | | | | | | | | | | |
| Efficiency | Energy Star Level V, ErP Step 2, NRCan & GEMS Compliant | | | | | | | | | | | | | |
| AC Current (max) | 0.48A | | | | | | | | | | | | | |
| Input Protection | Internal Primary Current Fuse, Inrush Limiting | | | | | | | | | | | | | |
| Leakage Current | 0.25mA | | | | | | | | | | | | | |
| Environmental Characteristics | | | | | | | | | | | | | | |
| Operating Temperature | 0°C-40°C | | | | | | | | | | | | | |
| Operating Relative Humidity | 20% RH to 80% RH | | | | | | | | | | | | | |
| Storage Temperature | -20°C-80°C, 10% RH to 90% RH | | | | | | | | | | | | | |
| Topology | Switching Flyback | | | | | | | | | | | | | |
| Dielectric Withstand | 3000VAC Primary-Secondary | | | | | | | | | | | | | |
| EMI Conduction & Radiation | Compliance to EN55022 Class B | | | | | | | | | | | | | |
| Harmonic Current | Compliance to EN61000-3-2, 3 | | | | | | | | | | | | | |
| EMS Immunity | EN61000-4-2, 3, 4, 5, 6, 8, 11 | | | | | | | | | | | | | |
| Characteristics | | | | | | | | | | | | | | |
| MTBF | 300,000Hrs (25°C, Telecordia SR-332) | | | | | | | | | | | | | |
| Dimension (LxWxH) | 78x52x41mm | | | | | | | | | | | | | |
| Weight | 158g | | | | | | | | | | | | | |

Note: Safety Approvals
 EU: CB, GS, CE, LPS
 UK: CB, CE, LPS
 US: CB, UL, cUL, FCC, PSE, BSMI, LPS
 AU: CB, RCM, LPS
 CN: CB, CCC, LPS

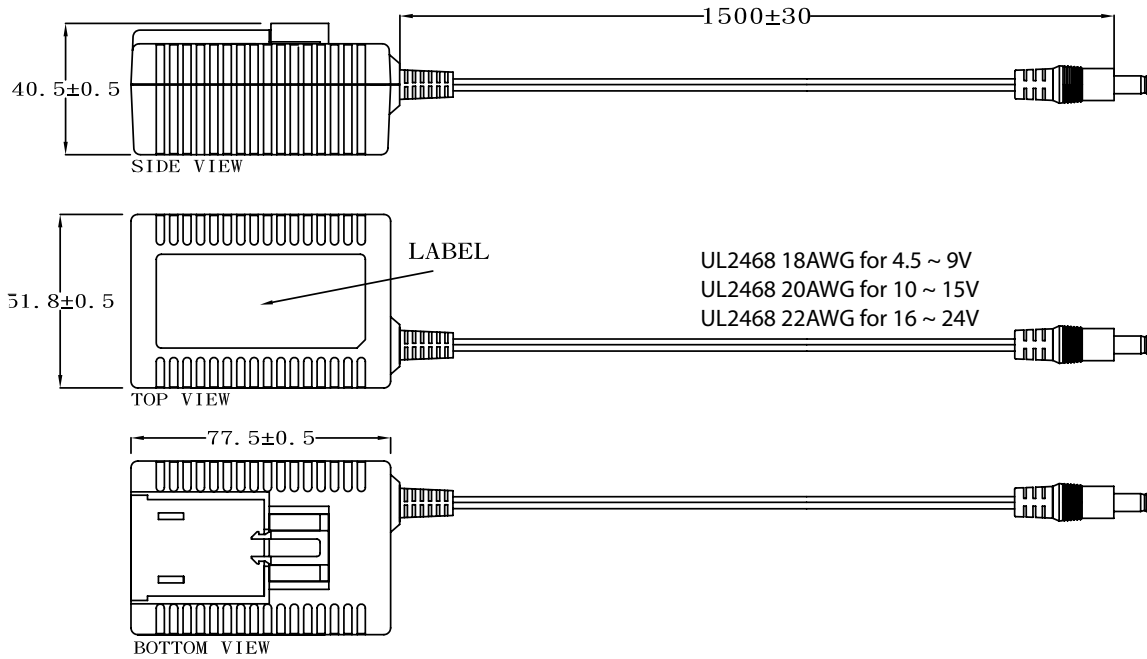
PART NUMBER SYSTEM



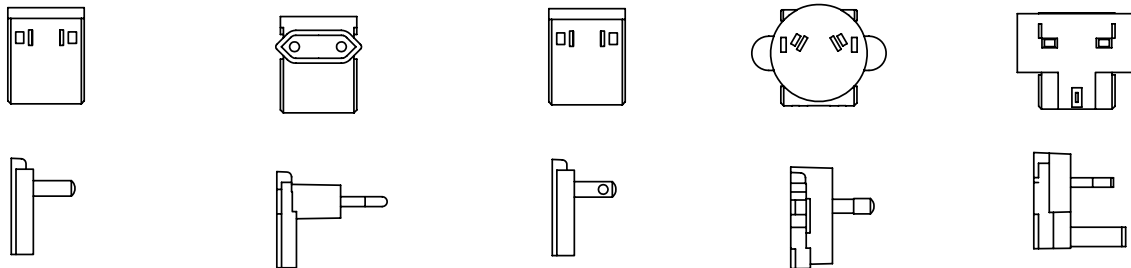
OUTPUT CONNECTOR

Please Reference Output Plug Type Page 49-50

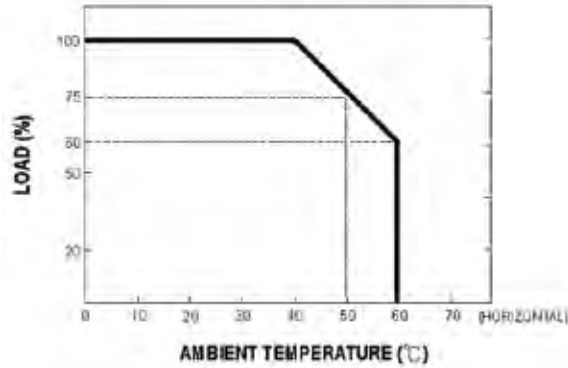
MECHANICAL SPECIFICATIONS



CHANGEABLE PLUGS



DERATING CURVE



UNIT: mm



Features:

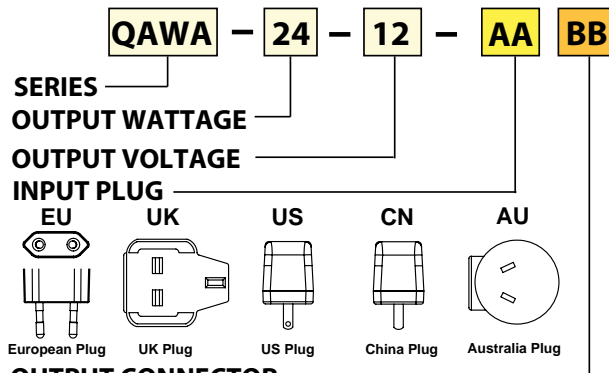
- Universal AC input/ Full Range
- Energy Efficiency Level V
- ErP Step 2 Compliant
- NRCan and GEMS Compliant
- Output Protections: OVP/SCP/OC
- No Load Power Consumption <0.3W
- 1 Year Warranty



| Model | QAWA-24-5 | QAWA-24-5.9 | QAWA-24-7 | QAWA-24-7.5 | QAWA-24-9 | QAWA-24-9.5 | QAWA-24-12 | QAWA-24-15 | QAWA-24-24 | QAWA-24-48 |
|--------------------------------------|---|-------------|-----------|-------------|-----------|-------------|------------|------------|------------|------------|
| Output Characteristics | | | | | | | | | | |
| DC Output | 5V | 5.9V | 7V | 7.5V | 9V | 9.5V | 12V | 15V | 24V | 48V |
| Rated Current | 4.0A | 3.5A | 3.0A | 3.0A | 2.5A | 2.5A | 2.0A | 1.6A | 1.0A | 0.5A |
| Ripple and Noise | ±2% Vo @ Rated Load | | | | | | | | | |
| Load Regulation (Typ.) | ±5% | | | | | | | | | |
| Transient Response (Typ.) | 0.5mS for 50% Load Change | | | | | | | | | |
| Hold-up Time (Typ.) | 10mS @ Rated Load | | | | | | | | | |
| Output Protection | Short Circuit, Over Voltage, Over Current | | | | | | | | | |
| Ferrite Core | No | | | | | | | | | |
| Input Characteristics | | | | | | | | | | |
| Voltage Range | 100VAC-240VAC | | | | | | | | | |
| Frequency Range | 50Hz-60Hz | | | | | | | | | |
| Efficiency | Energy Star Level V, ErP Step 2, NRCan & GEMS Compliant | | | | | | | | | |
| AC Current (max) | 0.58A | | | | | | | | | |
| Input Protection | Internal Primary Current Fuse, Inrush Limiting | | | | | | | | | |
| Leakage Current | 0.25mA | | | | | | | | | |
| Environmental Characteristics | | | | | | | | | | |
| Operating Temperature | 0°C-40°C | | | | | | | | | |
| Operating Relative Humidity | 20% RH to 80% RH | | | | | | | | | |
| Storage Temperature | -20°C-80°C, 10% RH to 90% RH | | | | | | | | | |
| Topology | Switching Flyback | | | | | | | | | |
| Dielectric Withstand | 3000VAC Primary-Secondary | | | | | | | | | |
| EMI Conduction & Radiation | Compliance to EN55022 Class B | | | | | | | | | |
| Harmonic Current | Compliance to EN61000-3-2, 3 | | | | | | | | | |
| EMS Immunity | EN61000-4-2, 3, 4, 5, 6, 8, 11 | | | | | | | | | |
| Characteristics | | | | | | | | | | |
| MTBF | 300,000Hrs (25°C, Telectordia SR-332) | | | | | | | | | |
| Dimension (LxWxH) | 72x34x69mm (US), 72x34x90mm (EU), 72x50x81mm (UK), 72x40x78 (AU), 72x34x69 (CN) | | | | | | | | | |
| Weight | 148g (US), 154g (EU), 158g (UK), 150g (AU), 148g (CN) | | | | | | | | | |

Note: Safety Approvals
 EU: CB, GS, CE, LPS
 UK: CB, CE, LPS
 US: CB, UL, cUL, FCC, PSE, BSMI, LPS
 AU: CB, RCM, LPS
 CN: CB, CCC, LPS

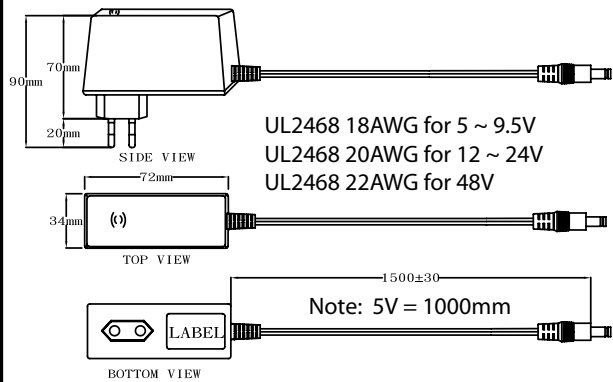
PART NUMBER SYSTEM



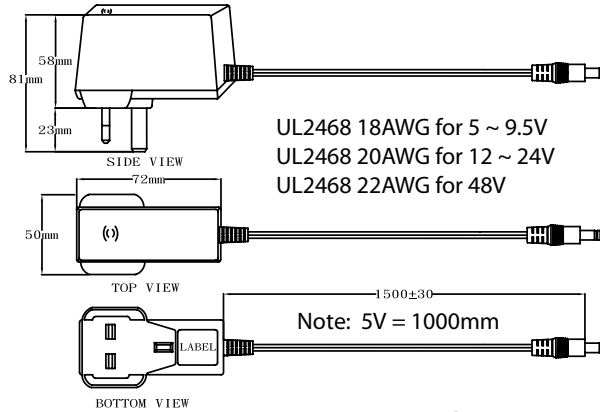
OUTPUT CONNECTOR
 Please Reference Output Plug Type Page 49-50

MECHANICAL SPECIFICATIONS

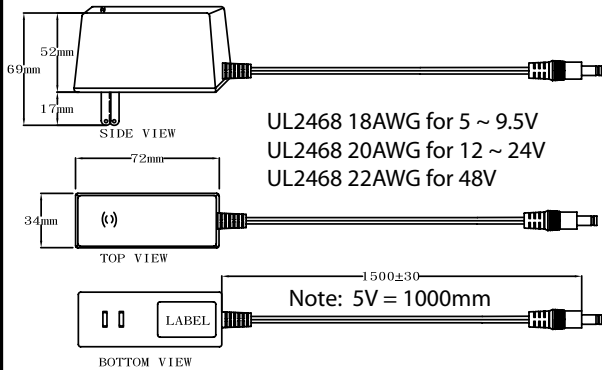
QAWA-24-XX-EU



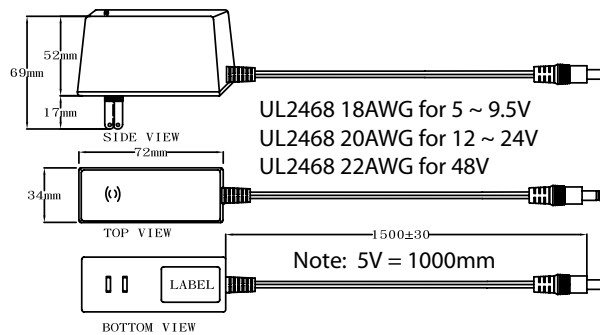
QAWA-24-XX-UK



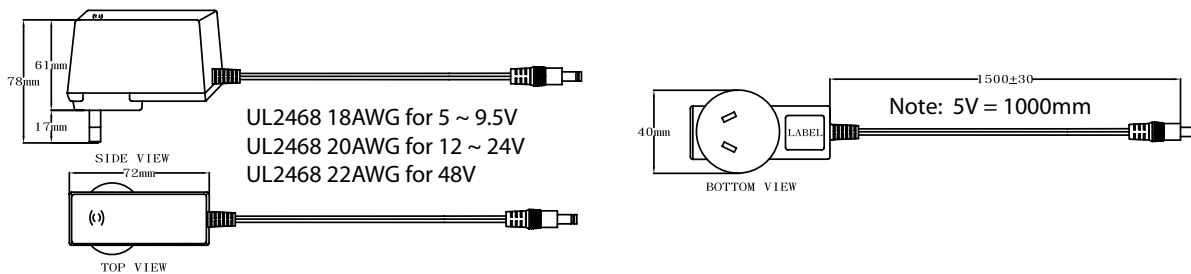
QAWA-24-XX-US



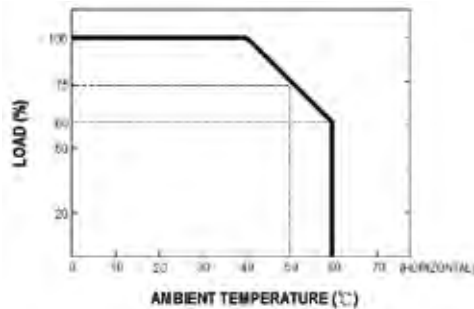
QAWA-24-XX-CN



QAWA-24-XX-AU



DERATING CURVE



UNIT: mm



Features:

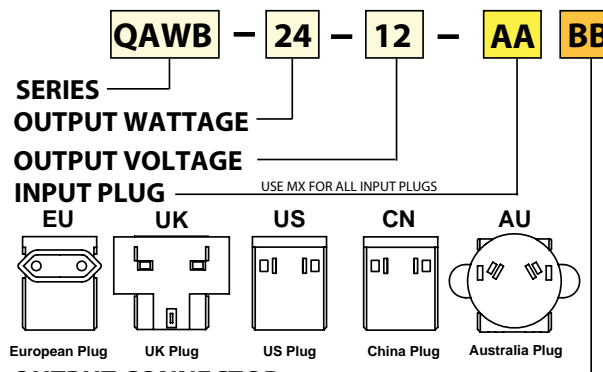
- Universal AC input/ Full Range
- Energy Efficiency Level V
- ErP Step 2 Compliant
- NRCan and GEMS Compliant
- Output Protections: OVP/SCP/OC
- No Load Power Consumption <0.3W
- 1 Year Warranty



| Model | QAWB-24-5 | QAWB-24-5.9 | QAWB-24-7.5 | QAWB-24-9 | QAWB-24-9.5 | QAWB-24-12 | QAWB-24-15 | QAWB-24-24 | QAWB-24-48 |
|--------------------------------------|---|-------------|-------------|-----------|-------------|------------|------------|------------|------------|
| Output Characteristics | | | | | | | | | |
| DC Output | 5V | 5.9V | 7.5V | 9V | 9.5V | 12V | 15V | 24V | 48V |
| Rated Current | 4.0A | 3.5A | 3.0A | 2.5A | 2.5A | 2.0A | 1.6A | 1.0A | 0.5A |
| Ripple and Noise | ±2% Vo @ Rated Load | | | | | | | | |
| Load Regulation (Typ.) | ±5% | | | | | | | | |
| Transient Response (Typ.) | 0.5mS for 50% Load Change | | | | | | | | |
| Hold-up Time (Typ.) | 10mS @ Rated Load | | | | | | | | |
| Output Protection | Short Circuit, Over Voltage, Over Current | | | | | | | | |
| Ferrite Core | No | | | | | | | | |
| Input Characteristics | | | | | | | | | |
| Voltage Range | 100VAC-240VAC | | | | | | | | |
| Frequency Range | 50Hz-60Hz | | | | | | | | |
| Efficiency | Energy Star Level V, ErP Step 2, NRCan & GEMS Compliant | | | | | | | | |
| AC Current (max) | 0.58A | | | | | | | | |
| Input Protection | Internal Primary Current Fuse, Inrush Limiting | | | | | | | | |
| Leakage Current | 0.25mA | | | | | | | | |
| Environmental Characteristics | | | | | | | | | |
| Operating Temperature | 0°C-40°C | | | | | | | | |
| Operating Relative Humidity | 20% RH to 80% RH | | | | | | | | |
| Storage Temperature | -20°C-80°C, 10% RH to 90% RH | | | | | | | | |
| Topology | Switching Flyback | | | | | | | | |
| Dielectric Withstand | 3000VAC Primary-Secondary | | | | | | | | |
| EMI Conduction & Radiation | Compliance to EN55022 Class B | | | | | | | | |
| Harmonic Current | Compliance to EN61000-3-2, 3 | | | | | | | | |
| EMS Immunity | EN61000-4-2, 3, 4, 5, 6, 8, 11 | | | | | | | | |
| Characteristics | | | | | | | | | |
| MTBF | 300,000Hrs (25°C, Telecordia SR-332) | | | | | | | | |
| Dimension (LxWxH) | 78x52x41mm | | | | | | | | |
| Weight | 158g | | | | | | | | |

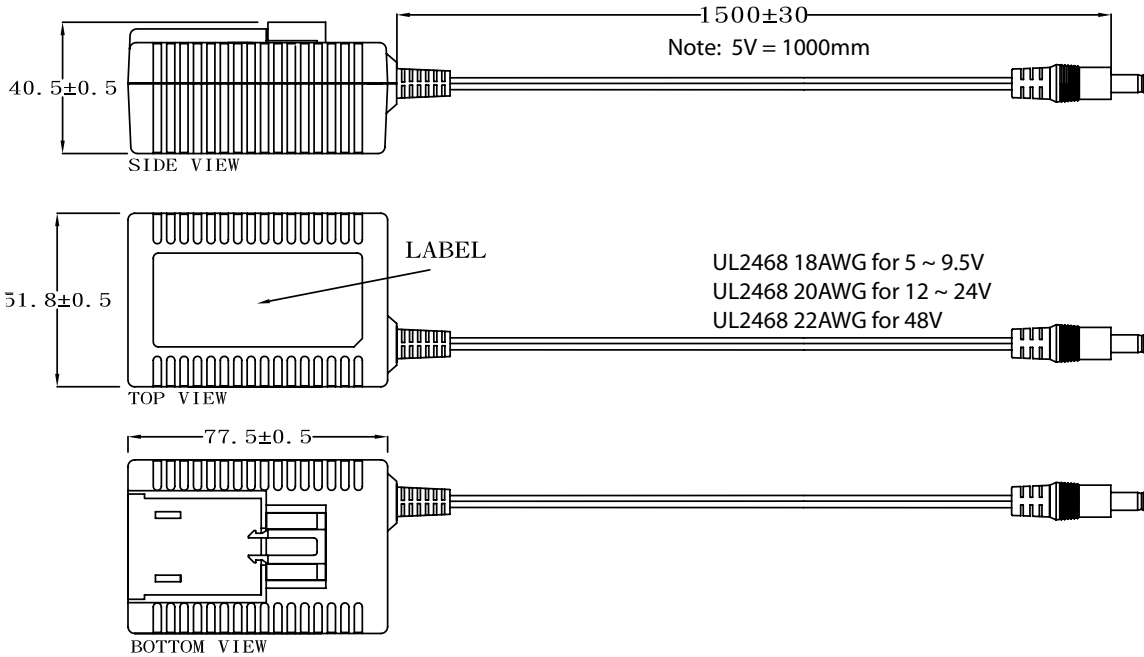
Note: Safety Approvals
 EU: CB, GS, CE, LPS
 UK: CB, CE, LPS
 US: CB, UL, cUL, FCC, PSE, BSMI, LPS
 AU: CB, RCM, LPS
 CN: CB, CCC, LPS

PART NUMBER SYSTEM

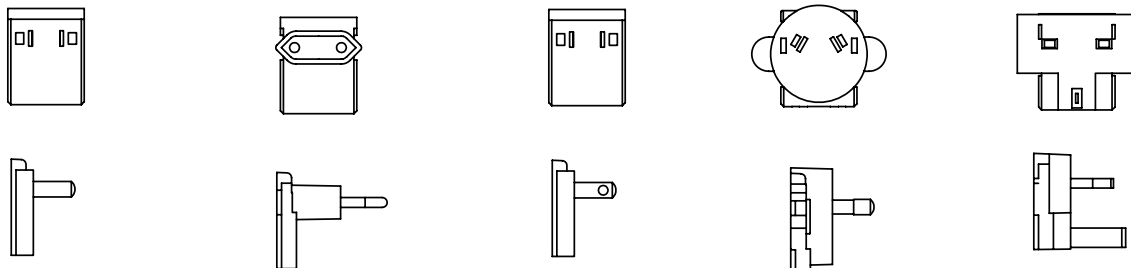


OUTPUT CONNECTOR
 Please Reference Output Plug Type Page 49-50

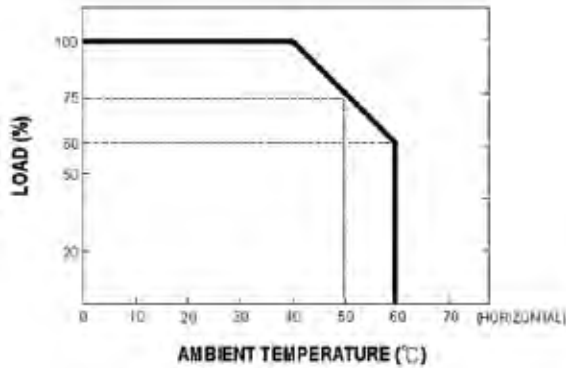
MECHANICAL SPECIFICATIONS



CHANGEABLE PLUGS



DERATING CURVE



UNIT: mm



Features:

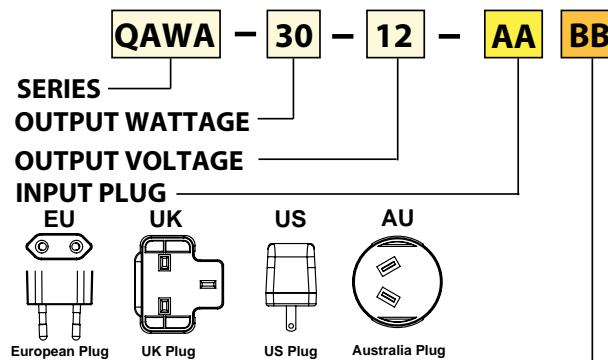
- Universal AC input/ Full Range
- Energy Efficiency Level V
- ErP Step 2 Compliant
- NRCan and GEMS Compliant
- Output Protections: OVP/SCP/OC
- No Load Power Consumption <0.3W
- 1 Year Warranty



| Model | QAWA-30-5 | QAWA-30-7.5 | QAWA-30-9 | QAWA-30-12 | QAWA-36-12 | QAWA-30-13.5 | QAWA-30-15 | QAWA-30-18 | QAWA-30-24 | QAWA-30-30 | QAWA-30-36 |
|--------------------------------------|--|-------------|-----------|------------|------------|--------------|------------|------------|------------|------------|------------|
| Output Characteristics | | | | | | | | | | | |
| DC Output | 5V | 7.5V | 9V | 12V | 12V | 13.5V | 15V | 18V | 24V | 30V | 36V |
| Rated Current | 5.0A | 4.0A | 3.33A | 2.5A | 3.0A | 2.22A | 2.0A | 1.66A | 1.25A | 1.0A | 0.84A |
| Ripple and Noise | ±2% Vo @ Rated Load | | | | | | | | | | |
| Load Regulation (Typ.) | ±5% | | | | | | | | | | |
| Transient Response (Typ.) | 0.5mS for 50% Load Change | | | | | | | | | | |
| Hold-up Time (Typ.) | 10mS @ Rated Load | | | | | | | | | | |
| Output Protection | Short Circuit, Over Voltage, Over Current | | | | | | | | | | |
| Ferrite Core | No | | | | | | | | | | |
| Input Characteristics | | | | | | | | | | | |
| Voltage Range | 100VAC-240VAC | | | | | | | | | | |
| Frequency Range | 50Hz-60Hz | | | | | | | | | | |
| Efficiency | Energy Star Level V, ErP Step 2, NRCan & GEMS Compliant | | | | | | | | | | |
| AC Current (max) | 0.9A | | | | | | | | | | |
| Input Protection | Internal Primary Current Fuse, Inrush Limiting | | | | | | | | | | |
| Leakage Current | 0.25mA | | | | | | | | | | |
| Environmental Characteristics | | | | | | | | | | | |
| Operating Temperature | 0°C-40°C | | | | | | | | | | |
| Operating Relative Humidity | 20% RH to 80% RH | | | | | | | | | | |
| Storage Temperature | -20°C-80°C, 10% RH to 90% RH | | | | | | | | | | |
| Topology | Switching Flyback | | | | | | | | | | |
| Dielectric Withstand | 3000VAC Primary-Secondary | | | | | | | | | | |
| EMI Conduction & Radiation | Compliance to EN55022 Class B | | | | | | | | | | |
| Harmonic Current | Compliance to EN61000-3-2, 3 | | | | | | | | | | |
| EMS Immunity | IEC61000-4-2, 3, 4, 5, 6, 8, 11 | | | | | | | | | | |
| Characteristics | | | | | | | | | | | |
| MTBF | 300,000Hrs (25°C, Telecordia SR-332) | | | | | | | | | | |
| Dimension (LxWxH) | 95x34x72mm (US), 95x34x92mm (EU), 95x50x84mm (UK), 95x41x80 (AU) | | | | | | | | | | |
| Weight | 190g | | | | | | | | | | |

Note: Safety Approvals
 EU: CB, GS, CE, LPS
 UK: CB, CE, LPS
 US: CB, UL, cUL, FCC, PSE, BSMI, LPS
 AU: CB, RCM, LPS

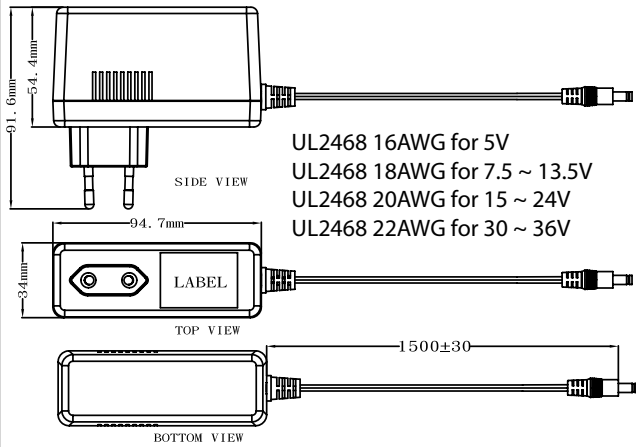
PART NUMBER SYSTEM



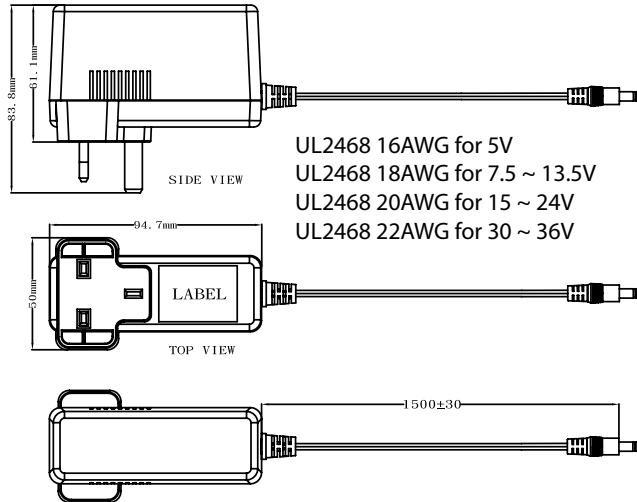
Please Reference Output Plug Type Page 49-50

MECHANICAL SPECIFICATIONS

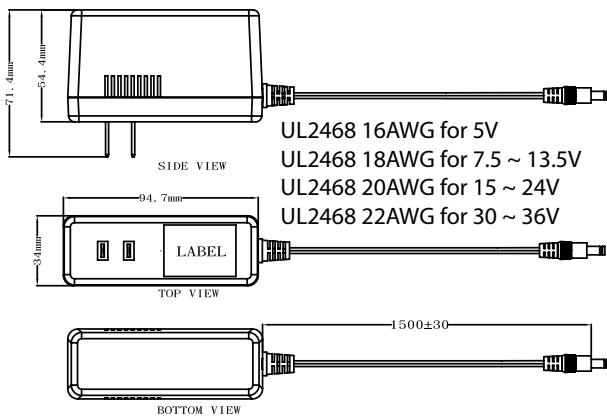
QAWA-30/36-XX-EU



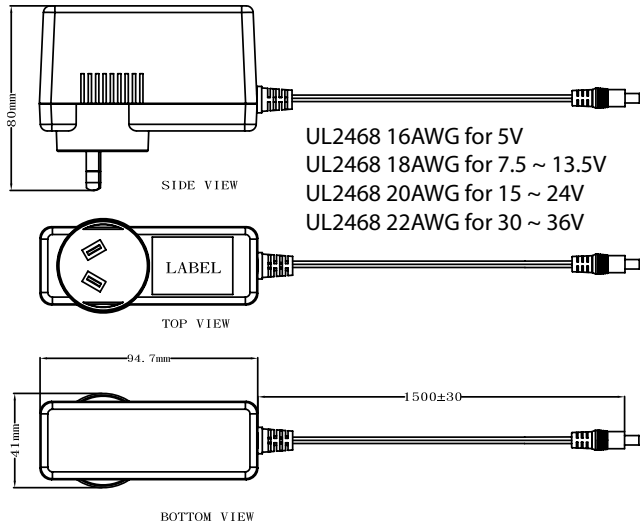
QAWA-30/36-XX-UK



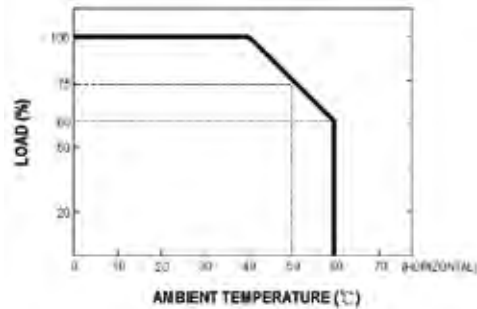
QAWA-30/36-XX-US



QAWA-30/36-XX-AU



DERATING CURVE



UNIT: mm



Features:

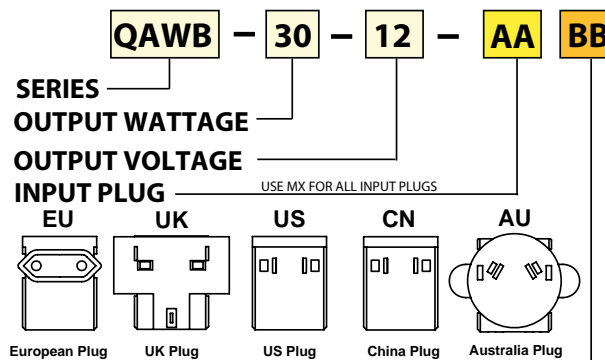
- Universal AC input/ Full Range
- Energy Efficiency Level V
- ErP Step 2 Compliant
- NRCAN and GEMS Compliant
- Output Protections: OVP/SCP/OC
- No Load Power Consumption <0.3W
- 1 Year Warranty



| Model | QAWB-30-5 | QAWB-30-7.5 | QAWB-30-9 | QAWB-30-12 | QAWB-30-12 | QAWB-30-13.5 | QAWB-30-15 | QAWB-30-18 | QAWB-30-24 | QAWB-30-30 | QAWB-30-36 |
|--------------------------------------|---|-------------|-----------|------------|------------|--------------|------------|------------|------------|------------|------------|
| Output Characteristics | | | | | | | | | | | |
| DC Output | 5V | 7.5V | 9V | 12V | 12V | 13.5V | 15V | 18V | 24V | 30V | 36V |
| Rated Current | 5.0A | 4.0A | 3.33A | 2.5A | 3.0A | 2.22A | 2.0A | 1.66A | 1.25A | 1.0A | 0.84A |
| Ripple and Noise | ±2% Vo @ Rated Load | | | | | | | | | | |
| Load Regulation (Typ.) | ±5% | | | | | | | | | | |
| Transient Response (Typ.) | 0.5mS for 50% Load Change | | | | | | | | | | |
| Hold-up Time (Typ.) | 10mS @ Rated Load | | | | | | | | | | |
| Output Protection | Short Circuit, Over Voltage, Over Current | | | | | | | | | | |
| Ferrite Core | No | | | | | | | | | | |
| Input Characteristics | | | | | | | | | | | |
| Voltage Range | 100VAC-240VAC | | | | | | | | | | |
| Frequency Range | 50Hz-60Hz | | | | | | | | | | |
| Efficiency | Energy Star Level V, ErP Step 2, NRCAN & GEMS Compliant | | | | | | | | | | |
| AC Current (max) | 0.9A | | | | | | | | | | |
| Input Protection | Internal Primary Current Fuse, Inrush Limiting | | | | | | | | | | |
| Leakage Current | 0.25mA | | | | | | | | | | |
| Environmental Characteristics | | | | | | | | | | | |
| Operating Temperature | 0°C-40°C | | | | | | | | | | |
| Operating Relative Humidity | 20% RH to 80% RH | | | | | | | | | | |
| Storage Temperature | -20°C-80°C, 10% RH to 90% RH | | | | | | | | | | |
| Topology | Switching Flyback | | | | | | | | | | |
| Dielectric Withstand | 3000VAC Primary-Secondary | | | | | | | | | | |
| EMI Conduction & Radiation | Compliance to EN55022 Class B | | | | | | | | | | |
| Harmonic Current | Compliance to EN61000-3-2, 3 | | | | | | | | | | |
| EMS Immunity | IEC61000-4-2, 3, 4, 5, 6, 8, 11 | | | | | | | | | | |
| Characteristics | | | | | | | | | | | |
| MTBF | 300,000Hrs (25°C, Telecordia SR-332) | | | | | | | | | | |
| Dimension (LxWxH) | 95x35x64mm | | | | | | | | | | |
| Weight | 190g | | | | | | | | | | |

Note: Safety Approvals
 EU: CB, GS, CE, LPS
 UK: CB, CE, LPS
 US: CB, UL, cUL, FCC, PSE, BSMI, LPS
 AU: CB, RCM, LPS
 CN: CB, CCC, LPS

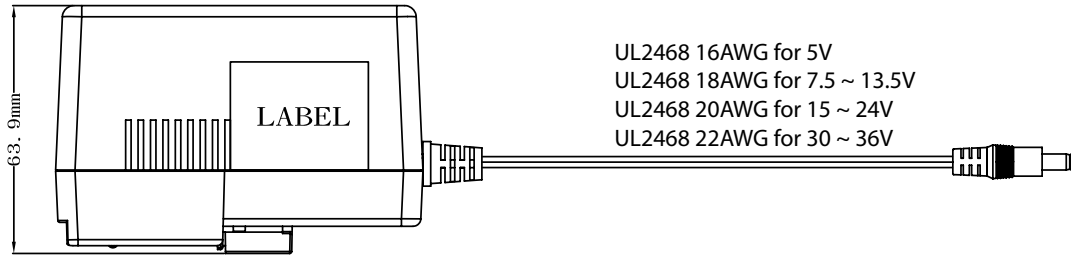
PART NUMBER SYSTEM



OUTPUT CONNECTOR

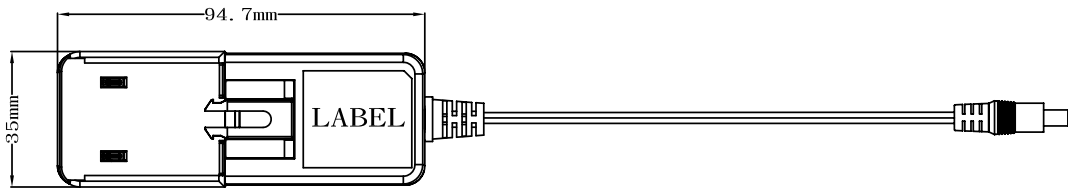
Please Reference Output Plug Type Page 49-50

MECHANICAL SPECIFICATIONS

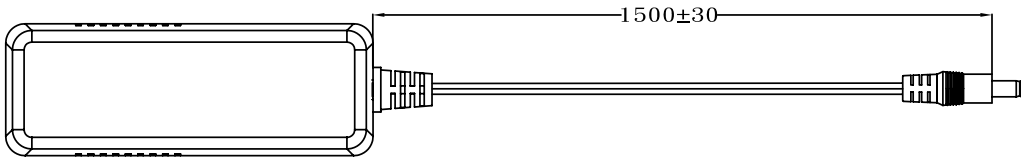


UL2468 16AWG for 5V
 UL2468 18AWG for 7.5 ~ 13.5V
 UL2468 20AWG for 15 ~ 24V
 UL2468 22AWG for 30 ~ 36V

SIDE VIEW

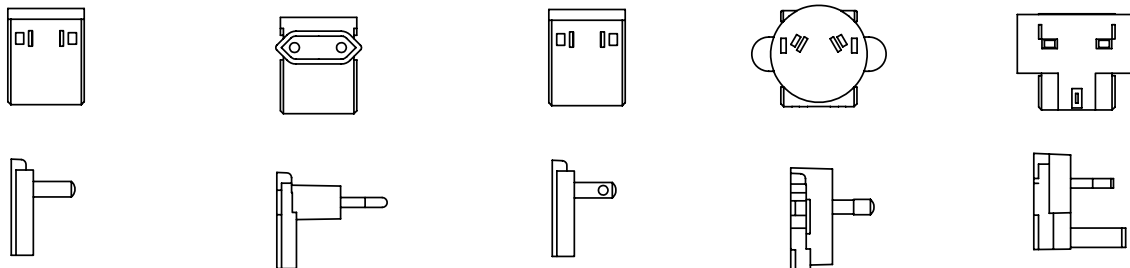


TOP VIEW

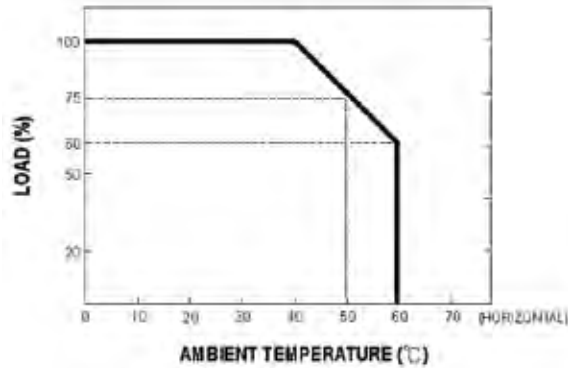


BOTTOM VIEW

CHANGEABLE PLUGS



DERATING CURVE



UNIT: mm

AC/DC Desktop Medical Power Supplies

- Output power: 30W - 160W
- Universal input
- 60601-1 Medical approved
- Level V efficiency
- Available with a range of input and output plugs





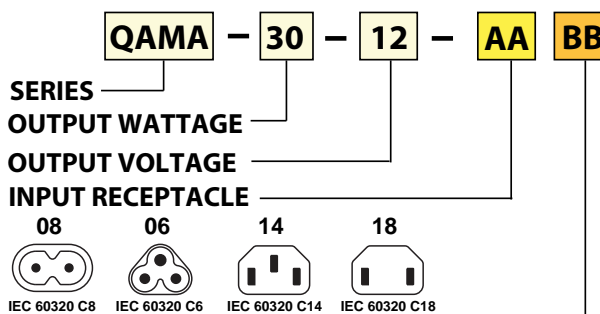
Features:

- Universal AC input/ Full Range
- Energy Efficiency Level V
- ErP Step 2 Compliant
- ANSI/AAMI/IEC/EN ES60601-1:2005 (60601 3rd Edition)
- Output Protections: OVP/SCP/OCP
- No Load Power Consumption <0.3W
- 1 Year Warranty



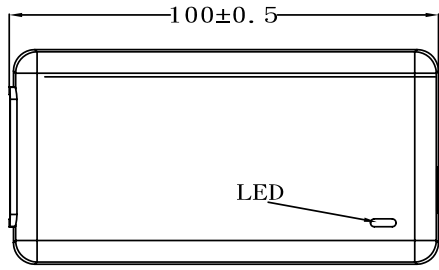
| Model | QAMA-30-5 | QAMA-30-7.5 | QAMA-30-9 | QAMA-30-12 | QAMA-30-15 | QAMA-30-18 | QAMA-30-24 |
|--------------------------------------|--|-------------|-----------|------------|------------|------------|------------|
| Output Characteristics | | | | | | | |
| DC Output | 5V | 7.5V | 9V | 12V | 15V | 18V | 24V |
| Rated Current | 4.00A | 4.00A | 3.34A | 2.50A | 2.00A | 1.67A | 1.25A |
| Ripple and Noise | ±2% Vo @ Rated Load | | | | | | |
| Load Regulation (Typ.) | ±5% | | | | | | |
| Transient Response (Typ.) | 0.5mS for 50% Load Change | | | | | | |
| Hold-up Time (Typ.) | 10mS @ Rated Load | | | | | | |
| Output Protection | Short Circuit, Over Voltage, Over Current | | | | | | |
| Ferrite Core | Yes | | | | | | |
| Input Characteristics | | | | | | | |
| Voltage Range | 100VAC-240VAC | | | | | | |
| Frequency Range | 50Hz-60Hz | | | | | | |
| Efficiency | Energy Star Level V, ErP Step 2 | | | | | | |
| AC Current (max) | 0.7A | | | | | | |
| Input Protection | Internal Primary Current Fuse, Inrush Limiting | | | | | | |
| Leakage Current | 0.25mA (2 Conductor), 0.5mA (3 Conductor) | | | | | | |
| Environmental Characteristics | | | | | | | |
| Operating Temperature | 0°C-40°C | | | | | | |
| Operating Relative Humidity | 20% RH to 80% RH | | | | | | |
| Storage Temperature | -20°C-80°C, 10% RH to 90% RH | | | | | | |
| Topology | Switching Flyback | | | | | | |
| Dielectric Withstand | 4000VAC Primary-Secondary | | | | | | |
| EMI Conduction & Radiation | Compliance to EN55011 Class B | | | | | | |
| Harmonic Current | Compliance to EN61000-3-2, 3 | | | | | | |
| EMS Immunity | EN60601-1-2 | | | | | | |
| Characteristics | | | | | | | |
| MTBF | 300,000Hrs (25°C, Telecordia SR-332) | | | | | | |
| Dimension (LxWxH) | 100x50x34mm | | | | | | |
| Weight | 210g | | | | | | |

PART NUMBER SYSTEM



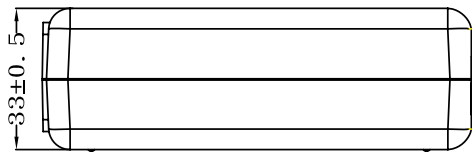
Please Reference Output Plug Type Page 49-50

MECHANICAL SPECIFICATIONS

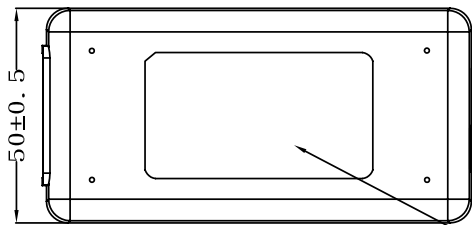
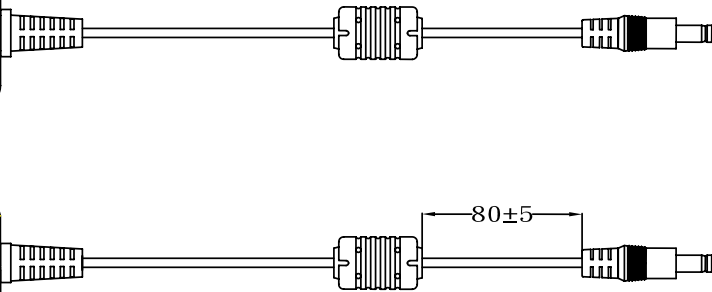


TOP VIEW

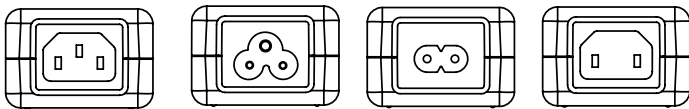
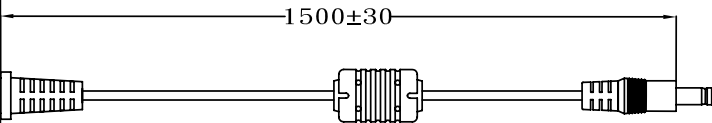
UL1185 16AWG for 5 ~ 7.5V
 UL1185 18AWG for 9 ~ 12V
 UL1185 20AWG for 15 ~ 24V



SIDE VIEW

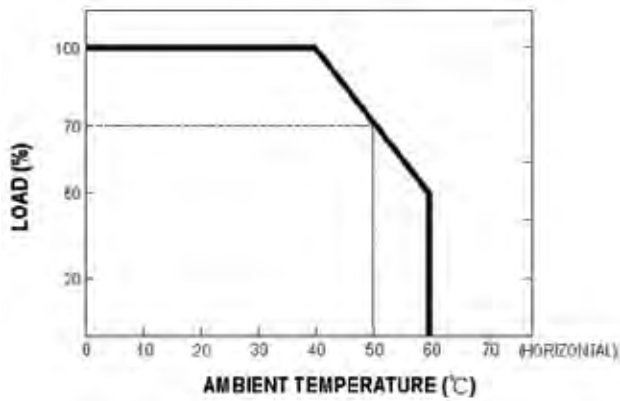


BOTTOM VIEW



FRONT-VIEW

DERATING CURVE



UNIT: mm



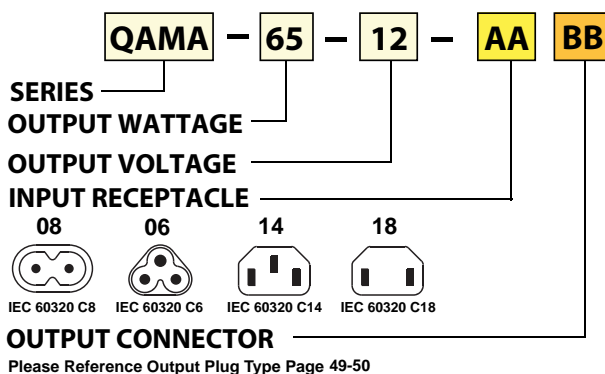
Features:

- Universal AC input/ Full Range
- Energy Efficiency Level V
- ErP Step 2 Compliant
- ANSI/AAMI/IEC/EN ES60601-1:2005 (60601 3rd Edition)
- Output Protections: OVP/SCP/OC
- No Load Power Consumption <0.5W
- 1 Year Warranty

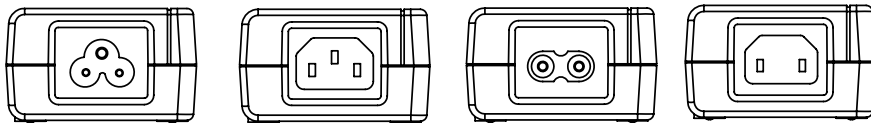
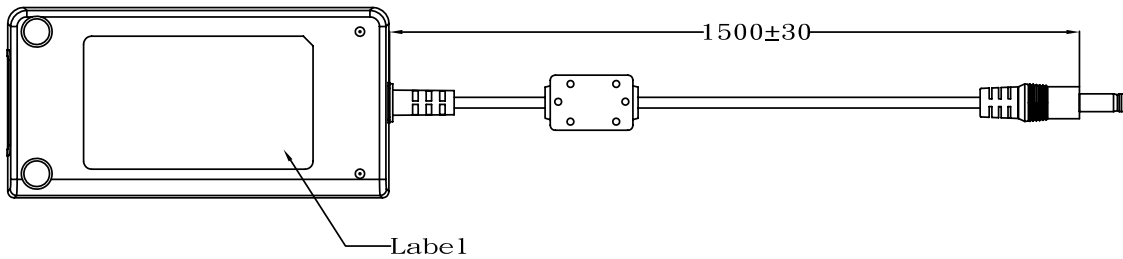
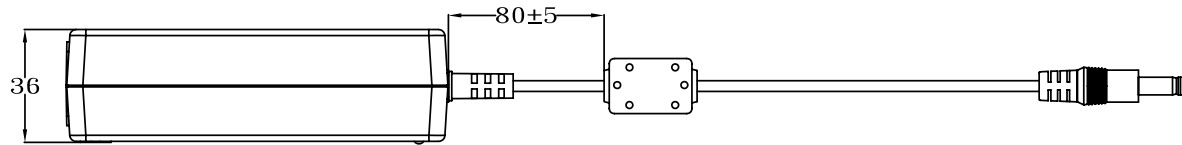
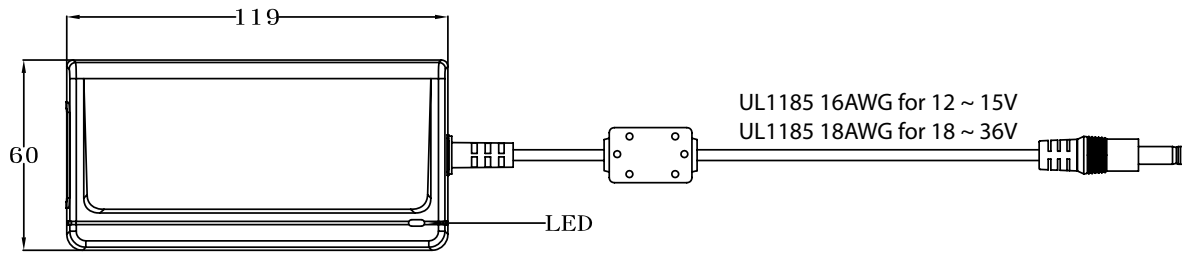


| Model | QAMA-65-12 | QAMA-65-15 | QAMA-65-18 | QAMA-65-19 | QAMA-65-24 | QAMA-65-36 |
|--------------------------------------|--|------------|------------|------------|------------|------------|
| Output Characteristics | | | | | | |
| DC Output | 12V | 15V | 18V | 19V | 24V | 36V |
| Rated Current | 5.0A | 4.34A | 3.62A | 3.43A | 2.71A | 1.81A |
| Ripple and Noise | ±2% Vo @ Rated Load | | | | | |
| Load Regulation (Typ.) | ±5% | | | | | |
| Transient Response (Typ.) | 0.5mS for 50% Load Change | | | | | |
| Hold-up Time (Typ.) | 10mS @ Rated Load | | | | | |
| Output Protection | Short Circuit, Over Voltage, Over Current | | | | | |
| Ferrite Core | Yes | | | | | |
| Input Characteristics | | | | | | |
| Voltage Range | 100VAC-240VAC | | | | | |
| Frequency Range | 50Hz-60Hz | | | | | |
| Efficiency | Energy Star Level V, ErP Step 2 | | | | | |
| AC Current (max) | 1.6A | | | | | |
| Input Protection | Internal Primary Current Fuse, Inrush Limiting | | | | | |
| Leakage Current | 0.25mA (2 Conductor), 0.5mA (3 Conductor) | | | | | |
| Environmental Characteristics | | | | | | |
| Operating Temperature | 0°C-40°C | | | | | |
| Operating Relative Humidity | 20% RH to 80% RH | | | | | |
| Storage Temperature | -20°C-80°C, 10% RH to 90% RH | | | | | |
| Topology | Switching Flyback | | | | | |
| Dielectric Withstand | 4000VAC Primary-Secondary | | | | | |
| EMI Conduction & Radiation | Compliance to EN55011 Class B | | | | | |
| Harmonic Current | Compliance to EN61000-3-2 | | | | | |
| EMS Immunity | EN60601-1-2 | | | | | |
| Characteristics | | | | | | |
| MTBF | 300,000Hrs (25°C, Telecordia SR-332) | | | | | |
| Dimension (LxWxH) | 119x60x36mm | | | | | |
| Weight | 350g | | | | | |

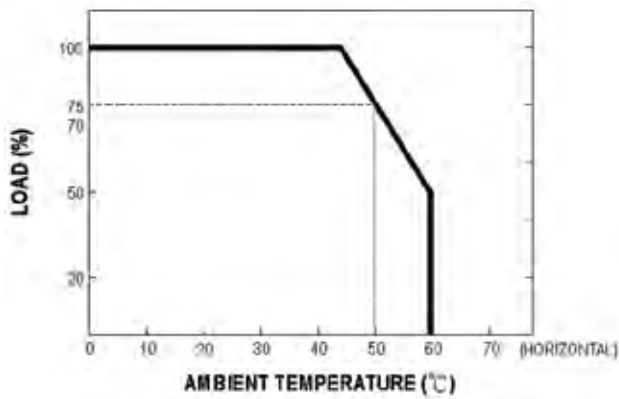
PART NUMBER SYSTEM



MECHANICAL SPECIFICATIONS



DERATING CURVE



UNIT: mm



Features:

- Universal AC input/ Full Range
- Energy Efficiency Level V
- ErP Step 2 Compliant
- ANSI/AAMI/IEC/EN ES60601-1:2005 (60601 3rd Edition)
- Output Protections: OVP/SCP/OC
- No Load Power Consumption <0.5W
- 2 Year Warranty

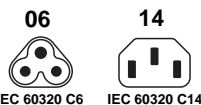


| Model | QAMA-90-12 | QAMA-90-15 | QAMA-90-19 | QAMA-90-24 | QAMA-90-36 | QAMA-90-48 |
|--------------------------------------|--|------------|------------|------------|------------|------------|
| Output Characteristics | | | | | | |
| DC Output | 12V | 15V | 19V | 24V | 36V | 48V |
| Rated Current | 7.5A | 6.00A | 4.74A | 3.75A | 2.50A | 1.88A |
| Ripple and Noise | ±2% Vo @ Rated Load | | | | | |
| Load Regulation (Typ.) | ±5% | | | | | |
| Transient Response (Typ.) | 0.5mS for 50% Load Change | | | | | |
| Hold-up Time (Typ.) | 10mS @ Rated Load | | | | | |
| Output Protection | Short Circuit, Over Voltage, Over Current | | | | | |
| Ferrite Core | Yes | | | | | |
| Input Characteristics | | | | | | |
| Voltage Range | 100VAC~240VAC | | | | | |
| Frequency Range | 50Hz-60Hz | | | | | |
| Efficiency | Energy Star Level V, ErP Step 2 | | | | | |
| AC Current (max) | 1.2A | | | | | |
| Input Protection | Internal Primary Current Fuse, Inrush Limiting | | | | | |
| Leakage Current | 0.5mA | | | | | |
| Environmental Characteristics | | | | | | |
| Operating Temperature | 0°C-40°C | | | | | |
| Operating Relative Humidity | 20% RH to 80% RH | | | | | |
| Storage Temperature | -20°C-80°C, 10% RH to 90% RH | | | | | |
| Topology | Switching Flyback | | | | | |
| Dielectric Withstand | 4000VAC Primary-Secondary | | | | | |
| EMI Conduction & Radiation | Compliance to EN55011 Class B | | | | | |
| Harmonic Current | Compliance to EN61000-3-2,3 | | | | | |
| EMS Immunity | IEC60601-1-2 | | | | | |
| Characteristics | | | | | | |
| MTBF | 300,000Hrs (25°C, Telecordia SR-332) | | | | | |
| Dimension (LxWxH) | 168x66x39mm | | | | | |
| Weight | 600g | | | | | |

PART NUMBER SYSTEM

QAMA - 90 - 12 - AA BB

SERIES
OUTPUT WATTAGE
OUTPUT VOLTAGE
INPUT RECEPTACLE

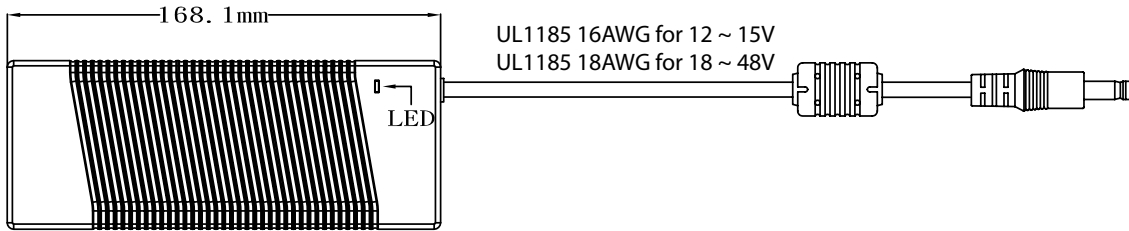


IEC 60320 C6 IEC 60320 C14

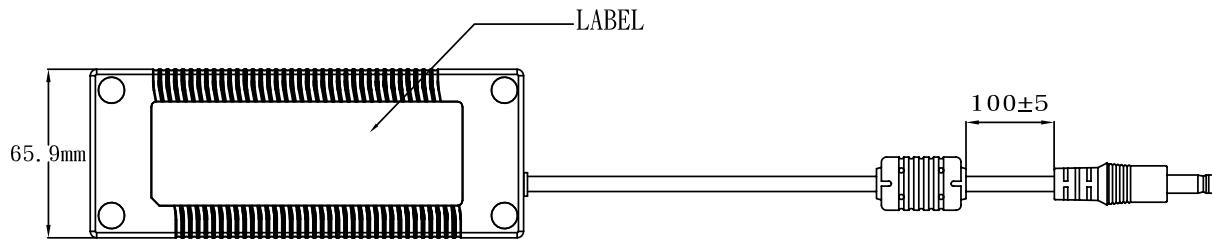
OUTPUT CONNECTOR

Please Reference Output Plug Type Page 49-50

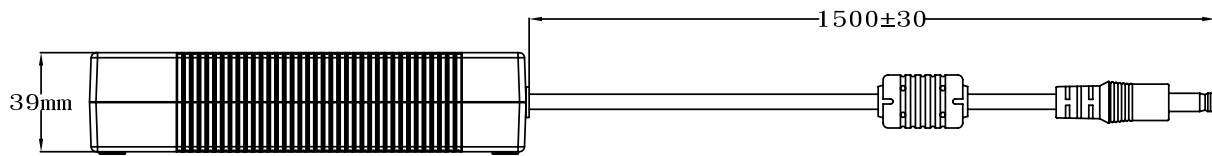
MECHANICAL SPECIFICATIONS



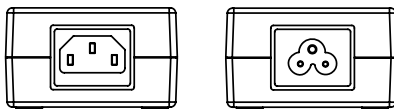
TOP-VIEW



BOTTOM-VIEW

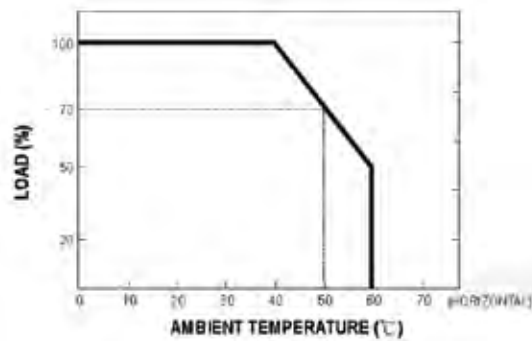


SIDE-VIEW



FRONT-VIEW

DERATING CURVE





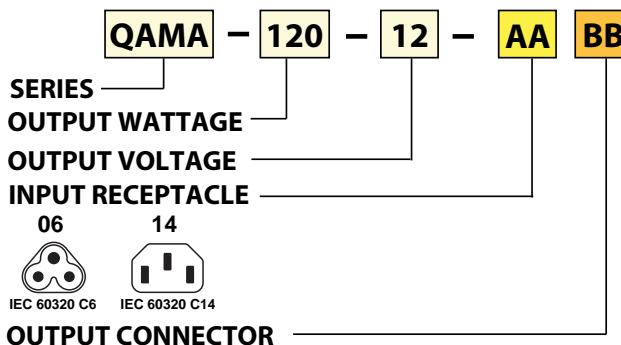
Features:

- Universal AC input/ Full Range
- Energy Efficiency Level V
- ErP Step 2 Compliant
- ANSI/AAMI/IEC/EN ES60601-1:2005 (60601 3rd Edition)
- Output Protections: OVP/SCP/OCP/OTP
- No Load Power Consumption <0.5W
- 2 Year Warranty



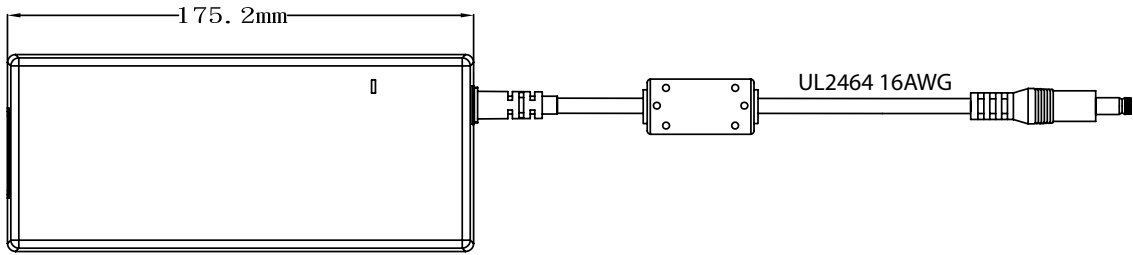
| Model | QAMA-120-12 | QAMA-120-15 | QAMA-120-19 | QAMA-120-24 | QAMA-120-36 | QAMA-120-48 |
|--------------------------------------|--|-------------|-------------|-------------|-------------|-------------|
| Output Characteristics | | | | | | |
| DC Output | 12V | 15V | 19V | 24V | 36V | 48V |
| Rated Current | 10.00A | 8.00A | 6.32A | 5.00A | 3.34A | 2.50A |
| Ripple and Noise | ±2% Vo @ Rated Load | | | | | |
| Load Regulation (Typ.) | ±5% | | | | | |
| Transient Response (Typ.) | 0.5mS for 50% Load Change | | | | | |
| Hold-up Time (Typ.) | 10mS @ Rated Load | | | | | |
| Output Protection | Short Circuit, Over Voltage, Over Current, Over Temp | | | | | |
| Ferrite Core | Yes | | | | | |
| Input Characteristics | | | | | | |
| Voltage Range | 100VAC-240VAC | | | | | |
| Frequency Range | 50Hz-60Hz | | | | | |
| Efficiency | Energy Star Level V, ErP Step 2 | | | | | |
| AC Current (max) | 1.4A | | | | | |
| Input Protection | Internal Primary Current Fuse, Inrush Limiting | | | | | |
| Leakage Current | 0.5mA | | | | | |
| Environmental Characteristics | | | | | | |
| Operating Temperature | 0°C-40°C | | | | | |
| Operating Relative Humidity | 20% RH to 80% RH | | | | | |
| Storage Temperature | -20°C-80°C, 10% RH to 90% RH | | | | | |
| Topology | LLC | | | | | |
| Dielectric Withstand | 4000VAC Primary-Secondary | | | | | |
| EMI Conduction & Radiation | Compliance to EN55011 Class B | | | | | |
| Harmonic Current | Compliance to EN61000-3-2 | | | | | |
| EMS Immunity | IEC60601-1-2 | | | | | |
| Characteristics | | | | | | |
| MTBF | 300,000Hrs (25°C, Telecordia SR-332) | | | | | |
| Dimension (LxWxH) | 175x74x42mm | | | | | |
| Weight | 660g | | | | | |

PART NUMBER SYSTEM

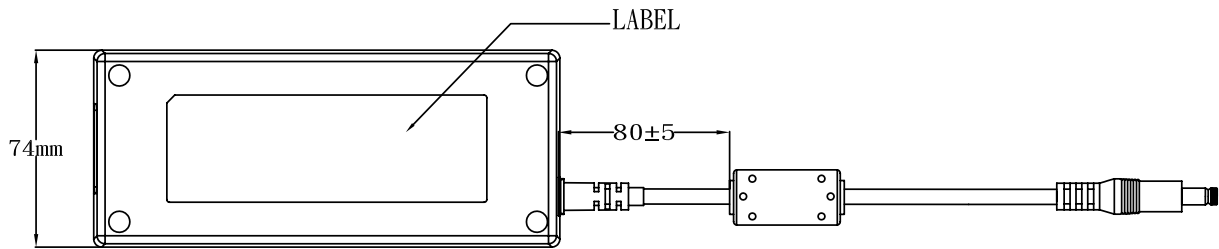


Please Reference Output Plug Type Page 49-50

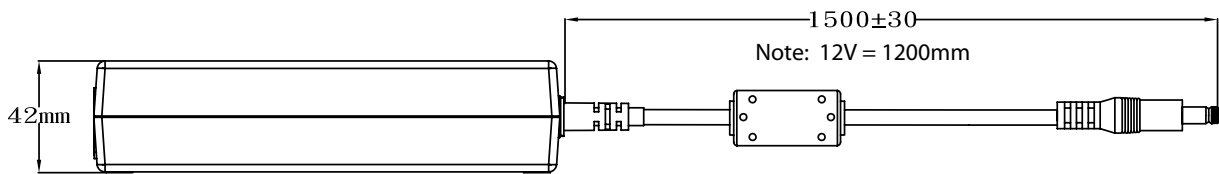
MECHANICAL SPECIFICATIONS



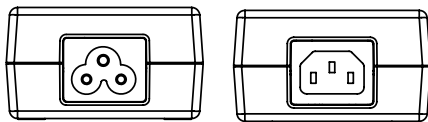
TOP-VIEW



BOTTOM-VIEW

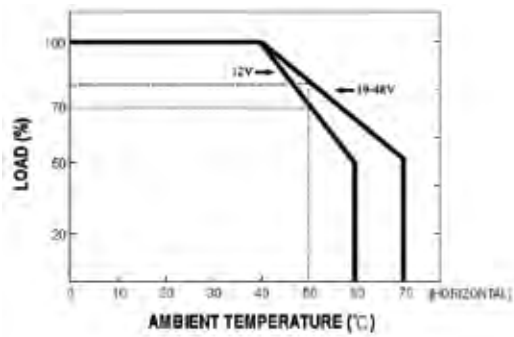


SIDE-VIEW



FRONT-VIEW

DERATING CURVE



UNIT: mm



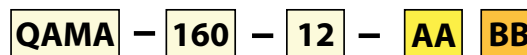
Features:

- Universal AC input/ Full Range
- Energy Efficiency Level V
- ErP Step 2 Compliant
- ANSI/AAMI/IEC/EN ES60601-1:2005 (60601 3rd Edition)
- Output Protections: OVP/SCP/OCP/OTP
- No Load Power Consumption <0.5W
- 2 Year Warranty

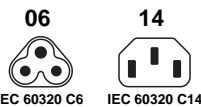


| Model | QAMA-160-12 | QAMA-160-19 | QAMA-160-24 | QAMA-160-48 |
|--------------------------------------|--|-------------|-------------|-------------|
| Output Characteristics | | | | |
| DC Output | 12V | 19V | 24V | 48V |
| Rated Current | 12.50A | 8.40A | 6.60A | 3.30A |
| Ripple and Noise | ±2% Vo @ Rated Load | | | |
| Load Regulation (Typ.) | ±5% | | | |
| Transient Response (Typ.) | 0.5mS for 50% Load Change | | | |
| Hold-up Time (Typ.) | 10mS @ Rated Load | | | |
| Output Protection | Short Circuit, Over Voltage, Over Current, Over Temp | | | |
| Ferrite Core | No | | | |
| Input Characteristics | | | | |
| Voltage Range | 100VAC-240VAC | | | |
| Frequency Range | 50Hz-60Hz | | | |
| Efficiency | Energy Star Level V, ErP Step 2 | | | |
| AC Current (max) | 1.8A | | | |
| Input Protection | Internal Primary Current Fuse | | | |
| Leakage Current | 0.5mA | | | |
| Environmental Characteristics | | | | |
| Operating Temperature | 0°C-40°C | | | |
| Operating Relative Humidity | 20% RH to 80% RH | | | |
| Storage Temperature | -20°C-80°C, 10% RH to 90% RH | | | |
| Topology | LLC | | | |
| Dielectric Withstand | 4000VAC Primary-Secondary | | | |
| EMI Conduction & Radiation | Compliance to EN55011 Class B | | | |
| Harmonic Current | Compliance to EN61000-3-2 | | | |
| EMS Immunity | IEC60601-1-2 | | | |
| Characteristics | | | | |
| MTBF | 300,000Hrs (25°C, Telecordia SR-332) | | | |
| Dimension (LxWxH) | 183x81x42mm | | | |
| Weight | 680g | | | |

PART NUMBER SYSTEM



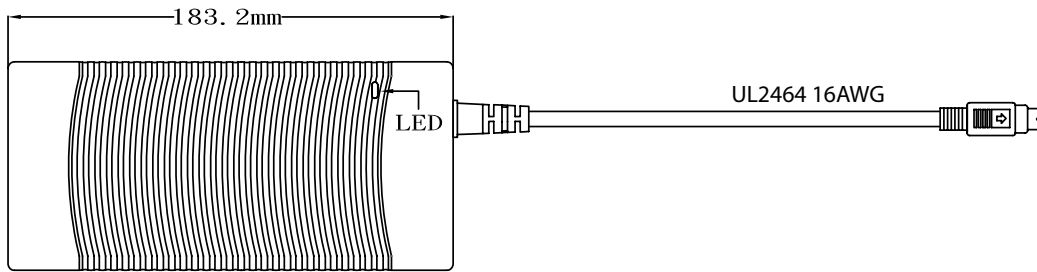
SERIES
 OUTPUT WATTAGE
 OUTPUT VOLTAGE
 INPUT RECEPTACLE



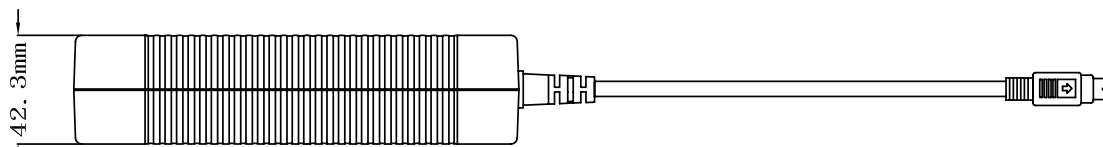
OUTPUT CONNECTOR

Please Reference Output Plug Type Page 49-50

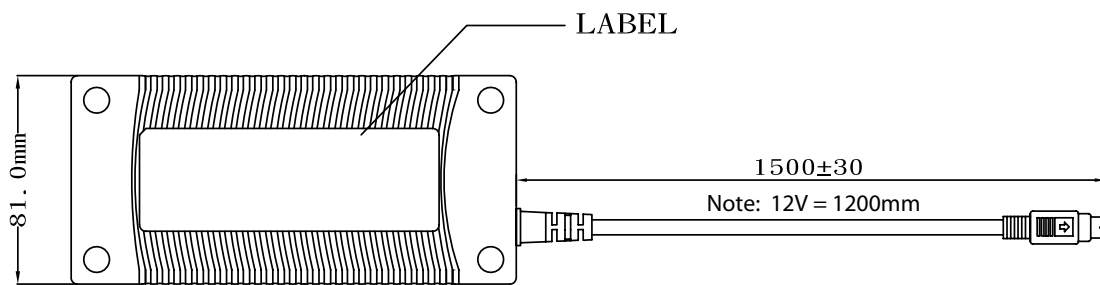
MECHANICAL SPECIFICATIONS



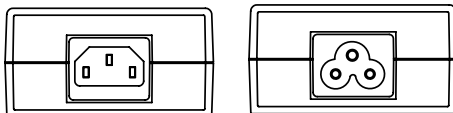
TOP-VIEW



SIDE-VIEW

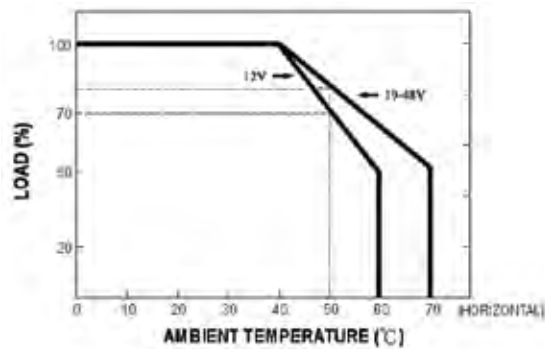


BOTTOM-VIEW



FRONT-VIEW

DERATING CURVE



UNIT: mm

PRODUCT PROFILE

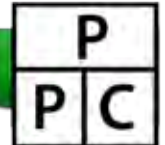


FAN-S DIVISION

AC & DC Fans and Accessories

Low cost, high tech AC & DC axial fans with sizes ranging from 25mm - 280 mm, DC voltages from 3.3VDC - 60VDC and AC voltages from 115VAC - 230VAC and many special features such as IP55, IP56M, and IP67 rated, GR487 salt fog rated, speed sensors, alarm functions and much more upon request. Each fan is offered with a variety of bearing types : 2-ball, 1-ball 1-sleeve, sleeve only, and our newly developed hydro dynamic bearing with better performance than sleeve and lower cost than 2 ball bearings. Every fan is available with a wide range of speeds from ultra low to super high speed.

Our fan accessories are famous worldwide and consist of wire form and plastic guards, plastic air filters, aluminum and stainless steel air filters, fan cords, and our patented noise reduction vibration sleeves.



PRIMARY POWER COMPONENTS DIVISION

AC Receptacles

A complete line of inlets, outlets, multifunction modules with major international approval marks thus assuring high safety standards and help customers comply with international regulations. Modern production methods enable us to manufacture cost-effective and reliable components. A full range of products are maintained in inventory for quick on-time deliveries. Custom designs are available upon request.

Circuit Breakers

QLB and QMB series are compact and cost effective thermal circuit breakers with a wide range of amp ratings from 3A - 40A and offered in single pole and push-to-reset with safety agency certifications. We offer a large variety of bushing types, terminals, name plates, button colors and printing with custom configurations available.

EMI Filters

EMI/RFI power line filters are designed to meet most international safety agency requirements. These filters help customers meet FCC and VDE emission standards. Our line consists of many standard configurations such as block type, filter with power line connector, and various filters with multifunctional modules. Custom designs are available upon request.

Power Cords

A large selection of North American and International Power Cords that have been designed to comply with North American and international safety agency regulations to insure safe and reliable products. Offered in a wide selection of plugs and connectors available in various cable insulations, voltage ratings, colors, lengths, shielding and a full range of hospital grade certified power cords. Custom configurations and strain reliefs are available upon request.

Power Supplies

A full range of low cost, high reliability and energy saving switch mode AC/DC power supplies consisting of enclosed, open frame, din rail, wall mount, desktop, medical approved, and waterproof LED drivers; our enclosed versions are rated from 15W - 800W, open frame from 20W - 125W, desktop and wall mount from 5W - 200W, and LED drivers with constant current 25W - 200W and constant voltage 25W - 300W. All models have universal voltage input and a variety of output voltages ranging from 3.3V - 445V and some models include power factor correction to increase efficiency and reduce power losses. All of our power supplies meet or exceed the RoHS EU and the Chinese directives and are certified with worldwide safety agencies to ensure a safe and reliable product.



WIRE MANAGEMENT, CABLE ASSEMBLIES & INTERCONNECT DIVISION

Cable Assemblies

We offer a wide selection of standard and custom cable assemblies, specializing in DVI, HDMI, USB and Fiber Optic and also producing flat ribbon cables, monitor cables, networking cables and an extensive offering of custom cable assemblies and wire harnesses.

Cable Ties & Accessories

Our low cost, high reliability cable nylon ties are available in a variety of styles including miniature, intermediate, standard and heavy duty. Specialty cable ties include releasable pawl type, stainless steel ball lock, head mount, push mount, marker ties, double loop, beaded and 4-way cable tie mounts. Cable ties are available in various material types including ultraviolet, heat stabilized, fire retardant and also are available in a range of colors. Custom designs and colors available upon request.

Heat Shrink Products

Heat shrinkable products include thin wall, medium and heavy wall, adhesive lined, medium and high voltage insulation, molded parts and end caps, cold shrink, wide range of shrink tubing kits and heat shrinkable cable and wire identification tubing.



INTERNATIONAL PROCUREMENT SERVICES DIVISION

Procurement Services

With over 30 years of global business experience, Qualtek's IPS division provides a complete range of services from component sourcing to complete turnkey projects. With our extensive knowledge of the major global manufacturing regions, this enables us to have access to the newest technology, highest quality, and the most cost effective production methods.

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