

# Qualtek

Electronics Corporation

P	
P	C

Division

## Power Supplies

- AC/DC Switch Mode
- AC/DC Adapters



[www.Qualtekusa.com](http://www.Qualtekusa.com)





## 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
<b>AC/DC Enclosed Frame Power Supply Overview</b>					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
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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					
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AC/DC Desktop Power Supplies					
Series	Output Power	Output Voltage VDC	Description	Dimensions	Page
<b>AC/DC Desktop Power Supplies Overview</b>					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:

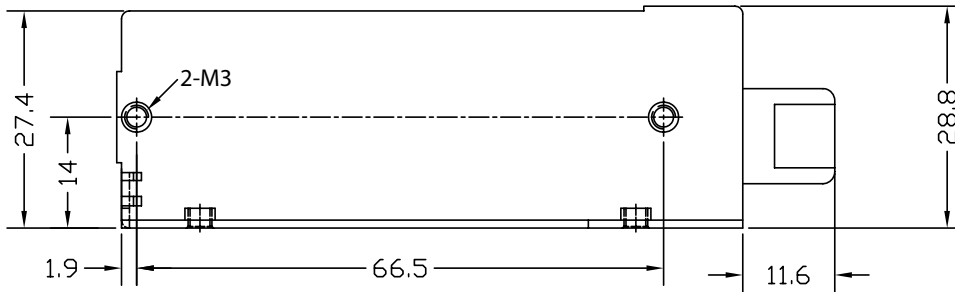
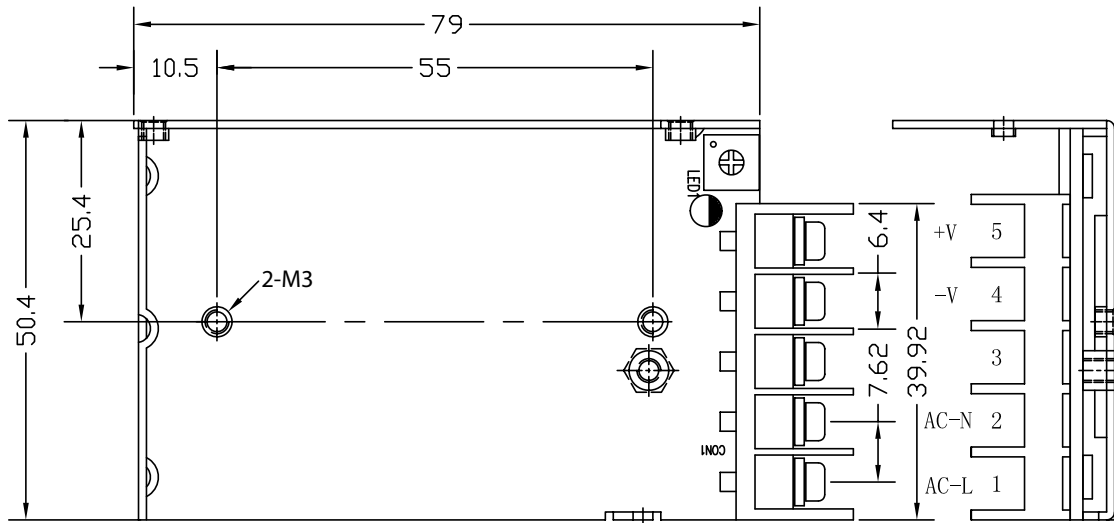
- Universal AC input/ Full range
- No Load Power Consumption <0.5W
- High Efficiency, and High Reliability
- Output Protections: OLP/OVP/SCP
- Wide operating ambient temperature (-25°C~70°C)
- All using 105°C long life electrolytic capacitors.
- 100% full load burn-in test
- PCB soldering side with conformal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



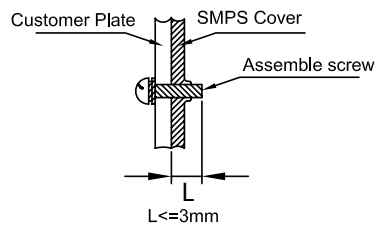
Model	QPD-15-3.3	QPD-15-5	QPD-15-12	QPD-15-15	QPD-15-24	
<b>Output Characteristics</b>						
DC Output	3.3V	5V	12V	15V	24V	
Rated Current	4A	3A	1.3A	1A	0.7A	
Current Range	0~4A	0~3A	0~1.3A	0~1.0A	0~0.7A	
Ripple and Noise	50mV	50mV	120mV	120mV	120mV	
Voltage ADJ. Range	3.0V~3.6V	4.4V~5.5V	10.0V~13.0V	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%					
<b>Input Characteristics</b>						
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					
<b>Protection</b>						
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					
<b>Environmental Characteristics</b>						
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					
<b>General Characteristics</b>						
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					



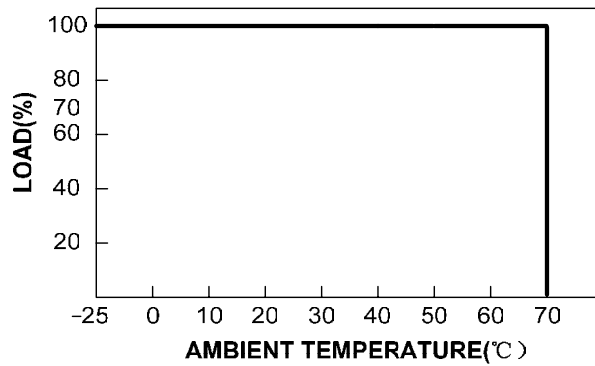
MECHANICAL SPECIFICATIONS



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:

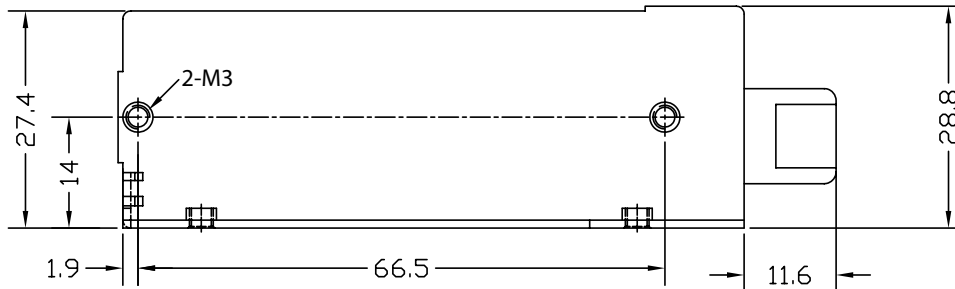
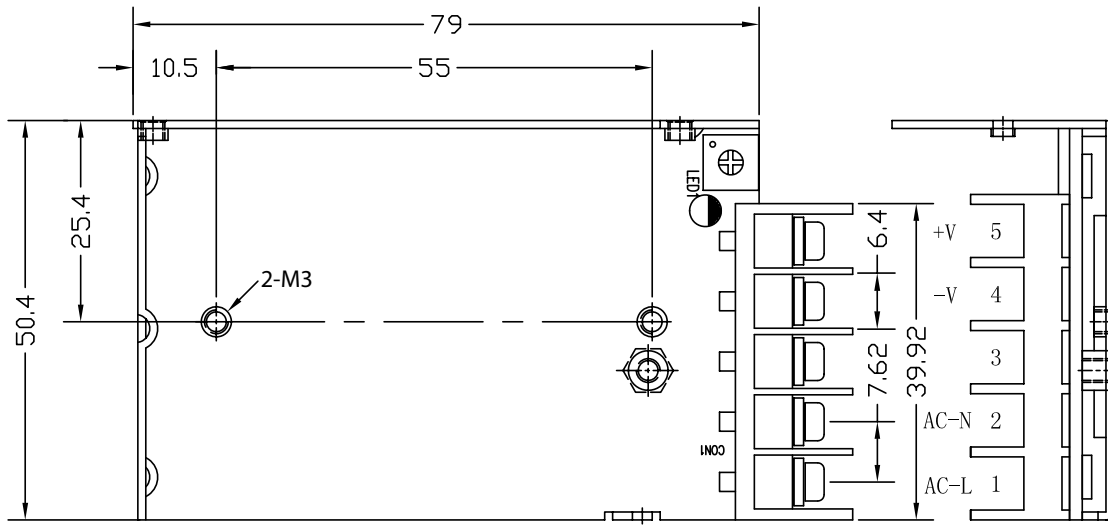
- Universal AC input/ Full range
- No Load Power Consumption <0.5W
- Wide Operating Ambient Temperature (-25°C~70°C)
- High Efficiency, and High Reliability
- Output Protections: OLP/OVP/SCP
- All using 105°C long life electrolytic capacitors.
- 100% full load burn-in test
- PCB soldering side with conformal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



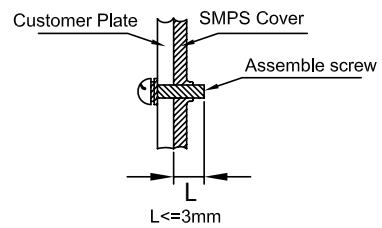
Model	QPD-25-3.3	QPD-25-5	QPD-25-12	QPD-25-15	QPD-25-24	
<b>Output Characteristics</b>						
DC Output	3.3V	5V	12V	15V	24V	
Rated Current	5A	5A	2.1A	1.6A	1.1A	
Current Range	0~5A	0~5A	0~2.1A	0~1.6A	0~1.1A	
Ripple and Noise (-20°C~70°C)	<50mV	<50mV	<120mV	<120mV	<120mV	
Voltage ADJ. Range	3.0V~3.6V	4.4V~5.5V	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%					
<b>Input Characteristics</b>						
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					
<b>Protection</b>						
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					
<b>Environmental Characteristics</b>						
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					
<b>General Characteristics</b>						
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					



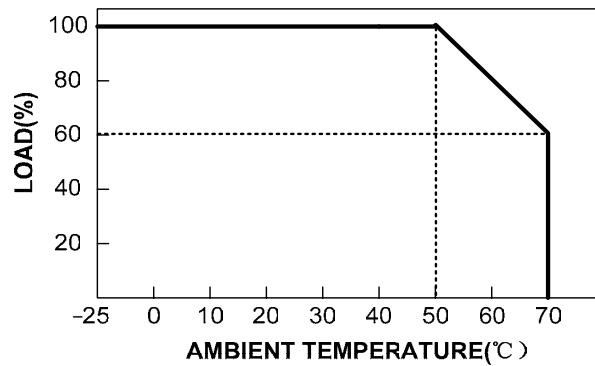
MECHANICAL SPECIFICATIONS



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:

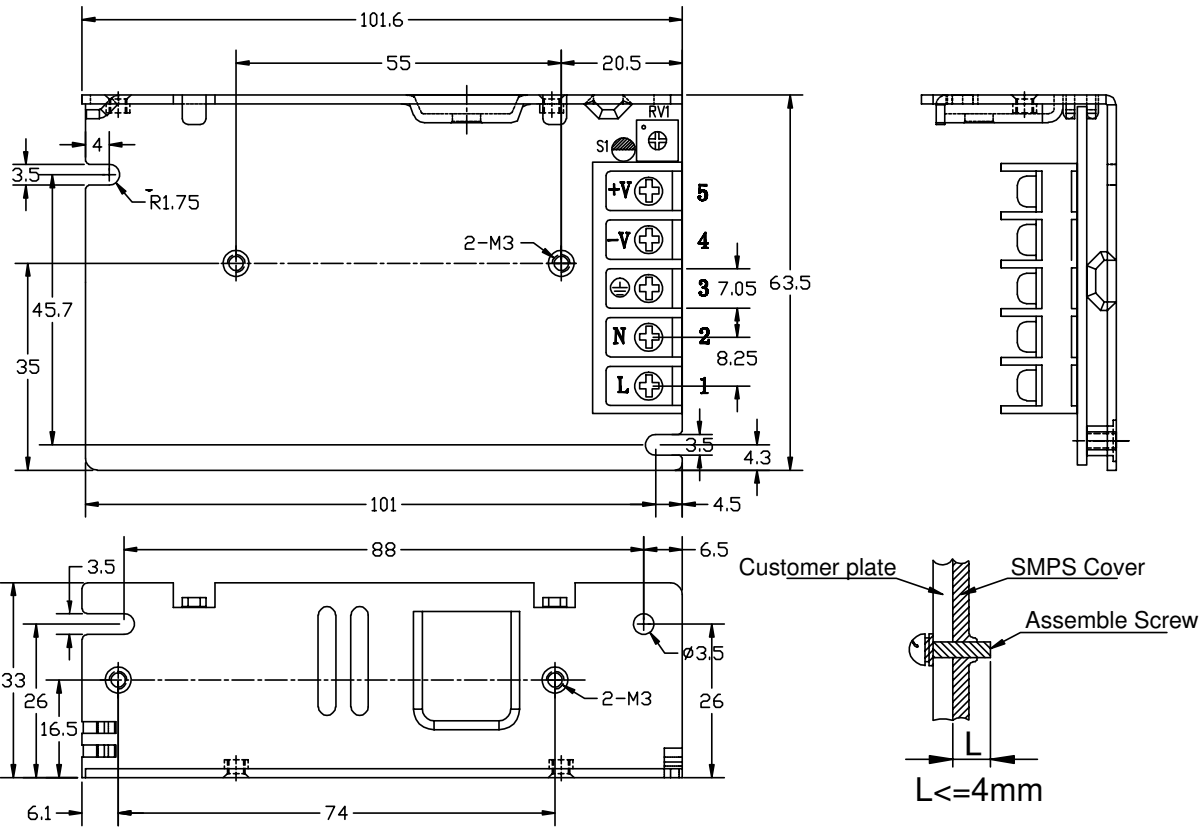
- Universal AC input/ Full range
- No Load Power Consumption <0.5W
- Wide Operating Ambient Temperature (-25°C~70°C)
- Operating Altitude up to 5000M
- High Efficiency, and High Reliability
- Output Protections: OLP/OVP/SCP
- All using 105°C long life electrolytic capacitors.
- 100% full load burn-in 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	
<b>Output Characteristics</b>						
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	120mV	180mV
	-25~0°C	80mV	180mV	200mV	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%					
<b>Input Characteristics</b>						
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					
<b>Protection</b>						
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					
<b>Environmental Characteristics</b>						
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					
<b>General Characteristics</b>						
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					

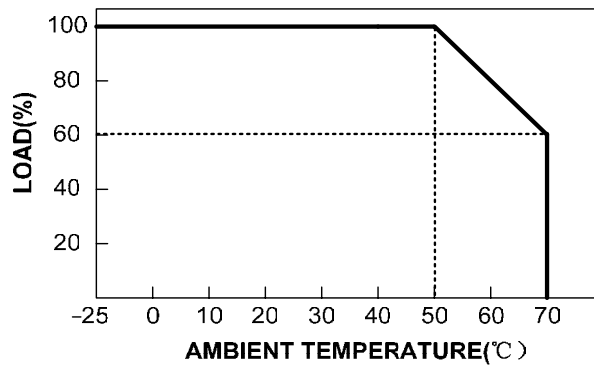


MECHANICAL SPECIFICATIONS



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:

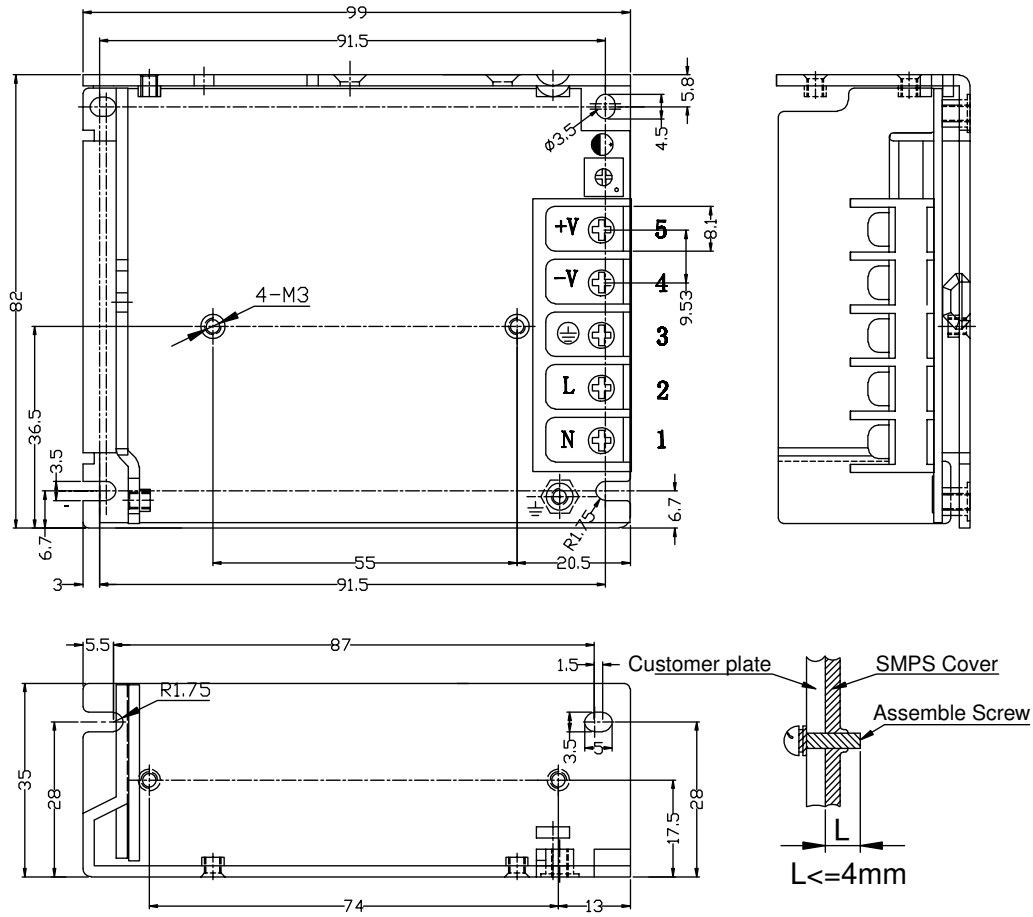
- Universal AC input/ Full range
- No Load Power Consumption <0.5W
- Wide Operating Ambient Temperature (-25°C~70°C)
- Operating Altitude up to 5000M
- High Efficiency, and High Reliability
- Output Protections: OLP/OVP/SCP
- All using 105°C long life electrolytic capacitors.
- 100% full load burn-in 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	
<b>Output Characteristics</b>						
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%					
<b>Input Characteristics</b>						
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					
<b>Protection</b>						
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					
<b>Environmental Characteristics</b>						
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					
<b>General Characteristics</b>						
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					

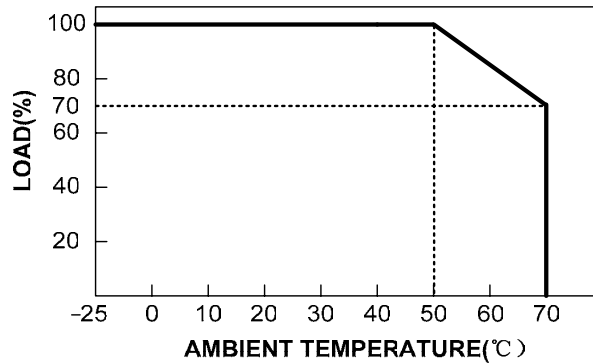


MECHANICAL SPECIFICATIONS



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

DERATING CURVE



UNIT: mm



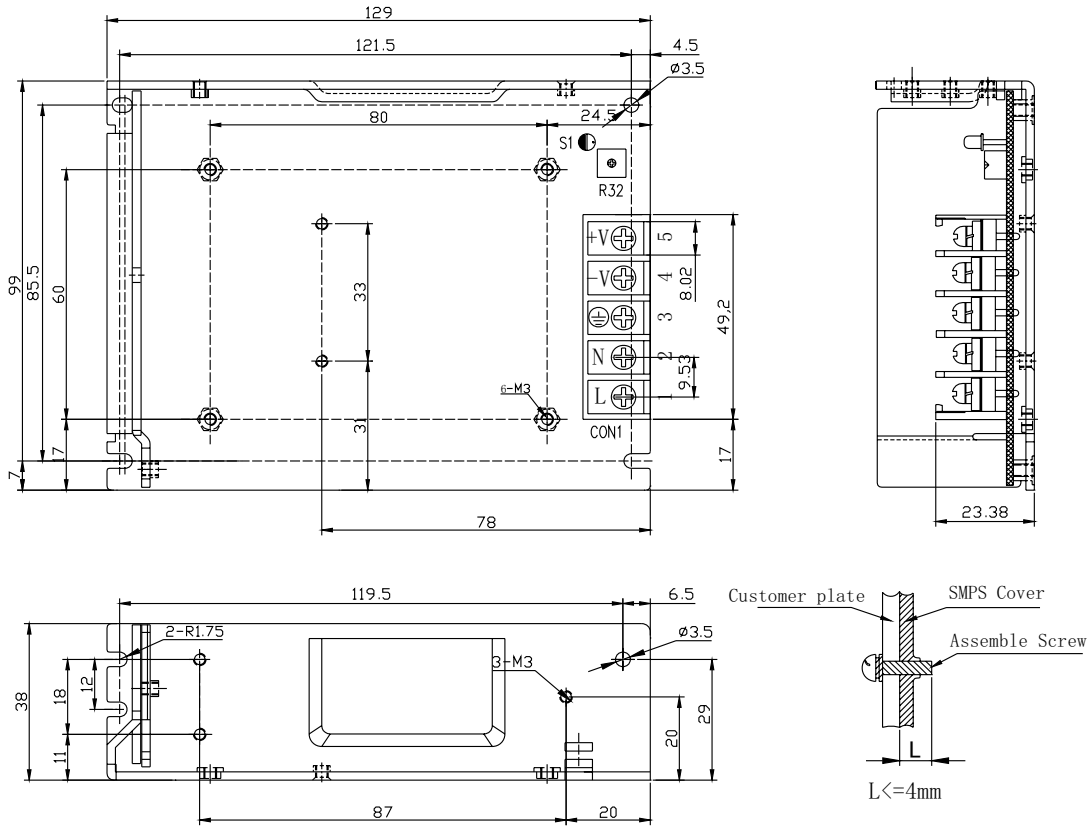
### Features:

- 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



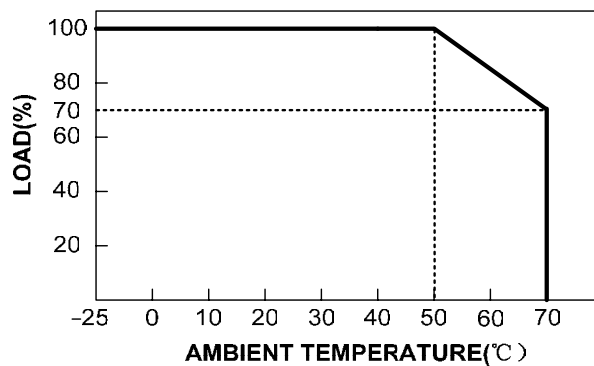
Model	QPD-75-5	QPD-75-12	QPD-75-15	QPD-75-24	QPD-75-48	
<b>Output Characteristics</b>						
DC Output	5V	12V	15V	24V	48V	
Rated Current	12A	6A	5A	3.2A	1.62A	
Current Range	0~12A	0~6A	0~5A	0~3.2A	0~1.62A	
Ripple and Noise (-25~70°C)	80mV	120mV	150mV	200mV	200mV	
Voltage ADJ. Range	±10% of rated output 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%					
<b>Input Characteristics</b>						
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)	<2.5A					
Inrush Current (Typical)	<20A@115VAC Cold start <40A@230VAC Cold start					
Leakage Current	Input-Output: <0.25mA Input-PG: <0.75mA					
<b>Protection</b>						
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					
<b>Environmental Characteristics</b>						
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					
<b>General Characteristics</b>						
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:

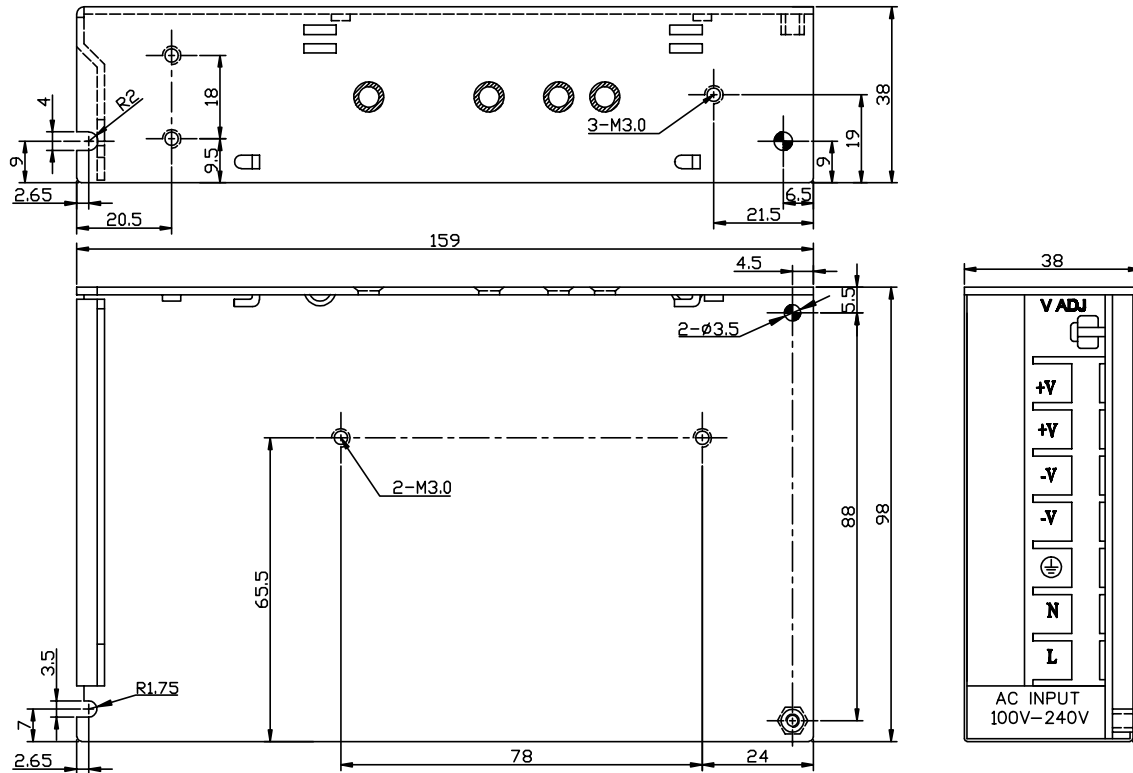
- Universal AC input/ Full range
- Wide Operating Ambient Temperature (-20°C~70°C)
- High Efficiency, and High Reliability
- Output Protections: OLP/OVP/SCP
- All using 105°C long life electrolytic capacitors.
- 100% full load burn-in test



Model	QPD-100-5	QPD-100-12	QPD-100-15	QPD-100-24	QPD-100-48	
<b>Output Characteristics</b>						
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%					
<b>Input Characteristics</b>						
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					
<b>Protection</b>						
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					
<b>Environmental Characteristics</b>						
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					
<b>General Characteristics</b>						
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					

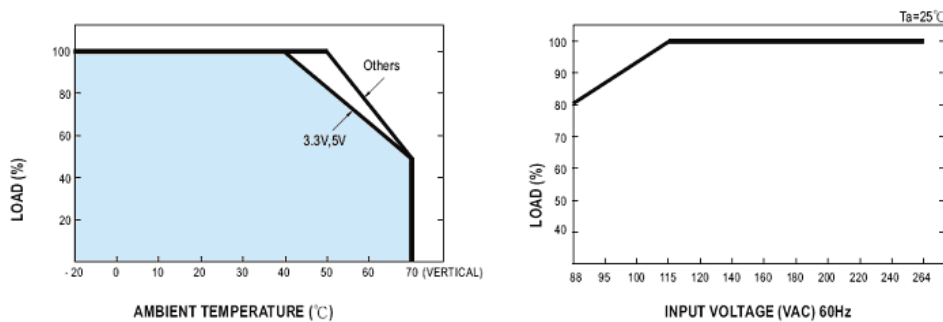


MECHANICAL SPECIFICATIONS



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	
<b>Output Characteristics</b>						
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%					
<b>Input Characteristics</b>						
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					
<b>Protection</b>						
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					
<b>Environmental Characteristics</b>						
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					
<b>General Characteristics</b>						
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					





### Features:

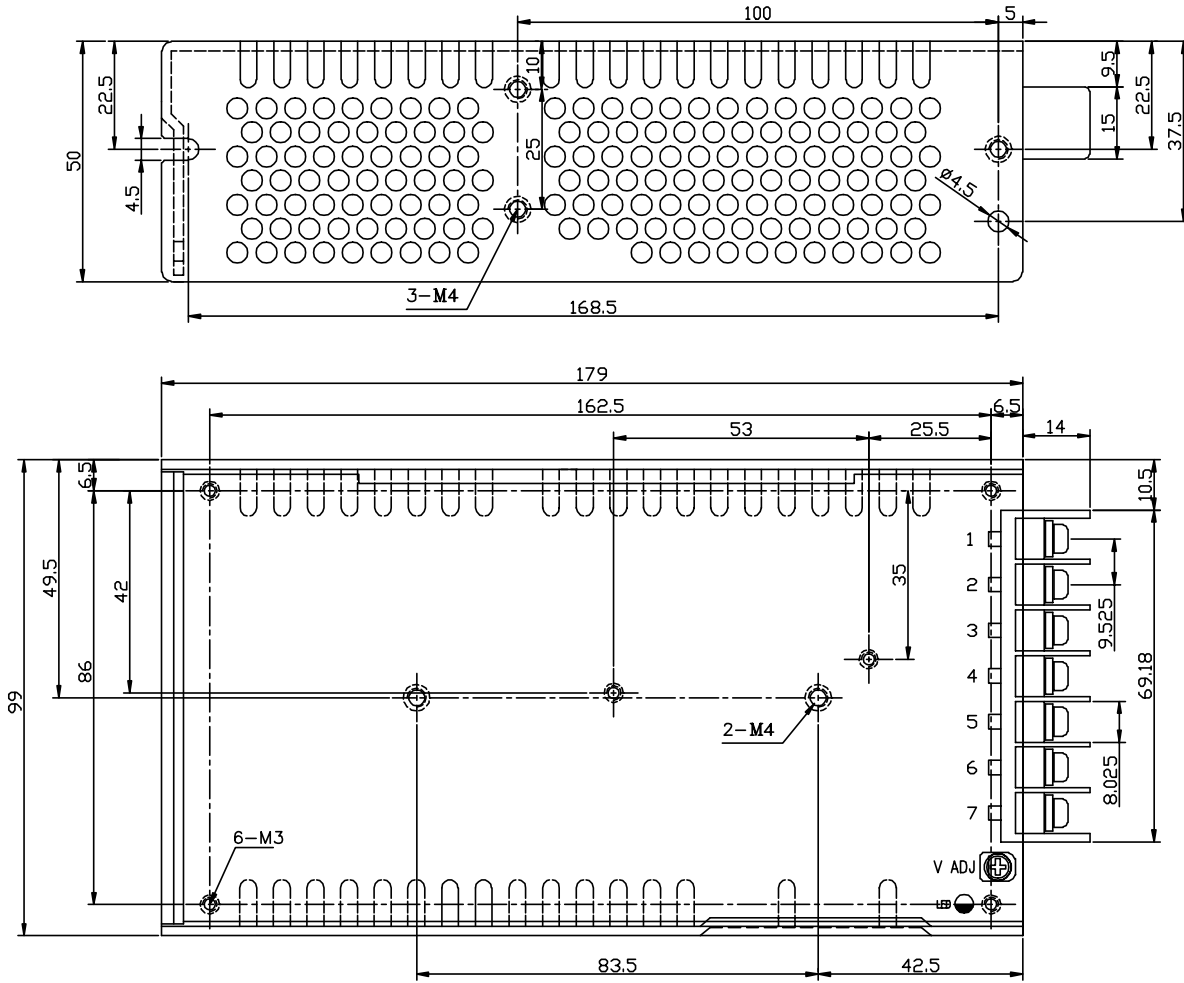
- Universal AC input/ Full range
- Built-in active PFC function, PF>0.95
- High Efficiency, and High Reliability
- Output Protections: OLP/OVP/SCP
- All using 105°C long life electrolytic capacitors.
- 100% full load burn-in test



Model	QPDF-100-5	QPDF-100-12	QPDF-100-15	QPDF-100-24	QPDF-100-36	QPDF-100-48
<b>Output Characteristics</b>						
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%					
<b>Input Characteristics</b>						
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					
<b>Protection</b>						
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					
<b>Environmental Characteristics</b>						
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					
<b>General Characteristics</b>						
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					

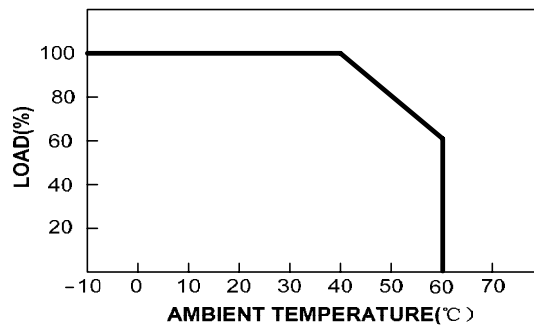


MECHANICAL SPECIFICATIONS



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



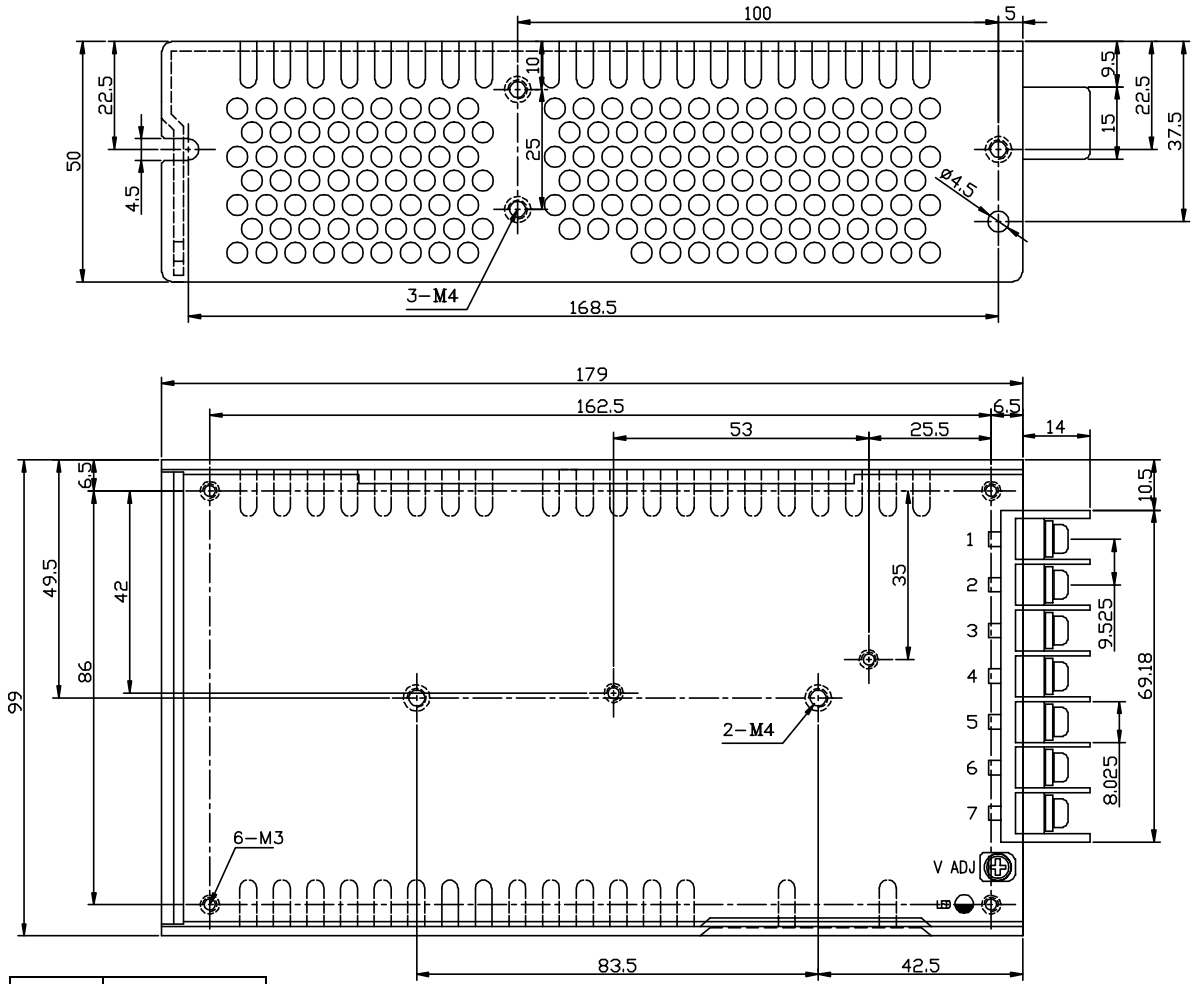
### Features:

- 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



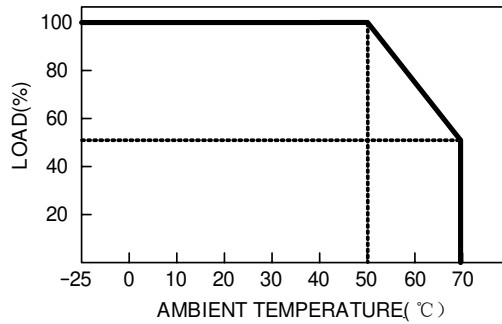
Model	QPDF-150-5	QPDF-150-12	QPDF-150-15	QPDF-150-24	QPDF-150-36	QPDF-150-48	
<b>Output Characteristics</b>							
DC Output	5V	12V	15V	24V	36V	48V	
Rated Current	30A	12.5A	10A	6.3A	4.1A	3.2A	
Current Range	0~30A	0~12.5A	0~10A	0~6.3A	0~4.1A	0~3.2A	
Ripple and Noise	<100mV	<100mV	<100mV	<150mV	<240mV	<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%						
<b>Input Characteristics</b>							
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						
<b>Protection</b>							
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						
<b>Environmental Characteristics</b>							
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						
<b>General Characteristics</b>							
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:

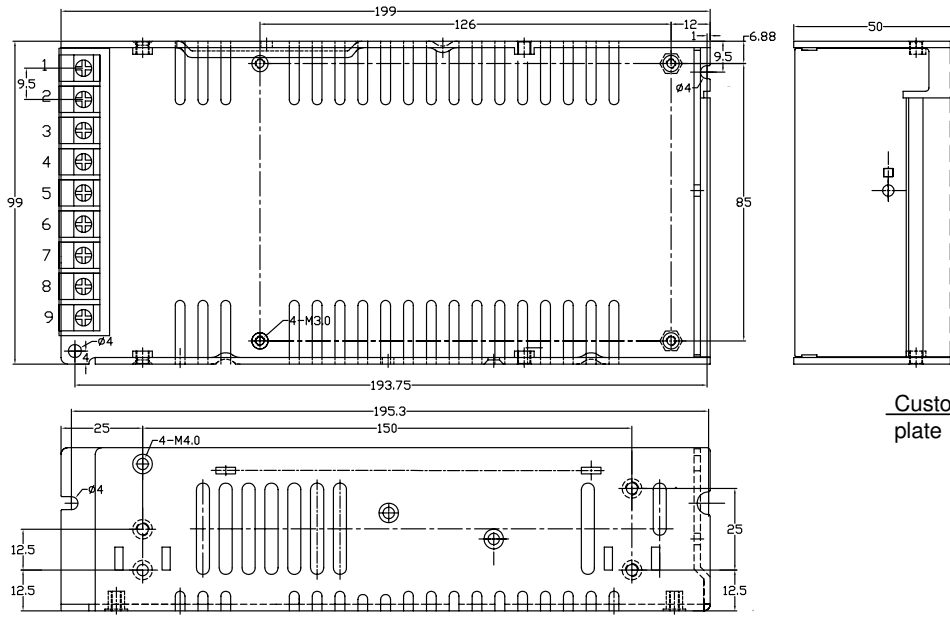
- Universal AC input/ Full range
- Built-in active PFC function, PF>0.95
- Miniature Size, High Power Density, High Efficiency, and High Reliability
- Output Protections: OLP/OPP/SCP
- Withstand 300VAC Surge Input for 5 Sec
- Operating Altitude up to 5000m
- Wide operating ambient temperature (-20°C~70°C)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



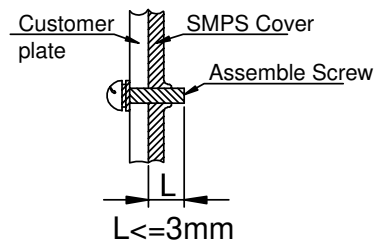
Model	QPWF-200(L)-5	QPWF-200(L)-12	QPWF-200(L)-24	QPWF-200(L)-48
<b>Output Characteristics</b>				
DC Output	5V	12V	24V	48V
Rated Current	40A	16.7A	8.4A	4.2A
Current Range (Note 1)	0~40A	0~16.7A	0~8.4A	0~4.2A
Ripple and Noise (Note 2)	0~70°C	≤200mV	≤150mV	≤200mV
	-20~0°C	≤250mV	≤200mV	≤200mV
Voltage 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%			
<b>Input Characteristics</b>				
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			
<b>Protection</b>				
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			
<b>Environmental Characteristics</b>				
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			
<b>General Characteristics</b>				
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.			



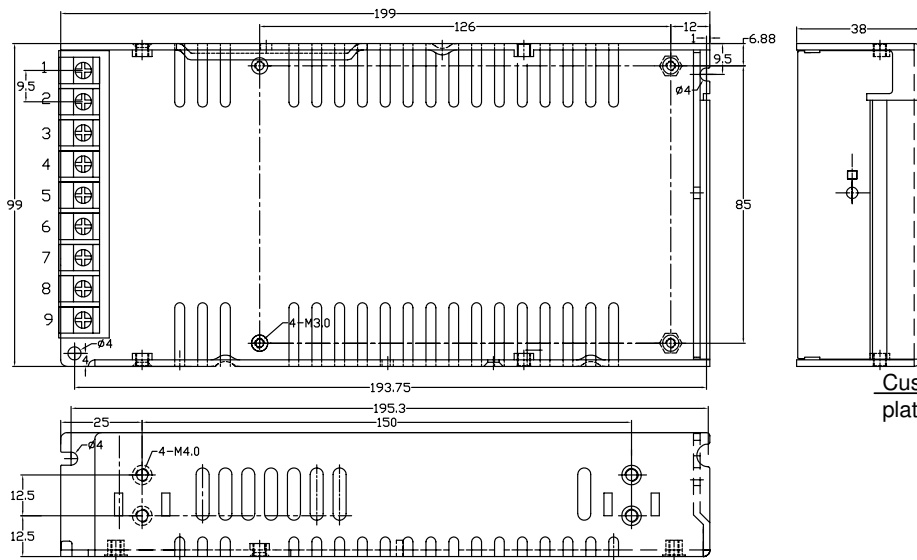
MECHANICAL SPECIFICATIONS  
QPWF-200 SERIES



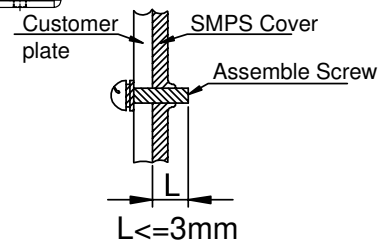
Pin No.	Assignment
1	AC-N
2	AC-L
3	F.G
4,5,6	DC output -V
7,8,9	DC output +V



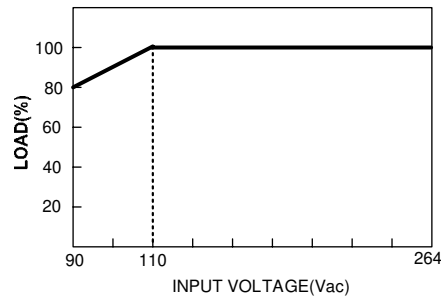
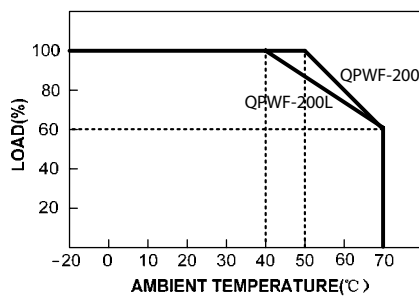
QPWF-200L SERIES



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



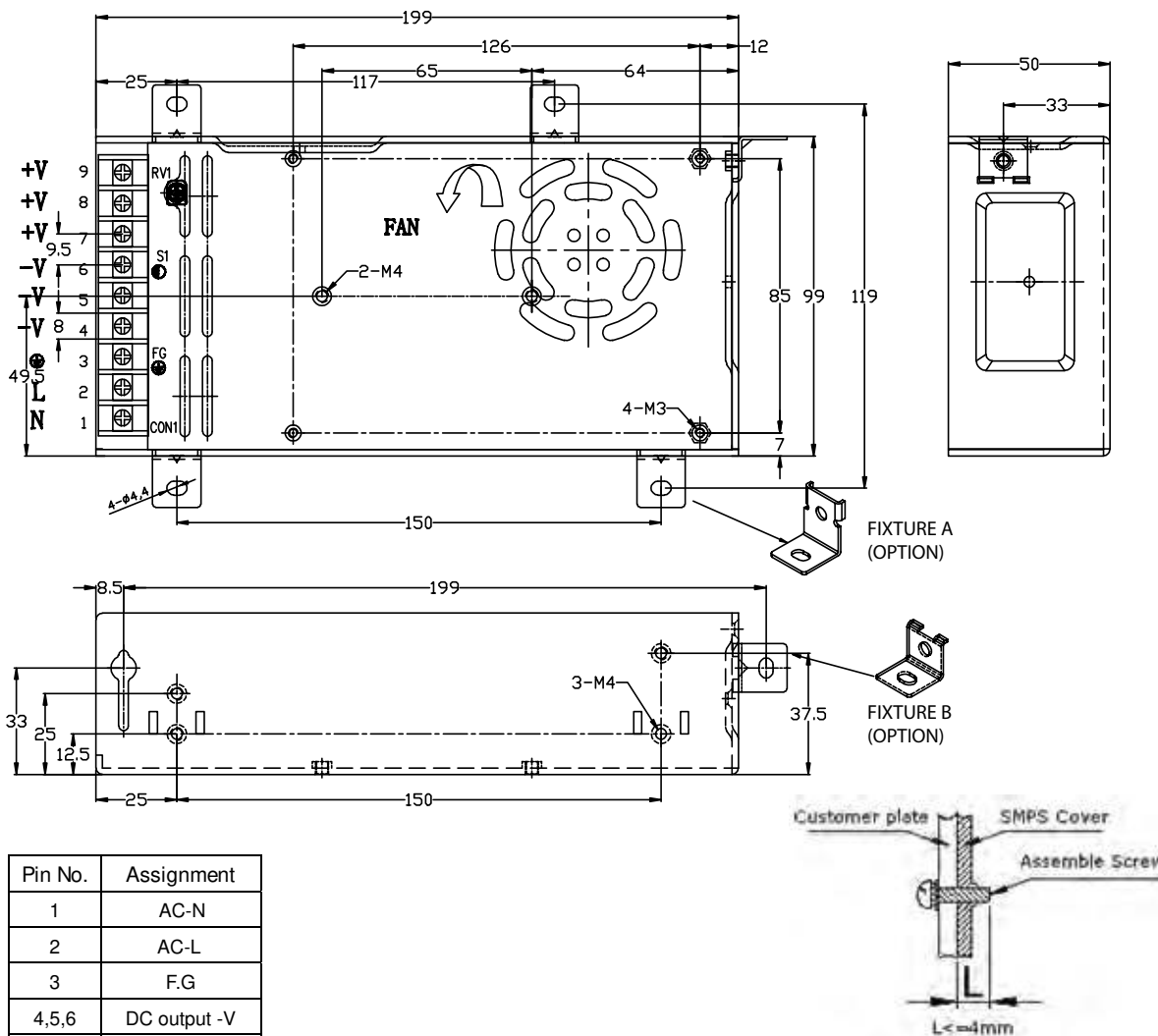
### Features:

- 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



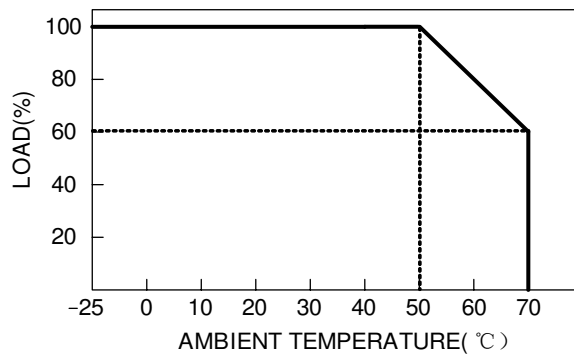
Model	QGKF-200-5	QGKF-200-12	QGKF-200-24	QGKF-200-48
<b>Output Characteristics</b>				
DC Output	5V	12V	24V	48V
Rated Current	40A	16.7A	8.4A	4.2A
Current Range (Note 1)	0~40A	0~16.7A	0~8.4A	0~4.2A
Ripple and Noise (Note 2)	<150mV	<150mV	<200mV	<200mV
Voltage ADJ. Range	-5% ~ +10% of rated output voltage			
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%			
<b>Input Characteristics</b>				
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			
<b>Protection</b>				
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			
<b>Environmental Characteristics</b>				
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			
<b>General Characteristics</b>				
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:

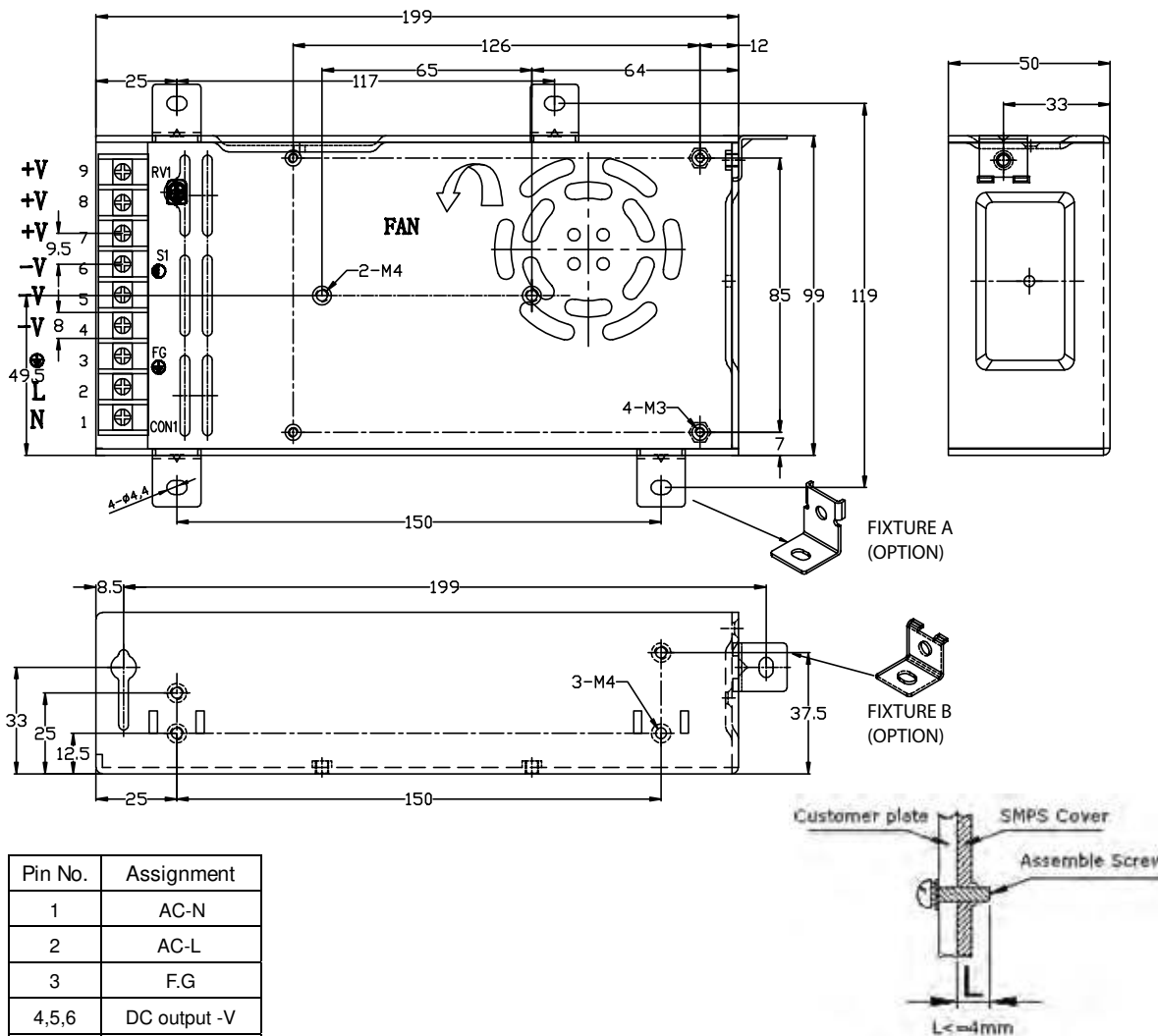
- Universal AC input/ Full range
- Built-in active PFC function, PF>0.95
- High Efficiency, and High Reliability
- Output Protections: OLP/OPP/SCP
- Withstand 300VAC Surge Input for 5 Sec
- Operating Altitude up to 5000m
- Wide operating ambient temperature (-25°C~70°C)
- Conformal Coating on both sides 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
<b>Output Characteristics</b>				
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%			
<b>Input Characteristics</b>				
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			
<b>Protection</b>				
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			
<b>Environmental Characteristics</b>				
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			
<b>General Characteristics</b>				
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.			

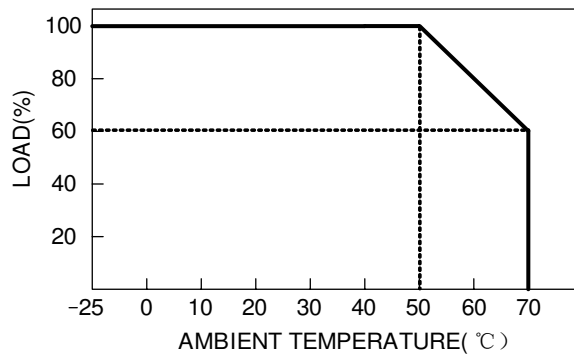


MECHANICAL SPECIFICATIONS



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



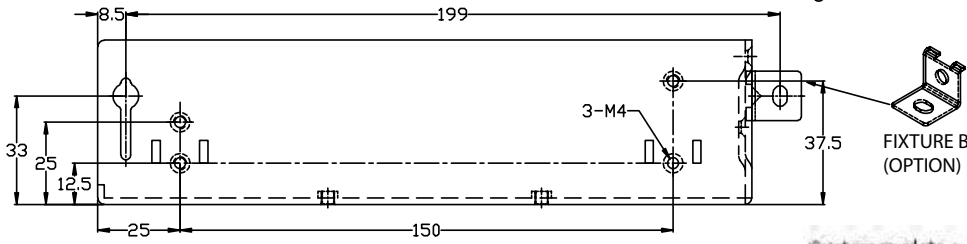
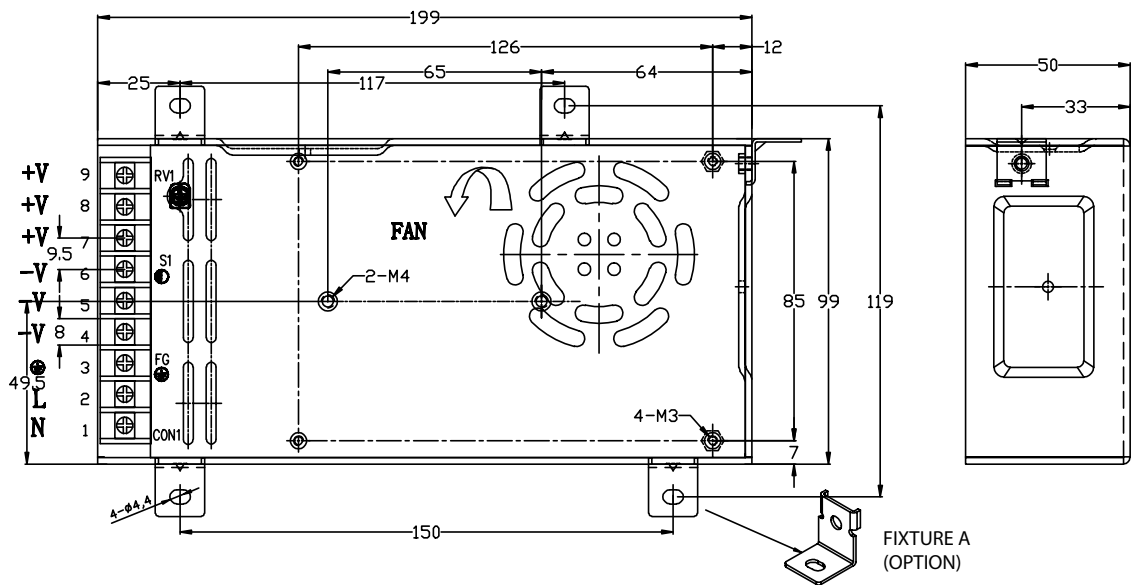
### Features:

- 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

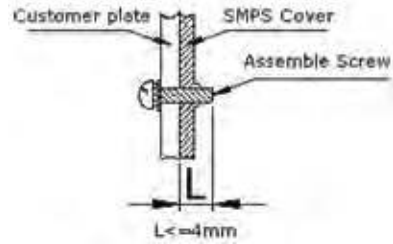


Model	QGKF-320-5	QGKF-320-12	QGKF-320-24	QGKF-320-48
<b>Output Characteristics</b>				
DC Output	5V	12V	24V	48V
Rated Current	55A	25A	13A	6.7A
Current Range (Note 1)	0~55A	0~25A	0~13A	0~6.7A
Ripple and Noise (Note 2)	<150mV	<150mV	<200mV	<200mV
Voltage ADJ. Range	-5% ~ +10% of rated output voltage			
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%			
<b>Input Characteristics</b>				
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			
<b>Protection</b>				
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			
<b>Environmental Characteristics</b>				
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			
<b>General Characteristics</b>				
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.			

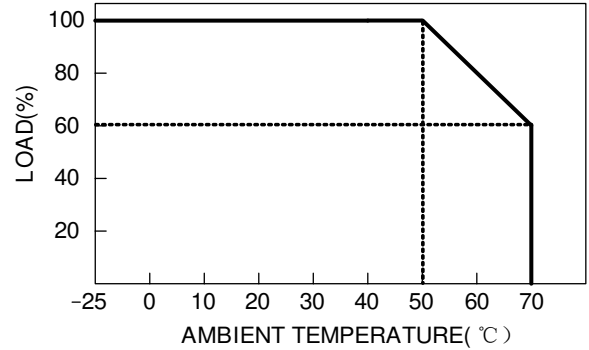
MECHANICAL SPECIFICATIONS



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



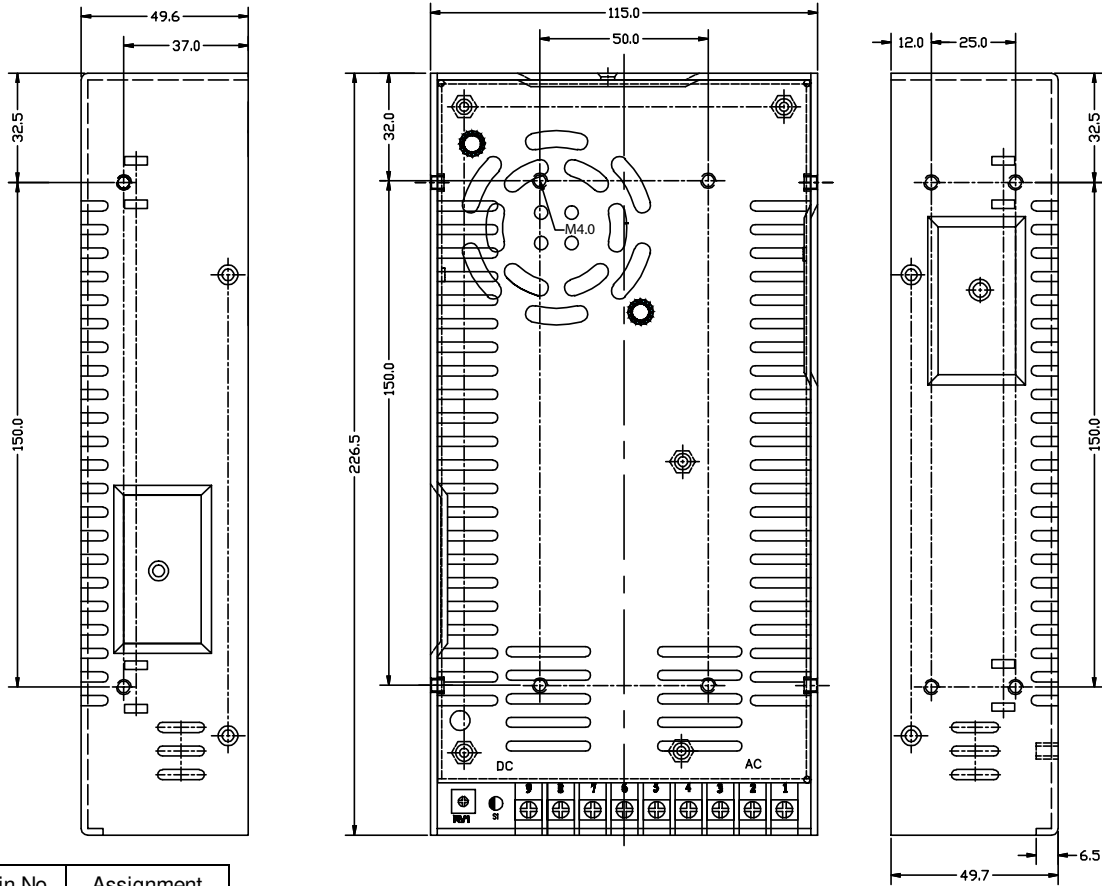
### Features:

- 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



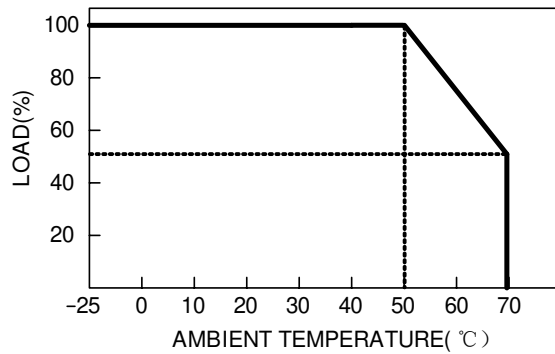
Model	QPDF-320-3.3	QPDF-320-4	QPDF-320-5	QPDF-320-7.5	QPDF-320-12	QPDF-320-24	QPDF-320-28	QPDF-320-36	QPDF-320-48	
<b>Output Characteristics</b>										
DC Output	3.3V	4V	5V	7.5V	12V	24V	28V	36V	48V	
Rated Current	60A	60A	60A	40A	25A	13A	11A	8.8A	6.7A	
Current Range	0~60A	0~60A	0~60A	0~40A	0~25A	0~13A	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%									
<b>Input Characteristics</b>										
Voltage Range	88VAC~264VAC, 124VDC~370VDC									
Frequency Range	47Hz-63Hz									
Power Factor (Typical)	PF>0.98/115VAC PF>0.95/230VAC									
Efficiency	115VAC	72%	73%	73%	77%	78%	79%	79%	80%	81%
(Typical)	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									
<b>Protection</b>										
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									
<b>Environmental Characteristics</b>										
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									
<b>General Characteristics</b>										
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





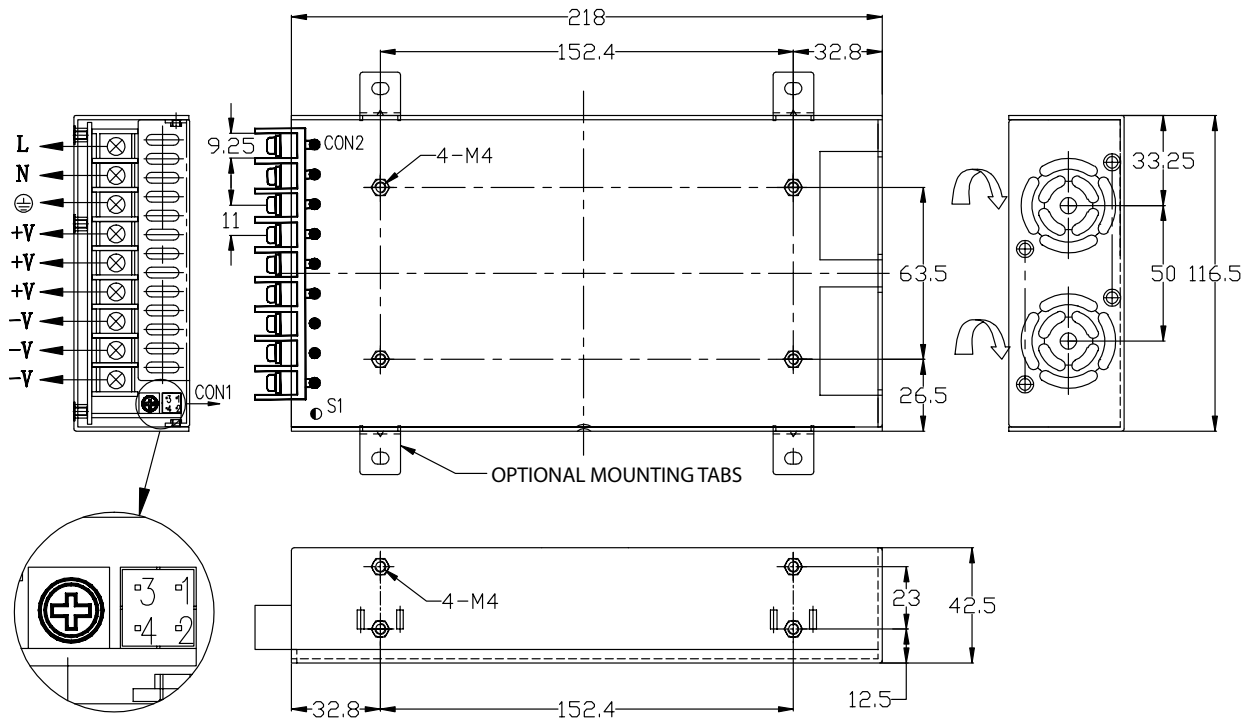
### Features:

- 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

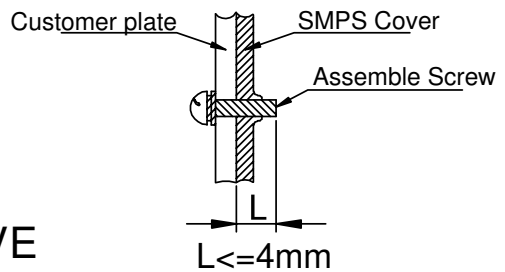


Model	QPDF-480-12	QPDF-480-24	QPDF-480-27	QPDF-480-36	QPDF-480-48
<b>Output Characteristics</b>					
DC Output	12V	24V	27V	36V	48V
Rated Current	34A	22A	18A	14A	11A
Current Range	0~34A	0~22A	0~18A	0~14A	0~11A
Ripple and Noise	0~70°C	<120mV	<150mV	<150mV	<200mV
	-30~0°C	<180mV	<150mV	<150mV	<200mV
Voltage 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%				
<b>Input Characteristics</b>					
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				
<b>Protection</b>					
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				
<b>Environmental Characteristics</b>					
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 60950-1:2006 (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				
<b>General Characteristics</b>					
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)				

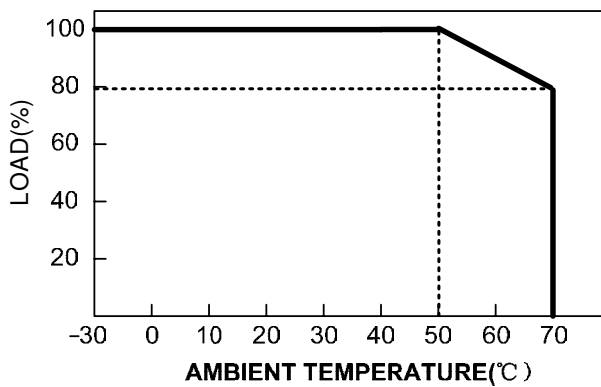
### MECHANICAL SPECIFICATIONS



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



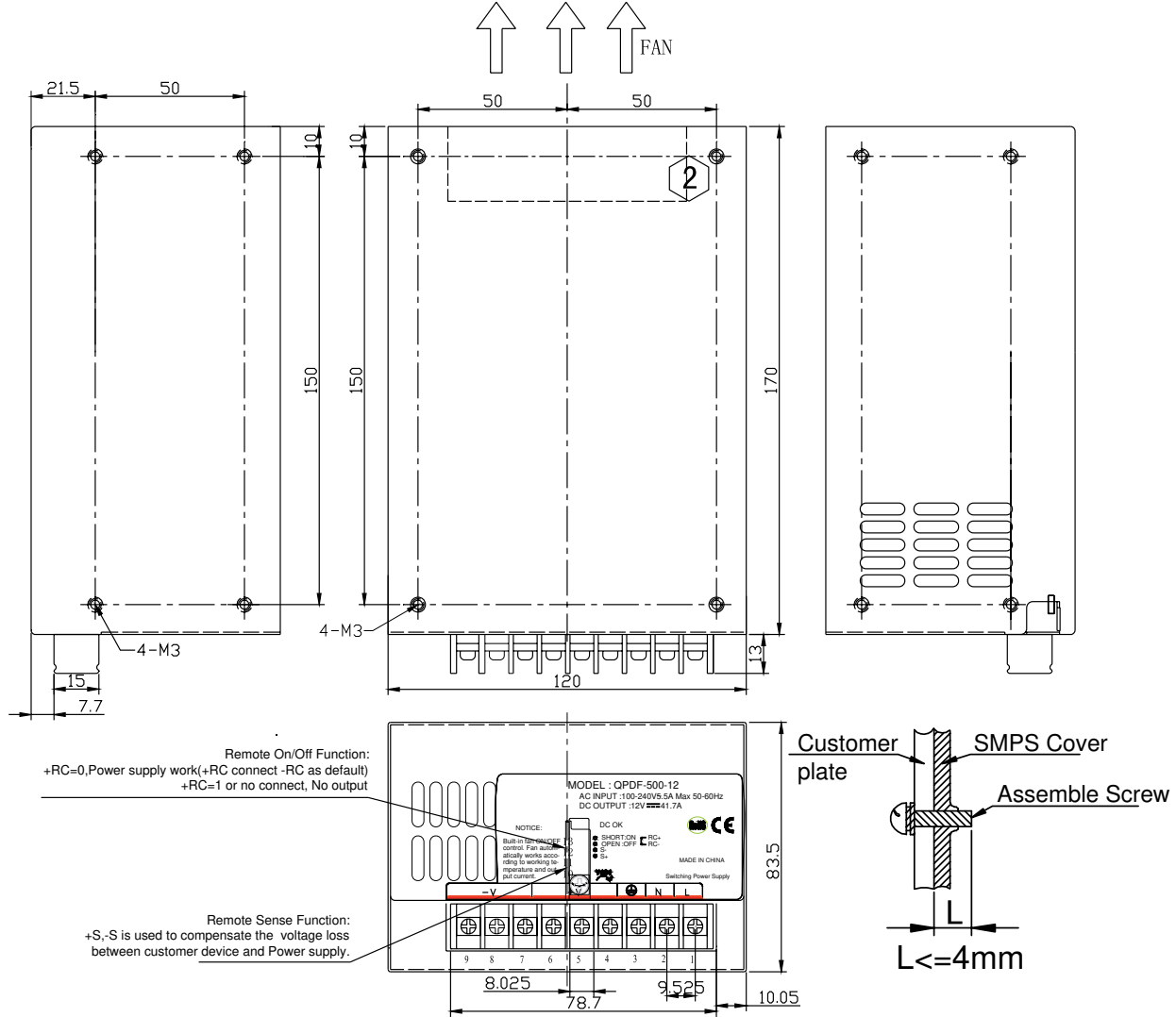
### Features:

- 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

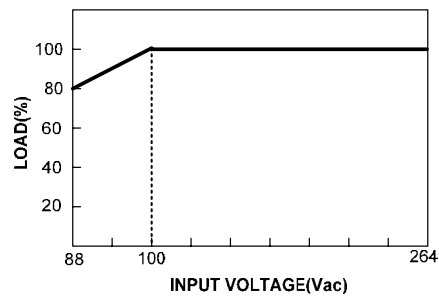
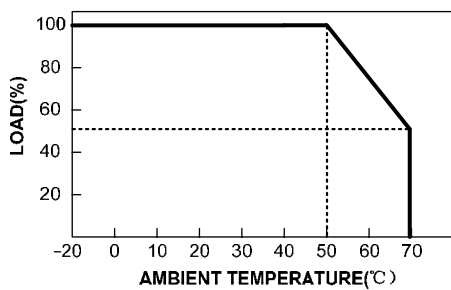


Model	QPDF-500-12	QPDF-500-24	QPDF-500-27.5	QPDF-500-48
<b>Output Characteristics</b>				
DC Output	12V	24V	27.5V	48V
Rated Current	41.7A	21A	18.2A	10.5A
Current Range	0~41.7A	0~21A	0~18.2A	0~10.5A
Ripple and Noise	0~70°C	<150mV	<200mV	<200mV
	-20~0°C	<240mV	<400mV	<400mV
Voltage ADJ. Range	11.6V~13.2V	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%			
<b>Input Characteristics</b>				
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%
	230VAC Input	88%	90%	91%
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			
<b>Protection</b>				
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			
<b>Environmental Characteristics</b>				
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			
<b>General Characteristics</b>				
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:

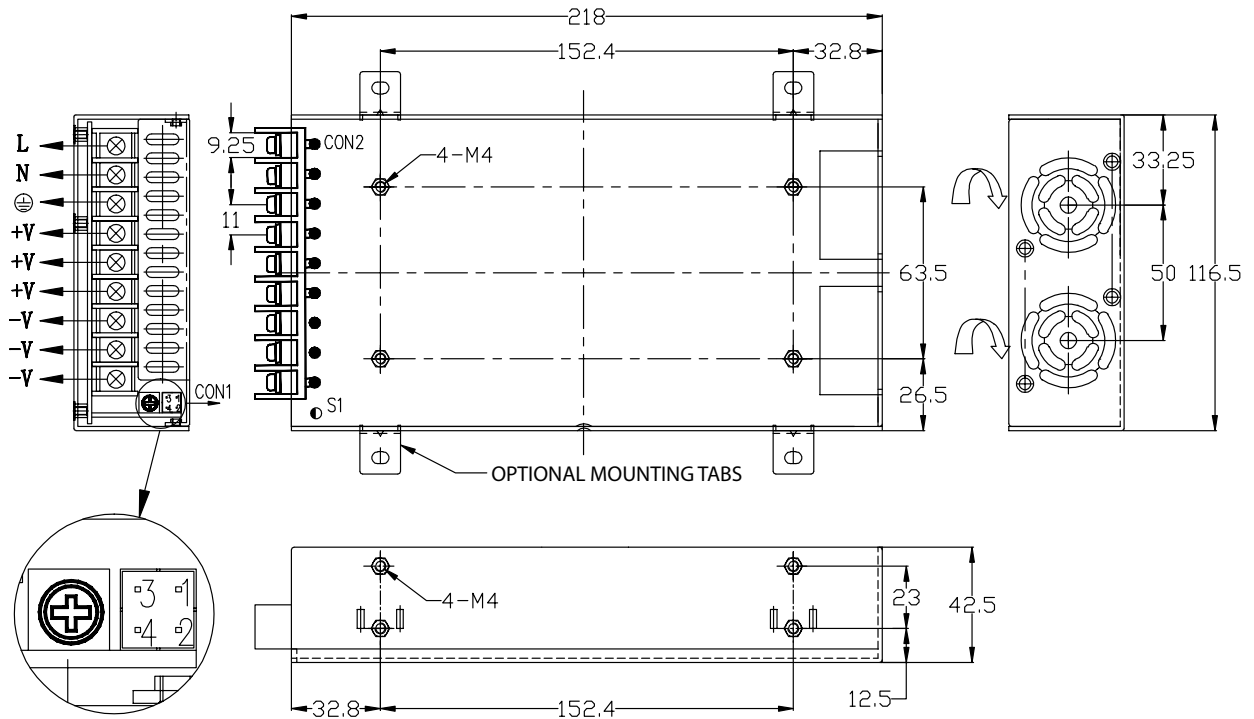
- Universal AC input/ Full range
- Built-in active PFC function, PF>0.96
- Built-in Fan Speed Control
- Built-in AC Inrush Current Limiting Circuit (<20A)
- Built-in Constant Current Limiting Circuit
- Built-in Remote Sense Function
- High Efficiency, and High Reliability
- Output Protections: OLP/OVP/OTP/SCP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



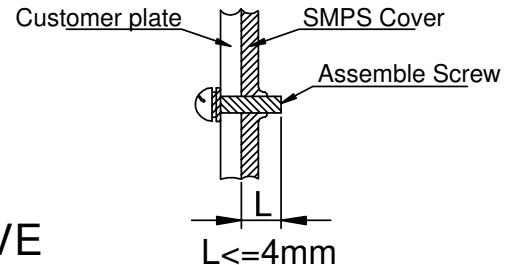
Model	QPDF-600-12	QPDF-600-24	QPDF-600-36	QPDF-600-48
<b>Output Characteristics</b>				
<b>DC Output</b>	12V	24V	36V	48V
<b>Rated Current (100-127VAC)</b>	34A	22A	14A	11A
<b>Rated Current (128-264VAC)</b>	42A	26.5A	17.5A	13.6A
<b>Ripple and Noise</b>	0~70°C	<120mV	<150mV	<150mV
	-30~0°C	<180mV	<150mV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



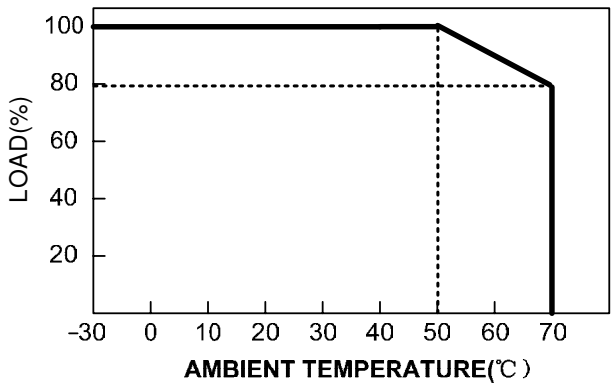
### MECHANICAL SPECIFICATIONS



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



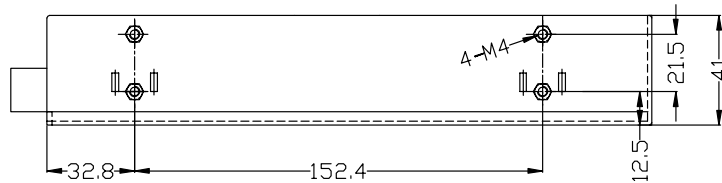
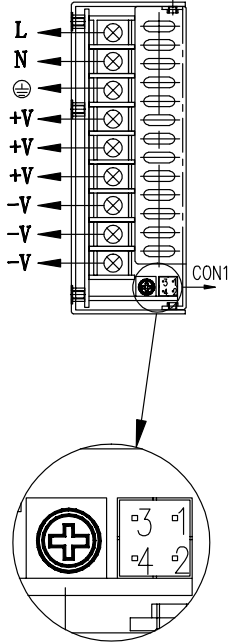
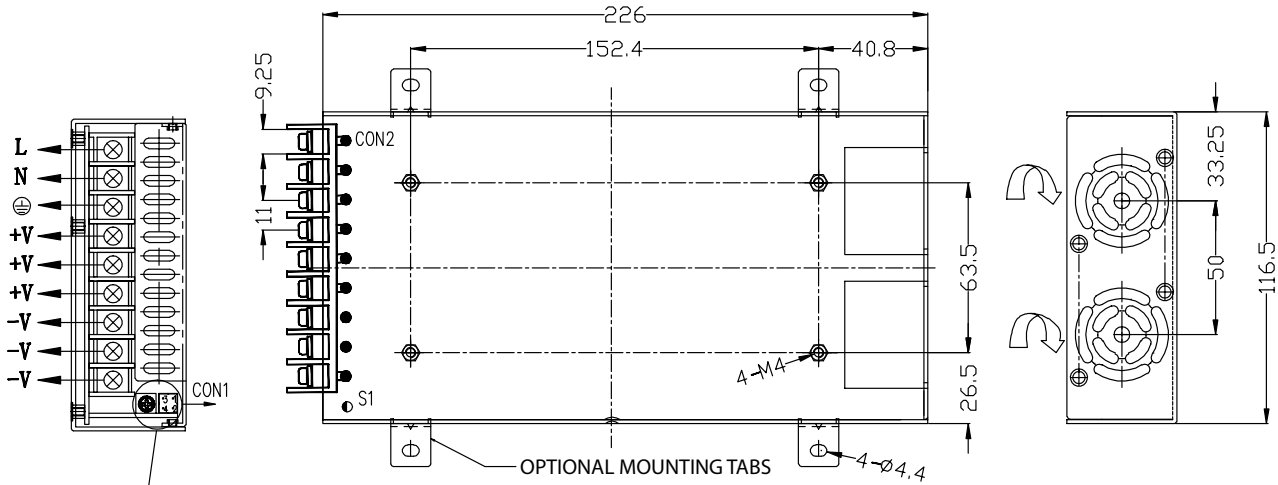
### Features:

- 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

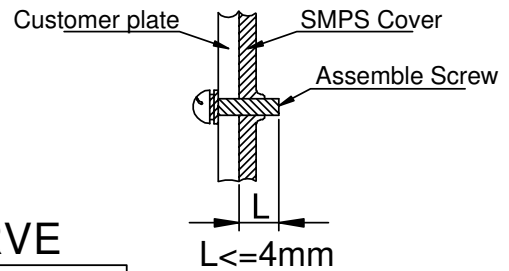


Model	QPDF-800-24	QPDF-800-27	QPDF-800-48
<b>Output Characteristics</b>			
DC Output	24V	27V	48V
Rated Current (100-127VAC)	27A	23A	14A
Rated Current (128-264VAC)	33A	29A	16.5A
Ripple and Noise	<200mV	<240mV	<240mV
Voltage ADJ. Range	-5% ~ +10% of rated output voltage		
Voltage Accuracy	±2.0%		
Line 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%		
<b>Input Characteristics</b>			
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		
<b>Protection</b>			
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		
<b>Environmental Characteristics</b>			
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		
<b>General Characteristics</b>			
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.)		

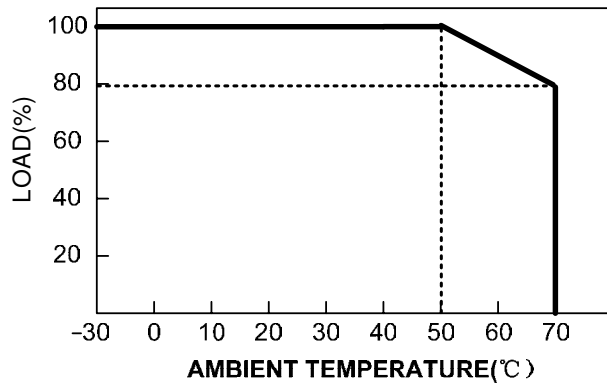
MECHANICAL SPECIFICATIONS



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





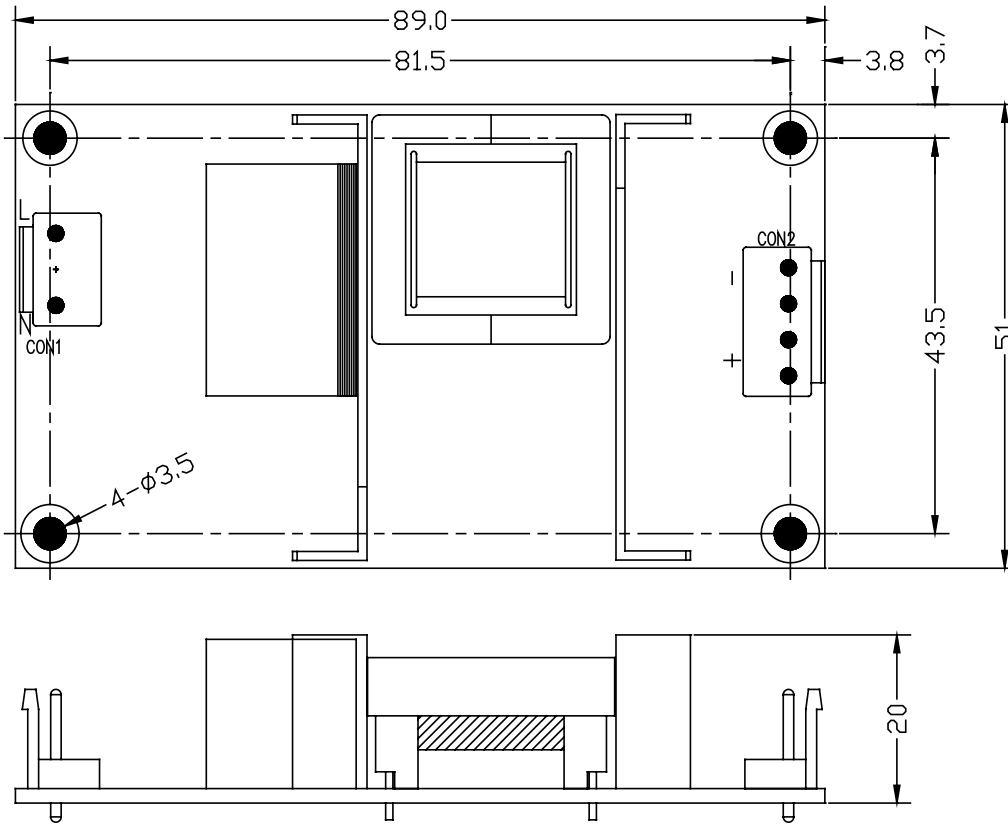
### Features:

- 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



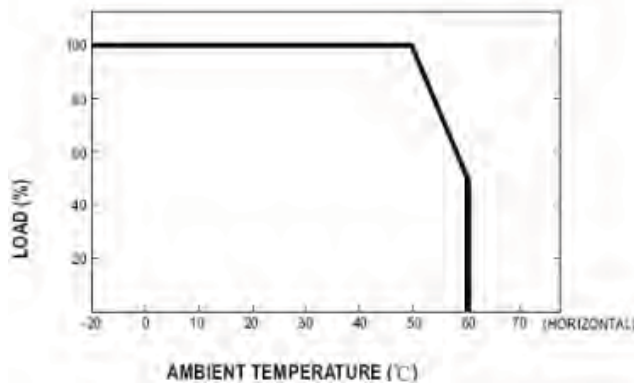
Model	QPS-20-3.3	QPS-20-5	QPS-20-12	QPS-20-15	QPS-20-24	QPS-20-48
<b>Output Characteristics</b>						
DC Output	3.3V	5V	12V	15V	24V	48V
Rated Current	4A	4A	1.67A	1.34A	0.84A	0.42A
Current Range	0~4A	0~4A	0~1.67A	0~1.34A	0~0.84A	0~0.42A
Ripple and Noise	0~60°C	<50mV	<50mV	<50mV	<50mV	<100mV
	-20~0°C	<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%					
<b>Input Characteristics</b>						
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					
<b>Protection</b>						
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					
<b>Environmental Characteristics</b>						
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					
<b>General Characteristics</b>						
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





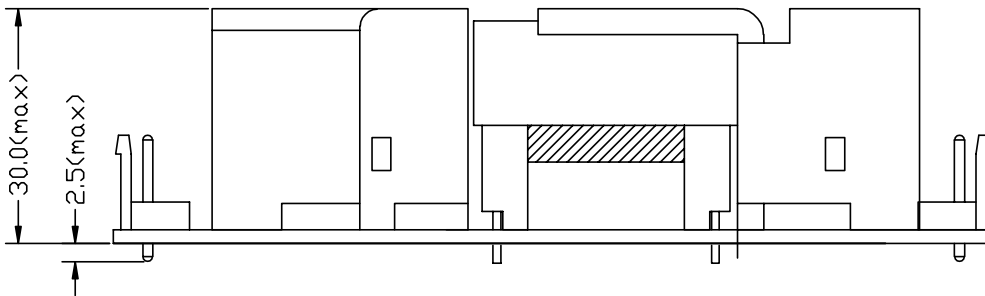
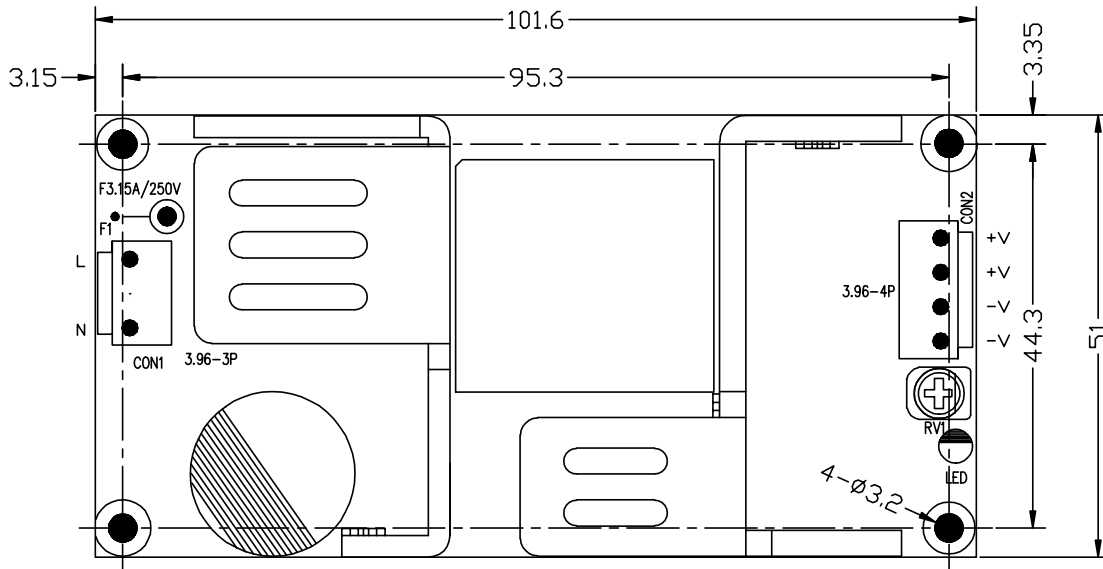
### Features:

- 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



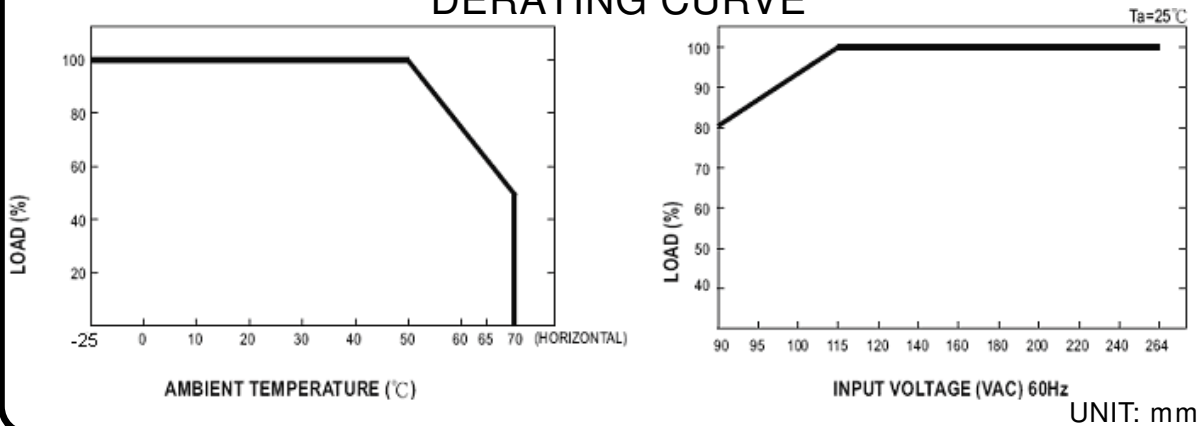
Model	QPS-60-5	QPS-60-12	QPS-60-15	QPS-60-24	QPS-60-48	
<b>Output Characteristics</b>						
DC Output	5V	12V	15V	24V	48V	
Rated Current	8A	4.5A	3.6A	2.5A	1.25A	
Current Range	0~8A	0~4.5A	0~3.6A	0~2.5A	0~1.25A	
Ripple and Noise	0~70°C	<50mV	<120mV	<120mV	<240mV	
	-25~0°C	<200mV	<300mV	<300mV	<360mV	
Voltage 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%					
<b>Input Characteristics</b>						
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					
<b>Protection</b>						
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					
<b>Environmental Characteristics</b>						
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					
<b>General Characteristics</b>						
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





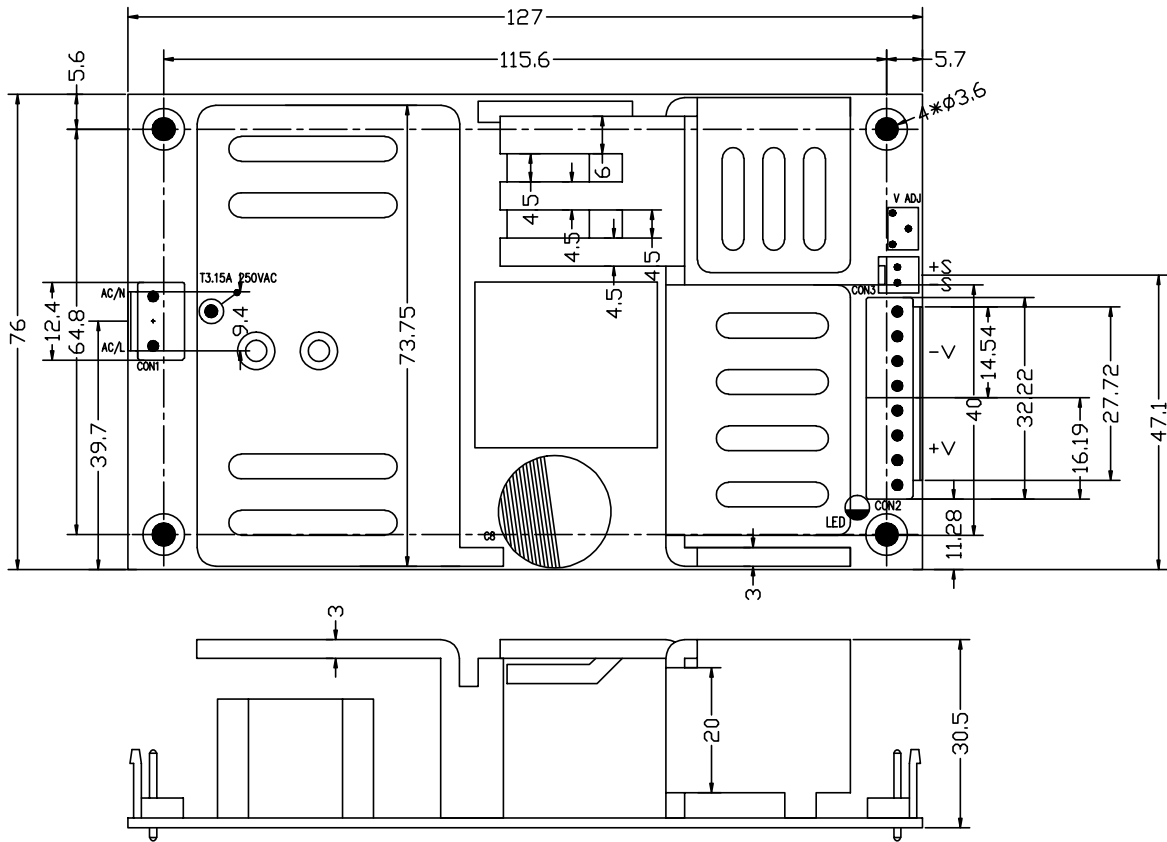
### Features:

- 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



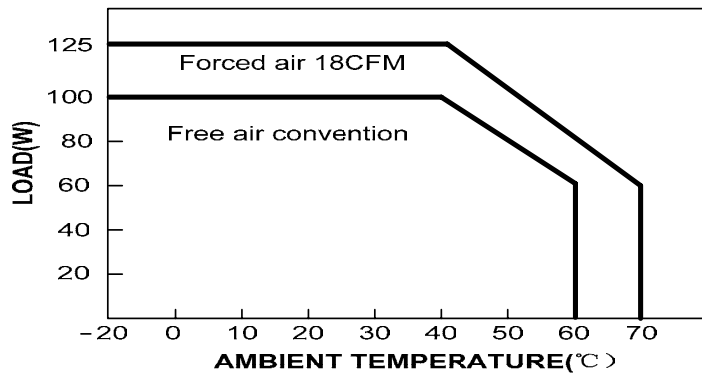
Model	QPSF-125-5	QPSF-125-12	QPSF-125-15	QPSF-125-24	QPSF-125-48	
<b>Output Characteristics</b>						
DC Output	5V	12V	15V	24V	48V	
Rated Current	20A	10.5A	8.4A	5.2A	2.6A	
Current Range	0~20A	0~10.5A	0~8.4A	0~5.2A	0~2.6A	
Ripple and Noise	<100mV	<100mV	<100mV	<100mV	<150mV	
Voltage ADJ. Range	4.5~5.7V	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%					
<b>Input Characteristics</b>						
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					
<b>Protection</b>						
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					
<b>Environmental Characteristics</b>						
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					
<b>General Characteristics</b>						
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

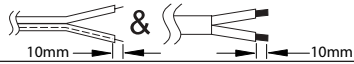
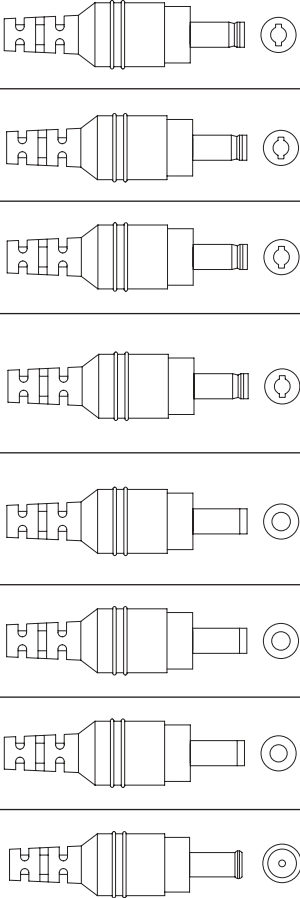
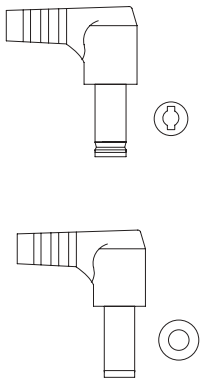


ITEM	CONNECTOR	MATING HOUSING	TERMINAL
AC IN (CON1)	LANDWIN 3961P0300T (CENTER PIN REMOVED)	LANDWIN 3960S OR JST VHR	LANDWIN 3963T011R OR JST SVH-21T-P1.1
DC OUT (CON2)	LANDWIN 3961P0800T	OR MOLEX 51144	OR MOLEX 50539
REMOTE SENSE (CON3)	LANDWIN 2541P0200T	LANDWIN 2510S OR MOLEX 5051	LANDWIN 2563T011X 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
<b>Output Characteristics</b>													
<b>DC Output</b>	4.5V	5V	7V	7.5V	9V	10V	12V	13.5V	15V	16V	18V	20V	24V
<b>Rated Current</b>	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
<b>Ripple and Noise</b>	±2% Vo @ Rated Load												
<b>Load Regulation (Typ.)</b>	±5%												
<b>Transient Response (Typ.)</b>	0.5mS for 50% Load Change												
<b>Hold-up Time (Typ.)</b>	10mS @ Rated Load												
<b>Output Protection</b>	Short Circuit, Over Voltage, Over Current												
<b>Ferrite Core</b>	No												
<b>Input Characteristics</b>													
<b>Voltage Range</b>	100VAC~240VAC												
<b>Frequency Range</b>	50Hz-60Hz												
<b>Efficiency</b>	Energy Star Level V, ErP Step 2, NRCan & GEMS Compliant												
<b>AC Current (max)</b>	0.48A												
<b>Input Protection</b>	Internal Primary Current Fuse, Inrush Limiting												
<b>Leakage Current</b>	0.25mA (2 Conductor)												
<b>Environmental Characteristics</b>													
<b>Operating Temperature</b>	0°C~40°C												
<b>Operating Relative Humidity</b>	20% RH to 80% RH												
<b>Storage Temperature</b>	-20°C~80°C, 10% RH to 90% RH												
<b>Topology</b>	Switching Flyback												
<b>Dielectric Withstand</b>	3000VAC Primary-Secondary												
<b>EMI Conduction &amp; Radiation</b>	Compliance to EN55022 Class B												
<b>Harmonic Current</b>	Compliance to EN61000-3-2, 3												
<b>EMS Immunity</b>	EN61000-4-2, 3, 4, 5, 6, 8, 11												
<b>Characteristics</b>													
<b>MTBF</b>	300,000Hrs (25°C, Telecordia SR-332)												
<b>Dimension (LxWxH)</b>	88x50x34mm												
<b>Weight</b>	144g												

### PART NUMBER SYSTEM

**QADA - 18 - 12 - 08 BB**

SERIES

OUTPUT WATTAGE

OUTPUT VOLTAGE

INPUT RECEPTACLE

08

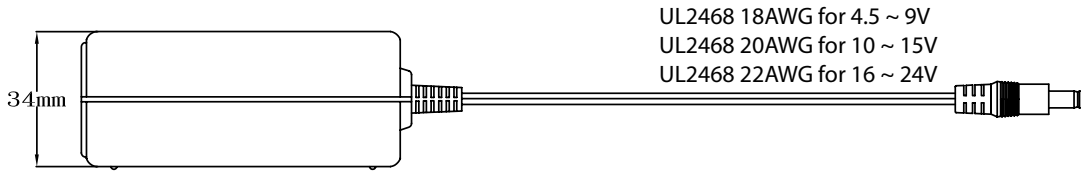


IEC 60320 C8

OUTPUT CONNECTOR

Please Reference Output Plug Type Page 49-50

### MECHANICAL SPECIFICATIONS

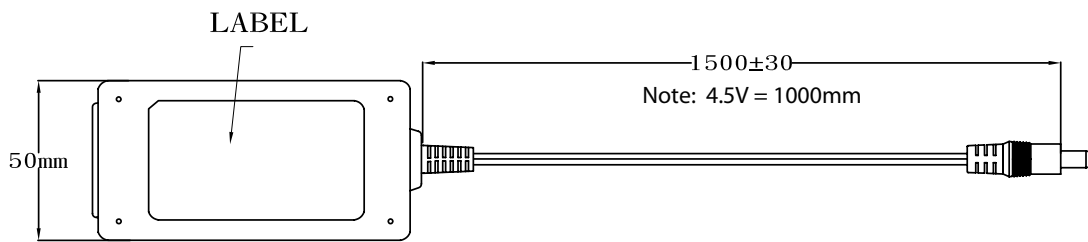


SIDE VIEW

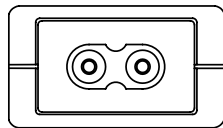
UL2468 18AWG for 4.5 ~ 9V  
UL2468 20AWG for 10 ~ 15V  
UL2468 22AWG for 16 ~ 24V



TOP VIEW



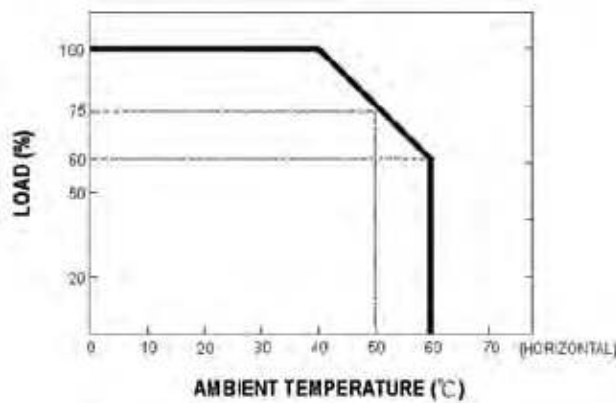
BOTTOM VIEW



FRONT-VIEW

LABEL

### DERATING CURVE



UNIT: mm



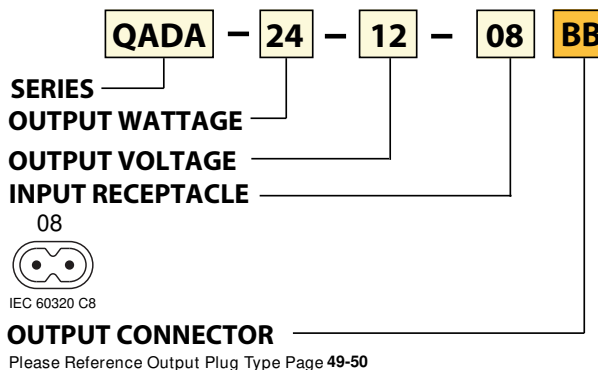
### Features:

- 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

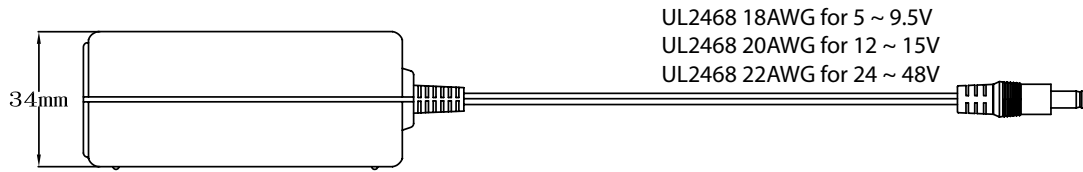


Model	QADA-24-5	QADA-24-5.9	QADA-24-7	QADA-24-7.5	QADA-24-9	QADA-24-9.5	QADA-24-12	QADA-24-15	QADA-24-24	QADA-24-48
<b>Output Characteristics</b>										
DC Output	5V	5.9V	7V	7.5V	9V	9.5V	12V	15V	24V	48V
Rated Current	4.0A	3.5A	3.0A	3.0A	2.5A	2.5A	2.0A	1.6A	1.0A	0.5A
Ripple and Noise	±2% Vo @ Rated 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									
<b>Input Characteristics</b>										
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)									
<b>Environmental Characteristics</b>										
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									
<b>Characteristics</b>										
MTBF	300,000Hrs (25°C, Telecordia SR-332)									
Dimension (LxWxH)	88x50x34mm									
Weight	166g									

### PART NUMBER SYSTEM



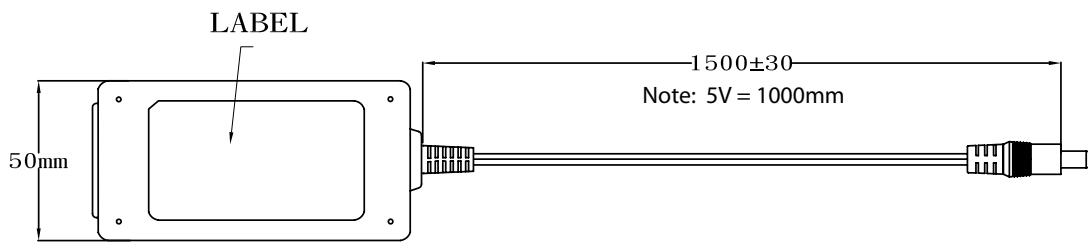
### MECHANICAL SPECIFICATIONS



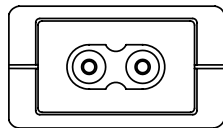
SIDE VIEW



TOP VIEW

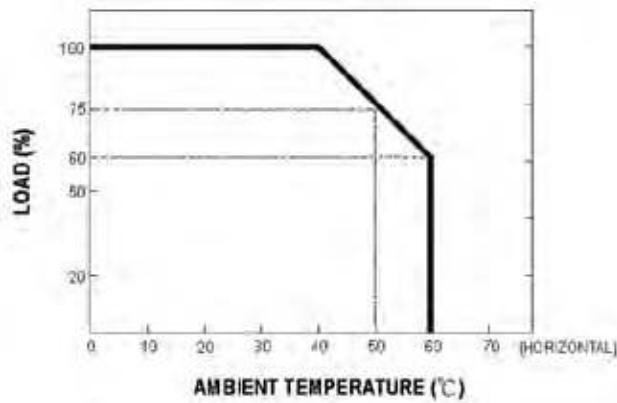


BOTTOM VIEW



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

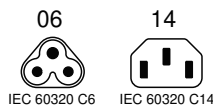


Model	QADB-24-5	QADB-24-5.9	QADB-24-7	QADB-24-7.5	QADB-24-9	QADB-24-9.5	QADB-24-12	QADB-24-15	QADB-24-24	QADB-24-48
<b>Output Characteristics</b>										
DC Output	5V	5.9V	7V	7.5V	9V	9.5V	12V	15V	24V	48V
Rated Current	4.0A	3.5A	3.0A	3.0A	2.5A	2.5A	2.0A	1.6A	1.0A	0.5A
Ripple and Noise	±2% Vo @ Rated 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									
<b>Input Characteristics</b>										
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									
<b>Environmental Characteristics</b>										
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									
<b>Characteristics</b>										
MTBF	300,000Hrs (25°C, Telecordia SR-332)									
Dimension (LxWxH)	100x50x33mm									
Weight	165g									

### PART NUMBER SYSTEM

QADB - 24 - 12 - AA BB

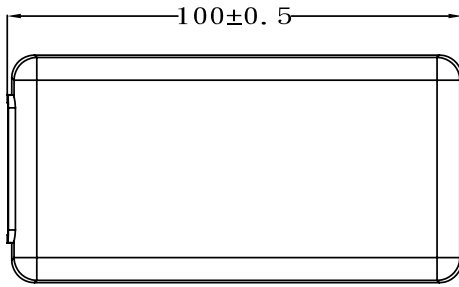
SERIES  
 OUTPUT WATTAGE  
 OUTPUT VOLTAGE  
 INPUT RECEPTACLE



OUTPUT CONNECTOR

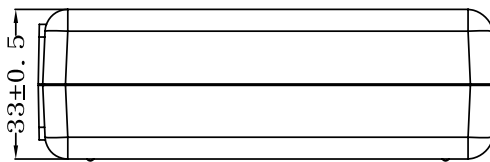
Please Reference Output Plug Type Page 49-50

MECHANICAL SPECIFICATIONS

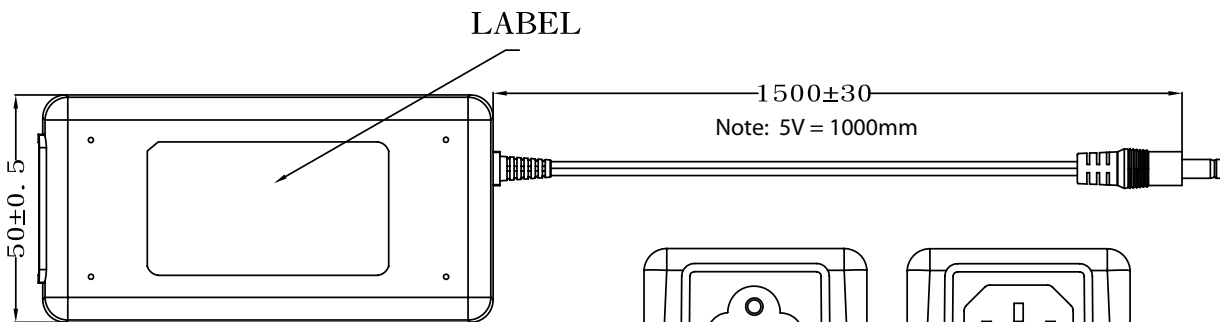


TOP VIEW

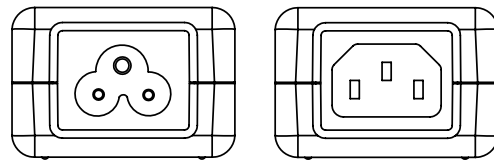
UL2468 18AWG for 5 ~ 9.5V  
 UL2468 20AWG for 12 ~ 48V



SIDE VIEW

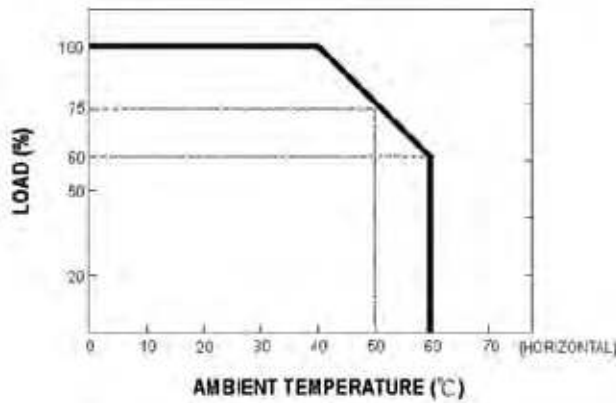


BOTTOM VIEW



FRONT-VIEW

DERATING CURVE



UNIT: mm





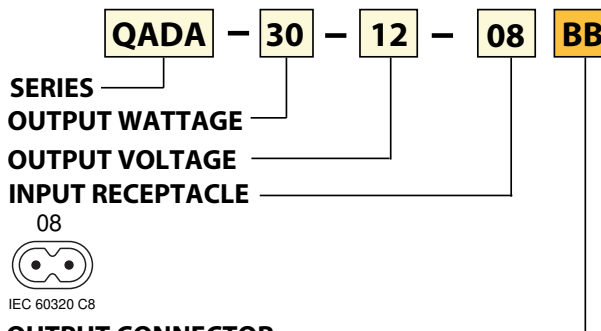
### Features:

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



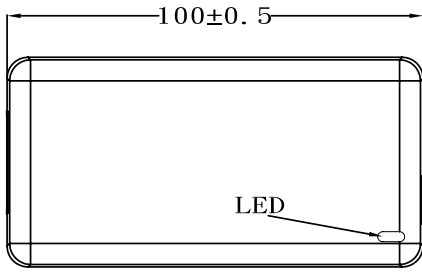
Model	QADA-30-5	QADA-30-7.5	QADA-30-8.4	QADA-30-8.5	QADA-30-9	QADA-30-12	QADA-30-13.5	QADA-30-15	QADA-30-18	QADA-30-24
<b>Output Characteristics</b>										
DC Output	5V	7.5V	8.4V	8.5V	9V	12V	13.5V	15V	18V	24V
Rated Current	5.0A	4.0A	3.58A	3.53A	3.34A	2.5A	2.22A	2.0A	1.67A	1.25A
Ripple and Noise	±2% 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									
<b>Input Characteristics</b>										
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)									
<b>Environmental Characteristics</b>										
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									
<b>Characteristics</b>										
MTBF	300,000Hrs (25°C, Telecordia SR-332)									
Dimension (LxWxH)	101x51x34mm									
Weight	210g									

### PART NUMBER SYSTEM



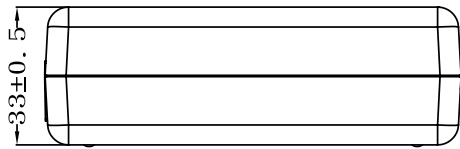
Please Reference Output Plug Type Page 49-50

MECHANICAL SPECIFICATIONS

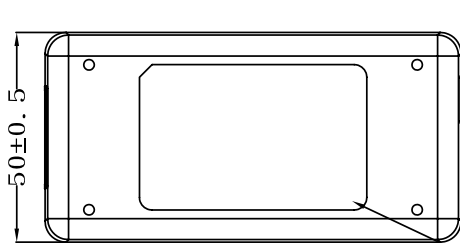
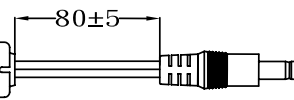


TOP VIEW

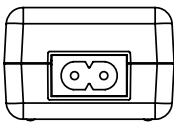
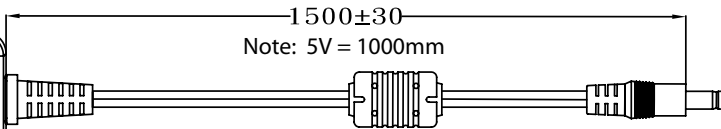
UL1165 16AWG for 5 ~ 7.5V  
 UL2468 18AWG for 8.4 ~ 13.5V  
 UL2468 20AWG for 15 ~ 24V



SIDE VIEW

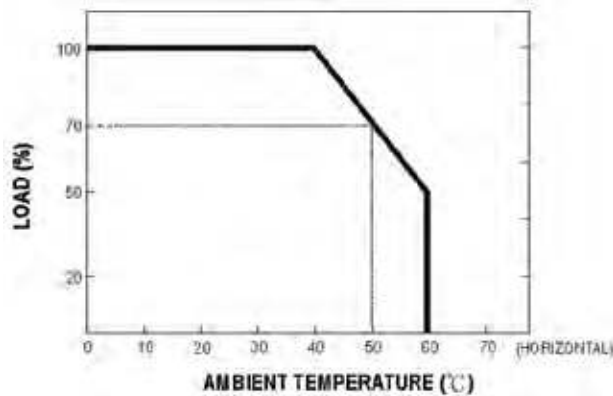


BOTTOM VIEW



FRONT-VIEW

DERATING CURVE



UNIT: mm



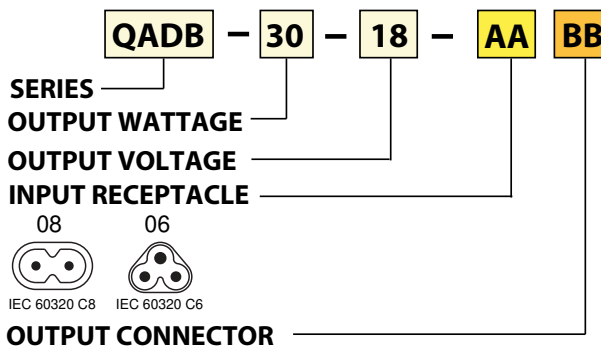
### Features:

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



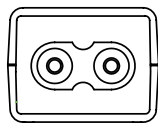
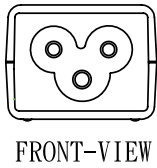
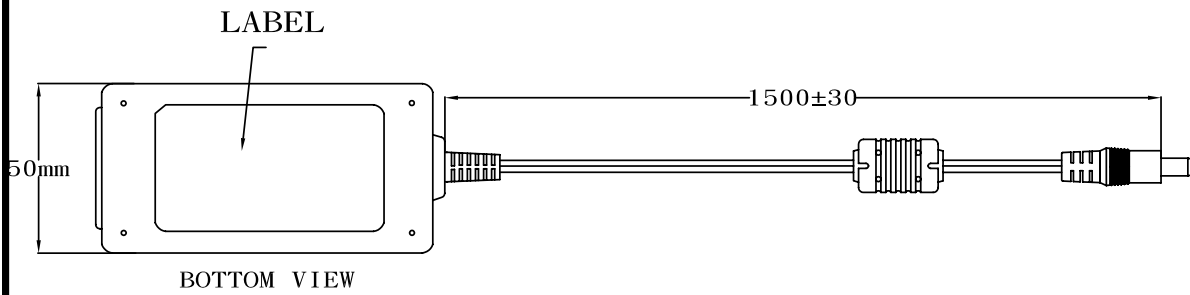
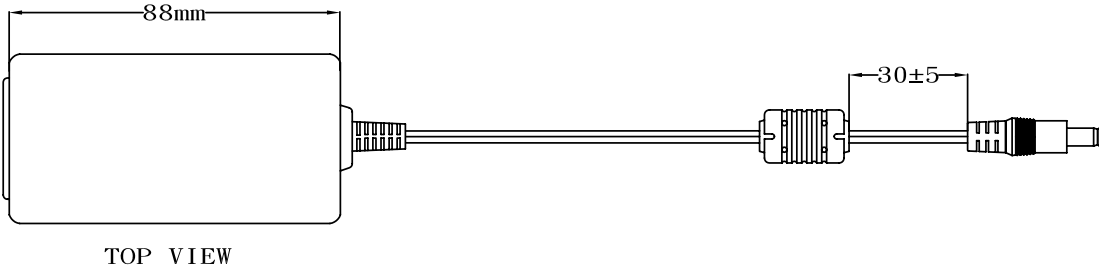
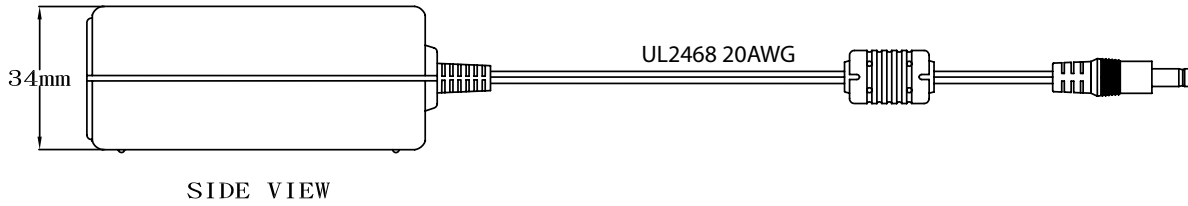
Model	QADB-30-18	QADB-40-18	QADB-30-18.5	QADB-40-18.5	QADB-30-19	QADB-40-19	QADB-30-19.5	QADB-40-19.5	QADB-30-20	QADB-40-20
<b>Output Characteristics</b>										
DC Output	18V	18V	18.5V	18.5V	19V	19V	19.5V	19.5V	20V	20V
Rated Current	1.66A	2.20A	1.62A	2.16A	1.57A	2.10A	1.53A	2.05A	1.50A	2.00A
Ripple 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									
<b>Input Characteristics</b>										
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)									
<b>Environmental Characteristics</b>										
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									
<b>Characteristics</b>										
MTBF	300,000Hrs (25°C, Telecordia SR-332)									
Dimension (LxWxH)	88x35x27mm									
Weight	140g									

### PART NUMBER SYSTEM

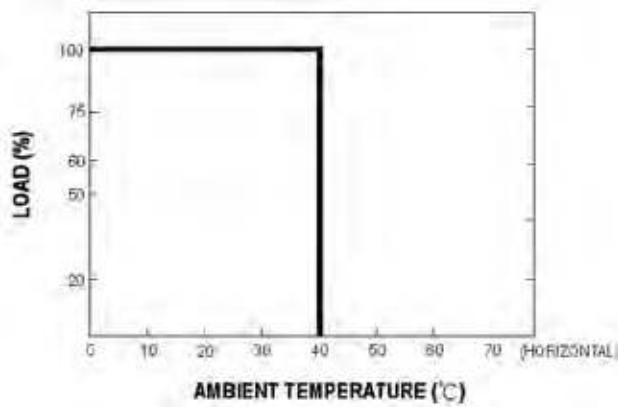


Please Reference Output Plug Type Page 49-50

### MECHANICAL SPECIFICATIONS



### DERATING CURVE



UNIT: mm



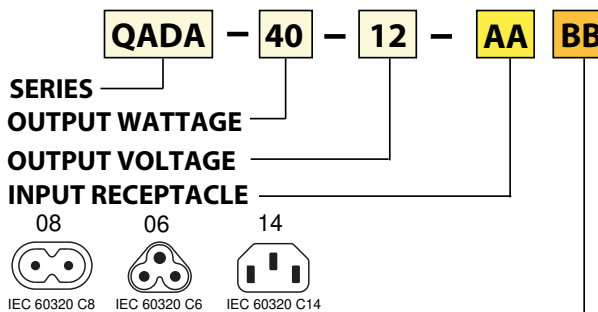
### Features:

- 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	QADA-40-9	QADA-40-12	QADA-40-15	QADA-40-16	QADA-40-18	QADA-40-24
<b>Output Characteristics</b>						
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					
<b>Input Characteristics</b>						
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)					
<b>Environmental Characteristics</b>						
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					
<b>Characteristics</b>						
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)					

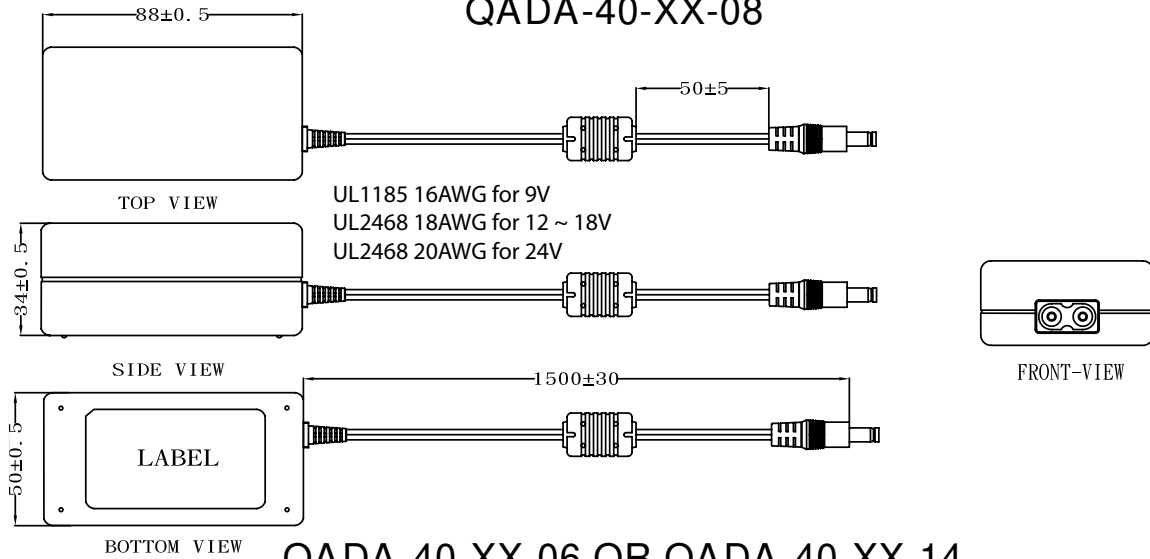
### PART NUMBER SYSTEM



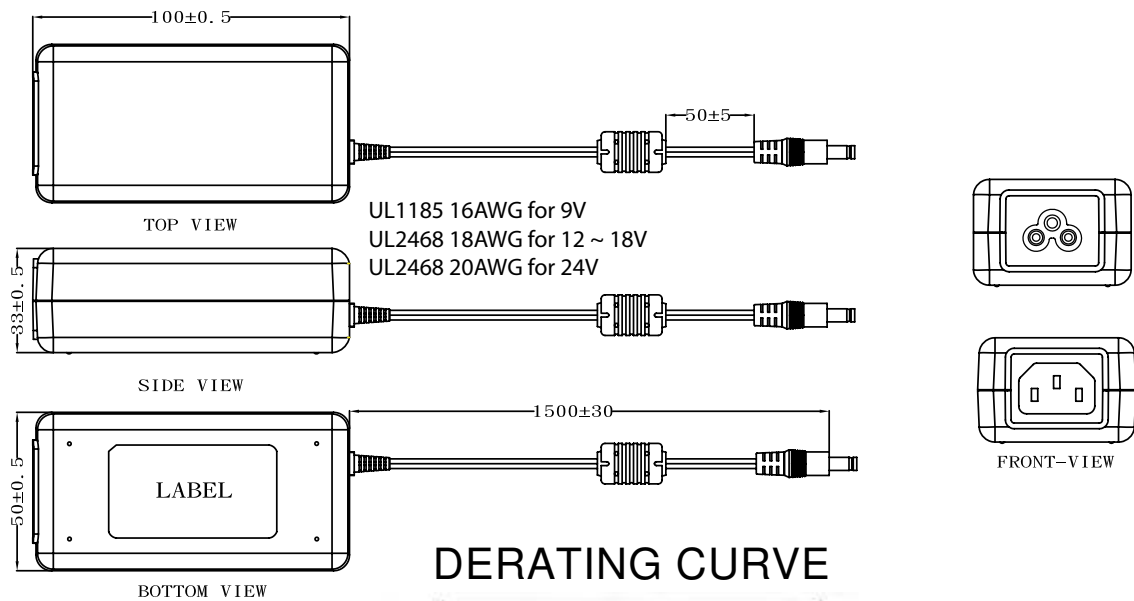
Please Reference Output Plug Type Page 49-50

MECHANICAL SPECIFICATIONS

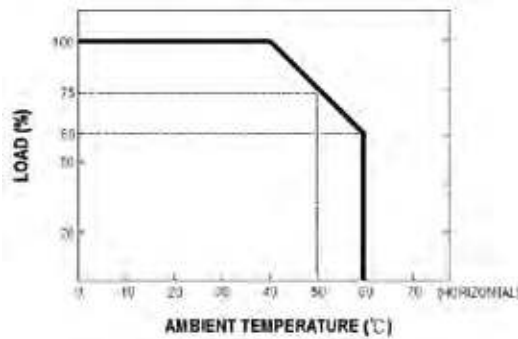
QADA-40-XX-08



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



DERATING CURVE



UNIT: mm



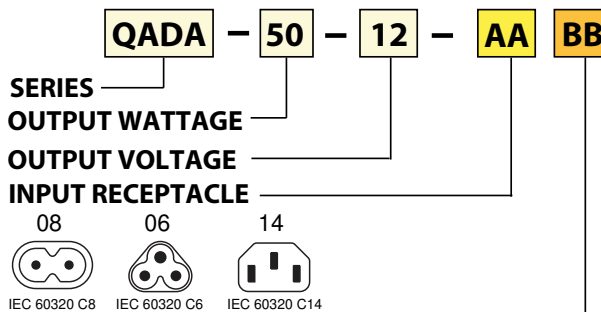
### Features:

- Universal AC input/ Full Range
- Energy Efficiency Level V
- ErP Step 2 Compliant
- NRCan and GEMS Compliant
- Output Protections: OVP/SCP/OC
- 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
<b>Output Characteristics</b>									
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								
<b>Input Characteristics</b>									
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)								
<b>Environmental Characteristics</b>									
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								
<b>Characteristics</b>									
MTBF	300,000Hrs (25°C, Telecordia SR-332)								
Dimension (LxWxH)	115x53x38mm								
Weight	278g								

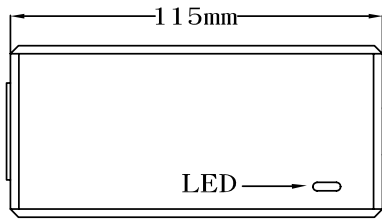
### PART NUMBER SYSTEM



**OUTPUT CONNECTOR**  
Please Reference Output Plug Type Page 49-50

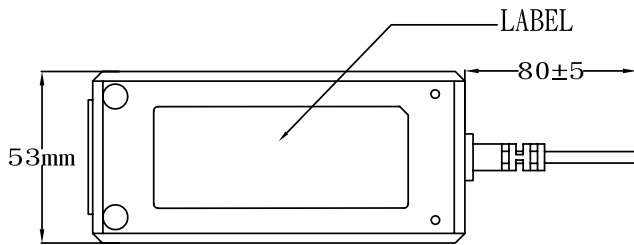


MECHANICAL SPECIFICATIONS

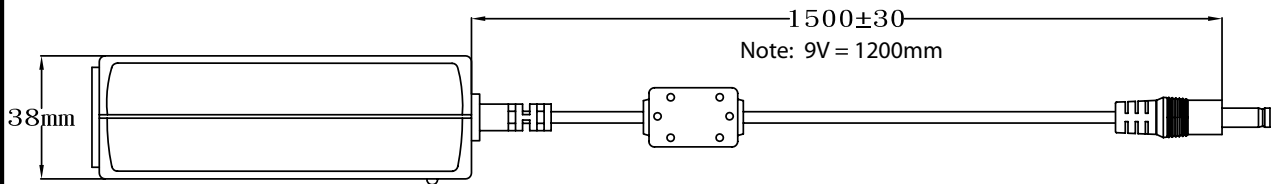


TOP-VIEW

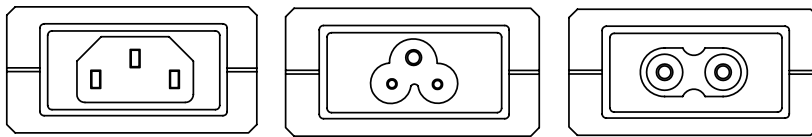
UL1185 16AWG for 9V  
 UL2468 16AWG for 12V  
 UL2468 18AWG for 13.5~24V  
 UL2468 20AWG for 48V



BOTTOM-VIEW

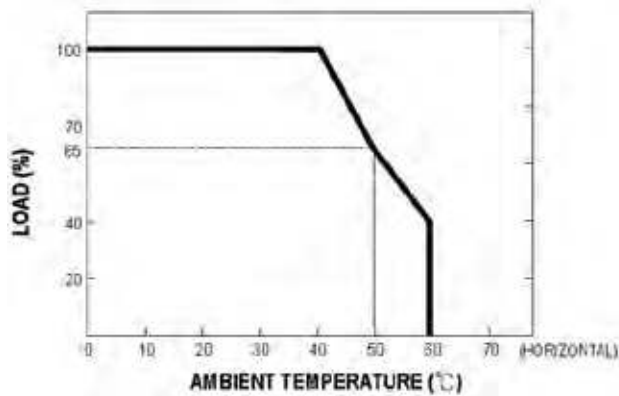


SIDE-VIEW



FRONT-VIEW

DERATING CURVE



UNIT: mm



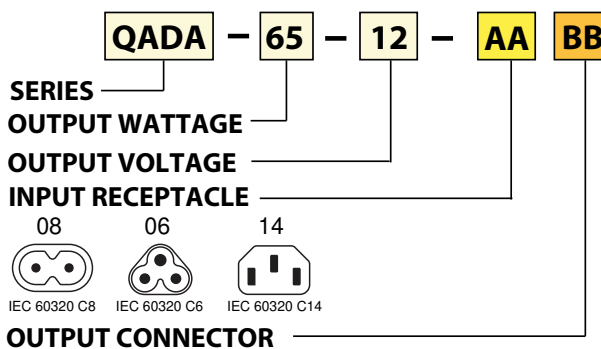
Features:

- 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



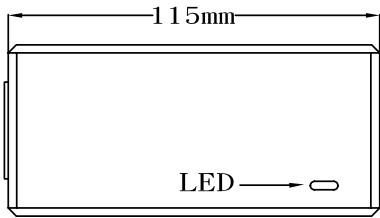
Model	QADA-65-12	QADA-65-15	QADA-65-16	QADA-65-18	QADA-65-19	QADA-72-19	QADA-65-20	QADA-65-24	QADA-72-24	QADA-65-30	QADA-65-32	QADA-65-48
<b>Output Characteristics</b>												
DC Output	12V	15V	16V	18V	19V	19V	20V	24V	24V	30V	32V	48V
Rated Current	5.0A	4.34A	4.07A	3.62A	3.43A	3.79A	3.25A	2.71A	3.00A	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											
<b>Input Characteristics</b>												
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)											
<b>Environmental Characteristics</b>												
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											
<b>Characteristics</b>												
MTBF	300,000Hrs (25°C, Telecordia SR-332)											
Dimension (LxWxH)	115x53x38mm											
Weight	310g											

**PART NUMBER SYSTEM**



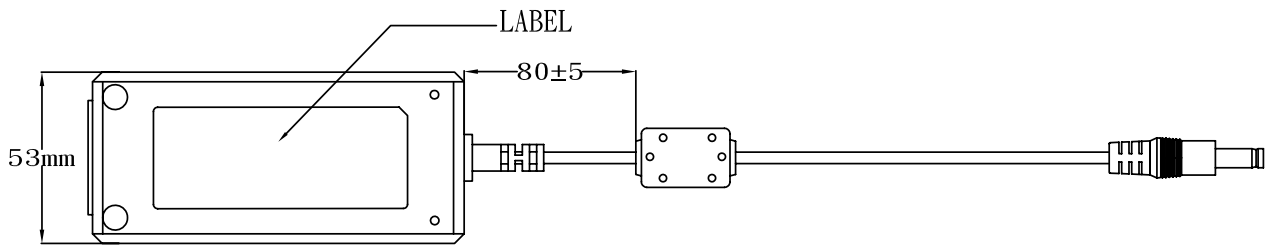
Please Reference Output Plug Type Page 49-50

### MECHANICAL SPECIFICATIONS

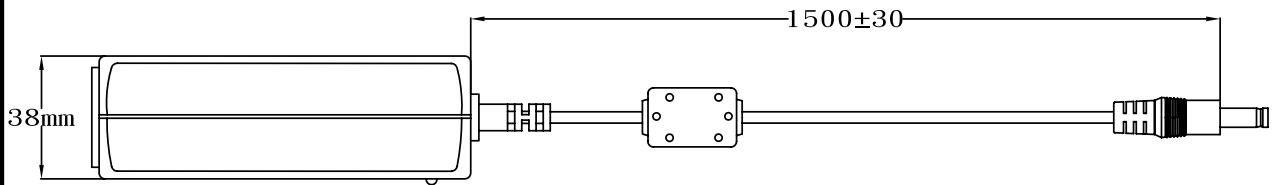


TOP-VIEW

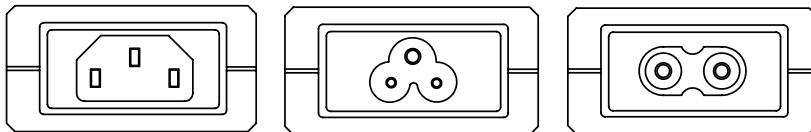
UL1185 16AWG for 12 ~ 16V  
UL2468 18AWG for 18 ~ 32V  
UL2468 20AWG for 48V



BOTTOM-VIEW

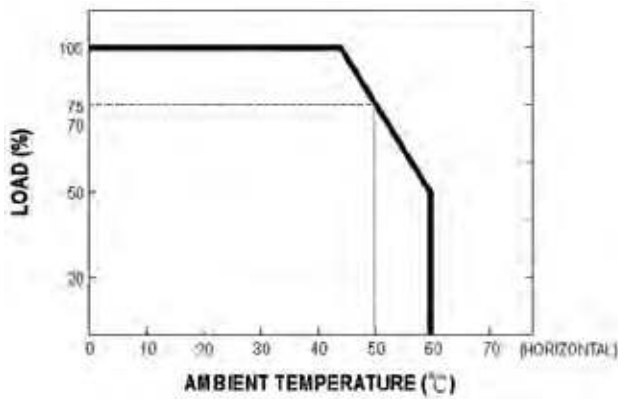


SIDE-VIEW



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

### PART NUMBER SYSTEM

**QADB - 65 - 15 - 06 BB**

**SERIES**  
**OUTPUT WATTAGE**  
**OUTPUT VOLTAGE**  
**INPUT RECEPTACLE**

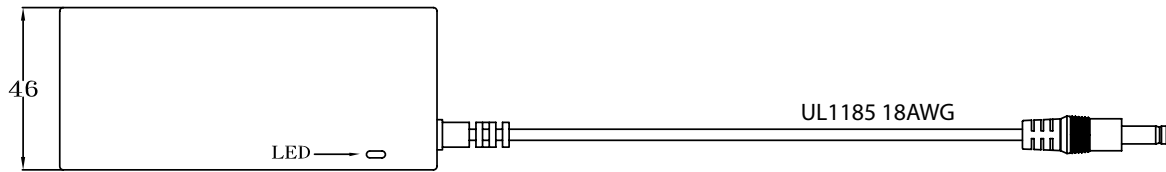


**OUTPUT CONNECTOR**

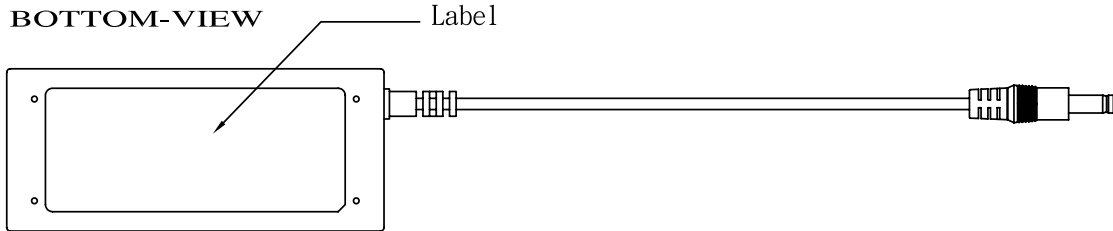
Please Reference Output Plug Type Page 49-50

### MECHANICAL SPECIFICATIONS

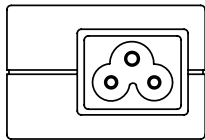
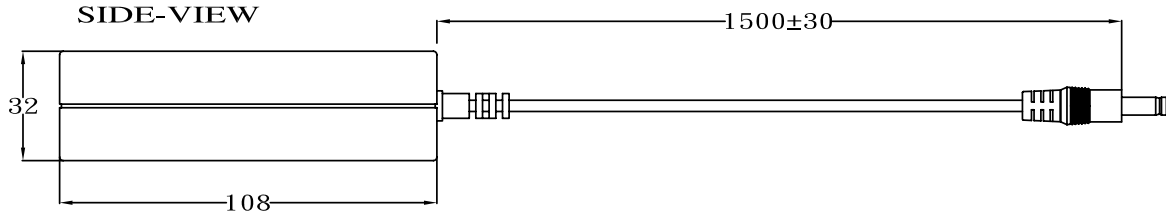
TOP-VIEW



BOTTOM-VIEW

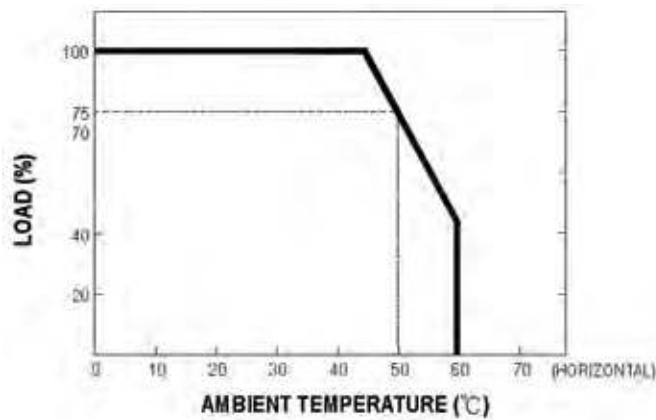


SIDE-VIEW



FRONT-VIEW

### DERATING CURVE



UNIT: mm



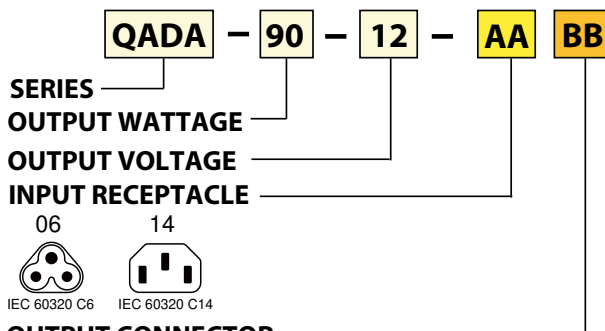
### Features:

- 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
<b>Output Characteristics</b>									
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								
<b>Input Characteristics</b>									
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								
<b>Environmental Characteristics</b>									
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								
<b>Characteristics</b>									
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)								

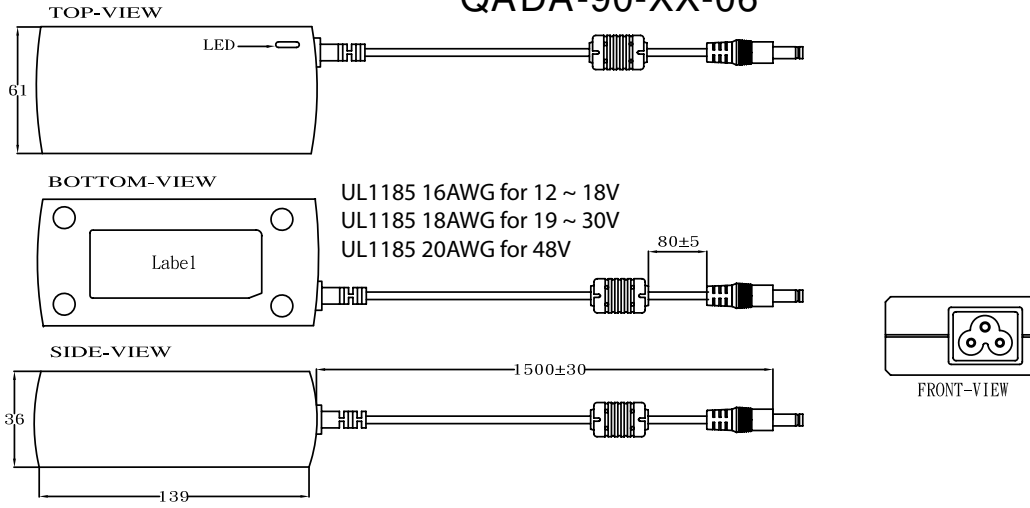
### PART NUMBER SYSTEM



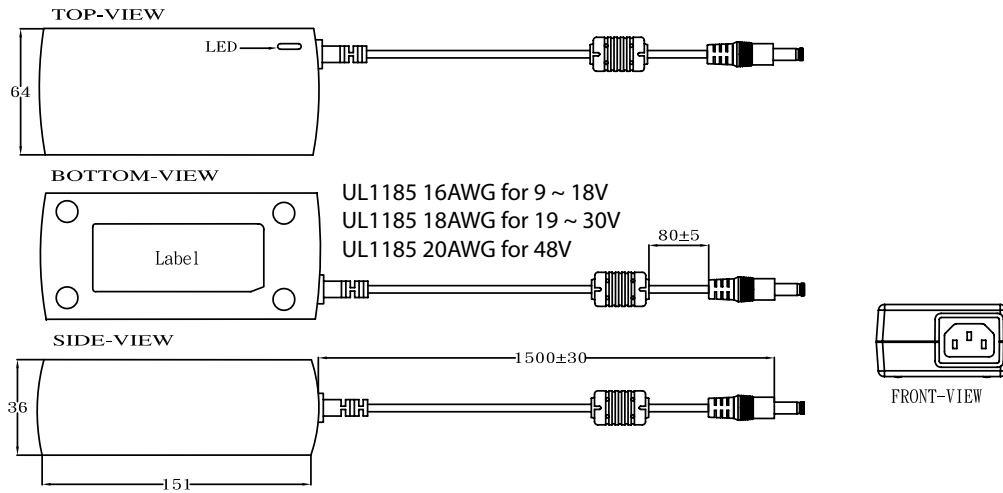
Please Reference Output Plug Type Page 49-50

MECHANICAL SPECIFICATIONS

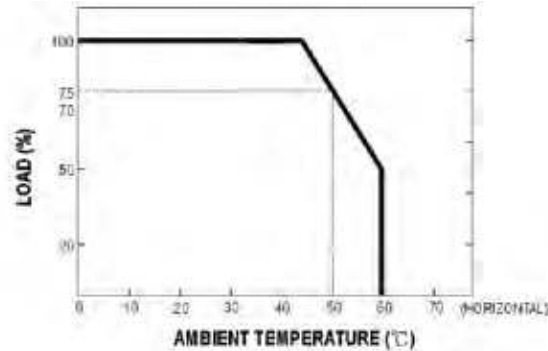
QADA-90-XX-06



QADA-90-XX-14



DERATING CURVE



UNIT: mm





### Features:

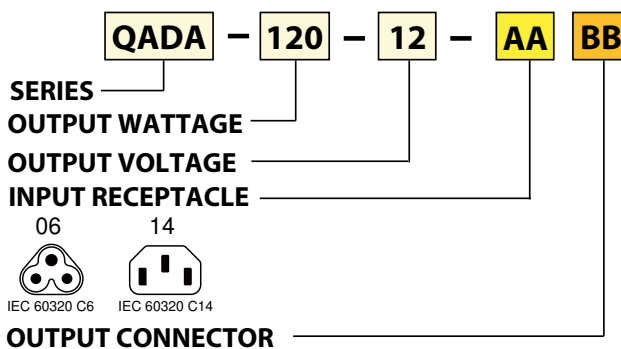
- Universal AC input/ Full Range
- Energy Efficiency Level V
- ErP Step 2 Compliant
- NRCan Compliant
- Output Protections: OVP/SCP/OC/OTP
- No Load Power Consumption <0.5W
- 1 Year Warranty



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

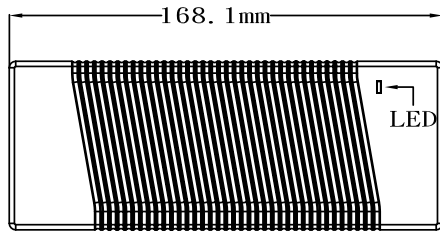
\* Note: 12V and 24V only

### PART NUMBER SYSTEM



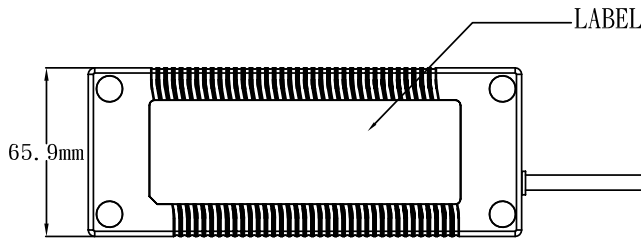
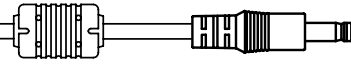
Please Reference Output Plug Type Page 49-50

MECHANICAL SPECIFICATIONS



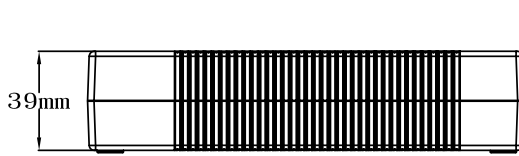
TOP-VIEW

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



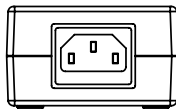
BOTTOM-VIEW

100±5

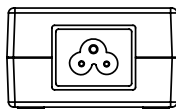


SIDE-VIEW

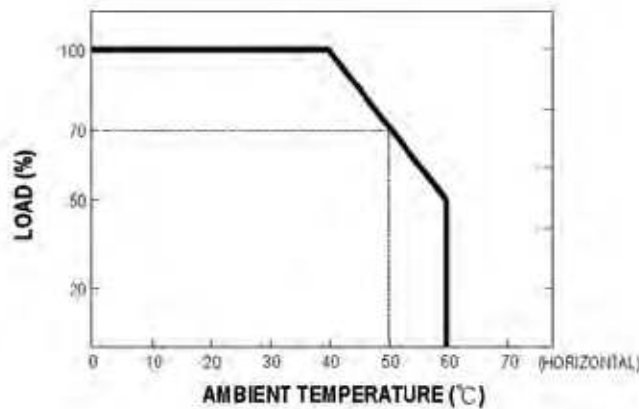
1500±30



FRONT-VIEW



DERATING CURVE



UNIT: mm



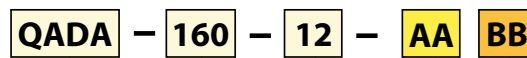
**Features:**

- 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

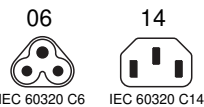


Model	QADA-160-12	QADA-160-19	QADA-160-24	QADA-160-48
<b>Output Characteristics</b>				
DC Output	12V	19V	24V	48V
Rated Current	12.5A	8.4A	6.6A	3.3A
Ripple and Noise	±2% Vo @ Rated Load			
Load Regulation (Typ.)	±5%			
Transient Response (Typ.)	0.5mS for 50% Load Change			
Hold-up Time (Typ.)	10mS @ Rated Load			
Output Protection	Short Circuit, Over Voltage, Over Current, Over Temp			
Ferrite Core	No			
<b>Input Characteristics</b>				
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			
<b>Environmental Characteristics</b>				
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			
<b>Characteristics</b>				
MTBF	300,000Hrs (25°C, Telecordia SR-332)			
Dimension (LxWxH)	175x74x42			
Weight	700g			

**PART NUMBER SYSTEM**



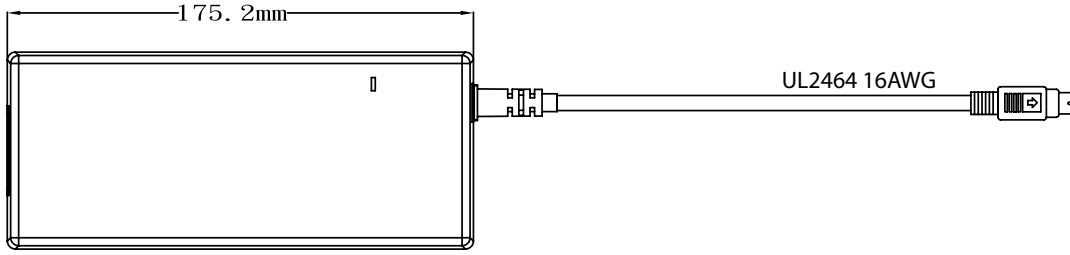
**SERIES**  
**OUTPUT WATTAGE**  
**OUTPUT VOLTAGE**  
**INPUT RECEPTACLE**



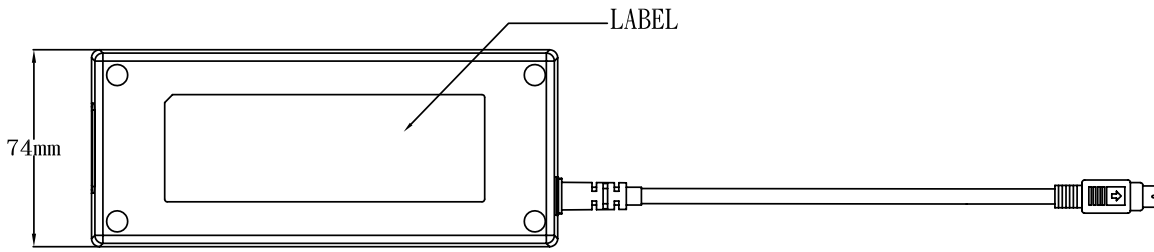
**OUTPUT CONNECTOR**

Please Reference Output Plug Type Page 49-50

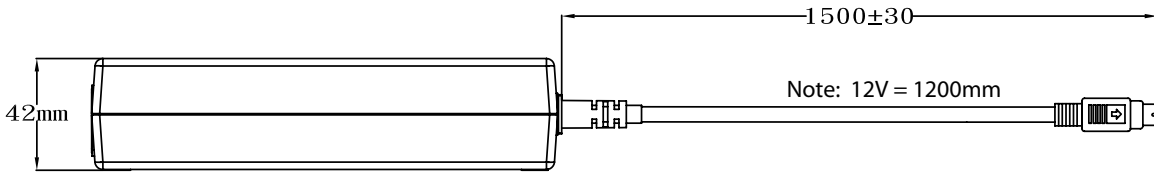
### MECHANICAL SPECIFICATIONS



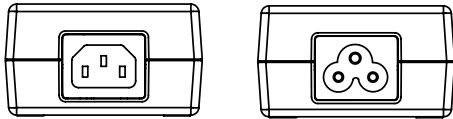
TOP-VIEW



BOTTOM-VIEW

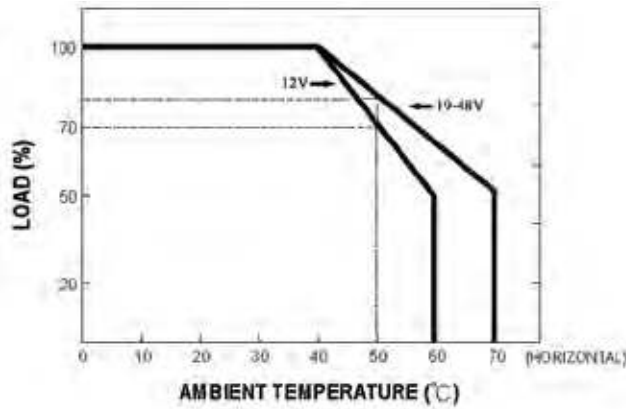


SIDE-VIEW



FRONT-VIEW

### DERATING CURVE



UNIT: mm



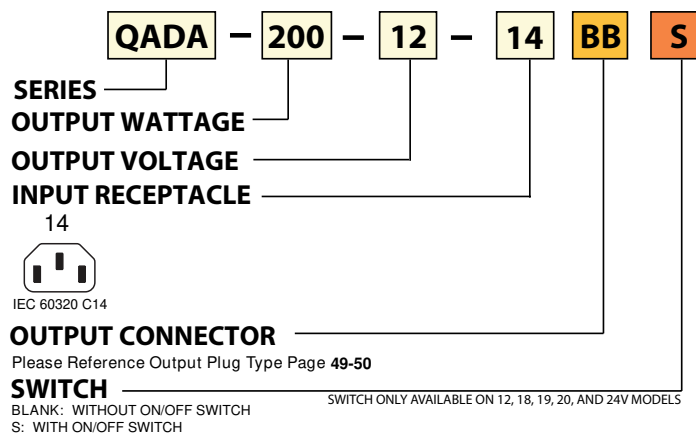
### Features:

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



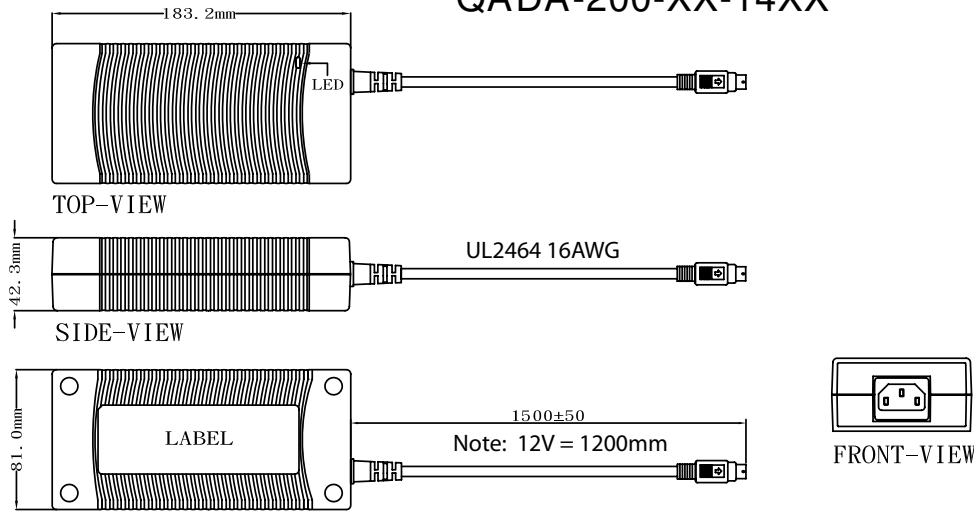
Model	QADA-200-12	QADA-200-13.5	QADA-200-18	QADA-200-19	QADA-200-20	QADA-200-24	QADA-200-48
<b>Output Characteristics</b>							
DC Output	12V	13.5V	18V	19V	20V	24V	48V
Rated Current	16.0A	14.0A	11.0A	10.5A	10.0A	8.3A	4.2A
Ripple and Noise	±2% Vo @ Rated Load						
Load Regulation (Typ.)	±5%						
Transient 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						
<b>Input Characteristics</b>							
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						
<b>Environmental Characteristics</b>							
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						
<b>Characteristics</b>							
MTBF	300,000Hrs (25°C, Telecordia SR-332)						
Dimension (LxWxH)	183x81x42mm (without switch), 203x81x42 (with switch)						
Weight	850g						

### PART NUMBER SYSTEM

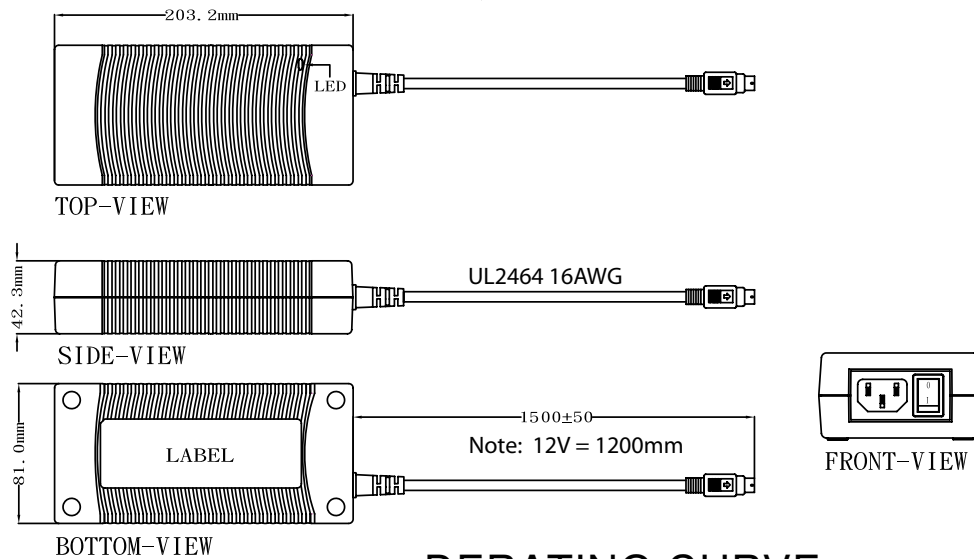


MECHANICAL SPECIFICATIONS

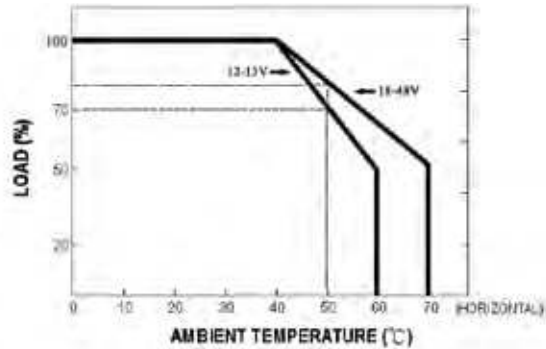
QADA-200-XX-14XX



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







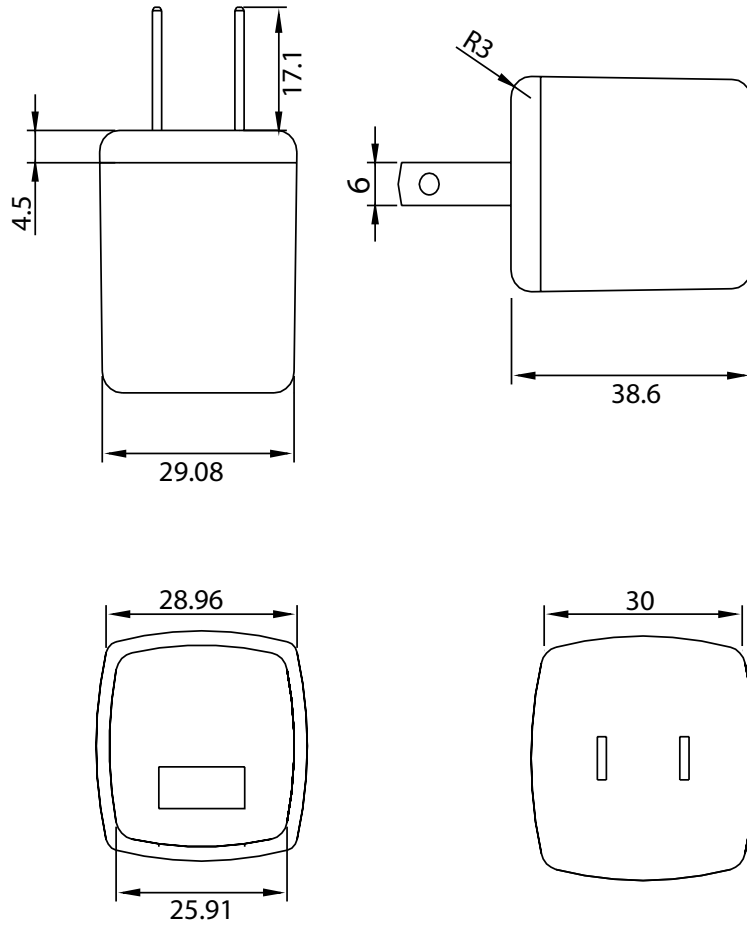
**Features:**

- 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
<b>Output Characteristics</b>		
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)	
<b>Input Characteristics</b>		
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	
<b>Protection</b>		
Over Load (OLP)	Shutdown, auto recovery	
Over Voltage (OVP)	Shutdown, auto recovery	
Short Circuit (SCP)	Shutdown, auto restart	
<b>Environmental Characteristics</b>		
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	
<b>General Characteristics</b>		
MTBF	More than 50,000Hrs (25°C, Full load)	
Dimension (LxWxH)	38.6x30x30mm	

MECHANICAL SPECIFICATIONS



UNIT: mm



### Features:

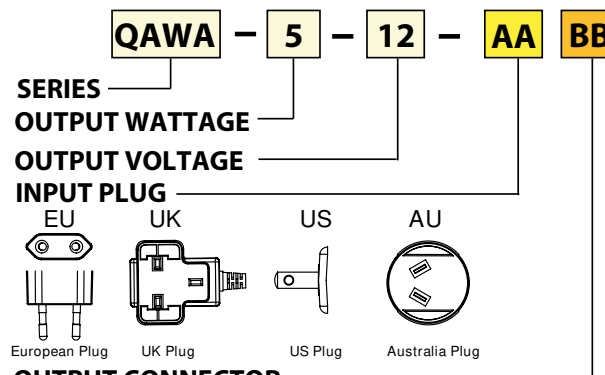
- Universal AC input/ Full Range
- Energy Efficiency Level V
- ErP Step 2 Compliant
- NRCAN and GEMS Compliant
- Output Protections: OVP/SCP/OCV
- No Load Power Consumption <0.1W
- 1 Year Warranty



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
<b>Output Characteristics</b>										
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									
<b>Input Characteristics</b>										
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									
<b>Environmental Characteristics</b>										
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									
<b>Characteristics</b>										
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

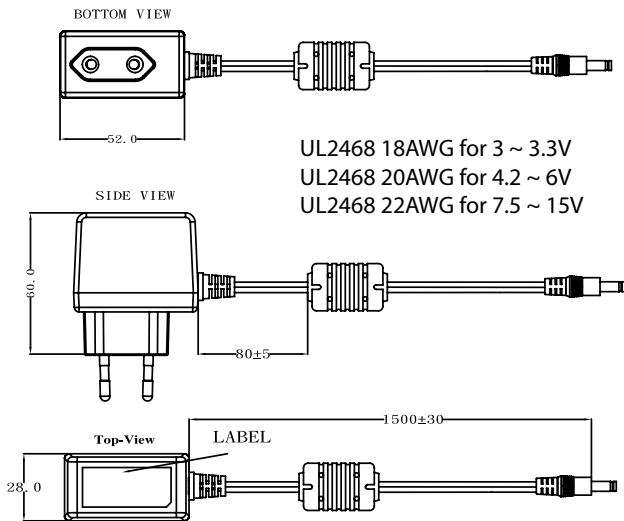
### PART NUMBER SYSTEM



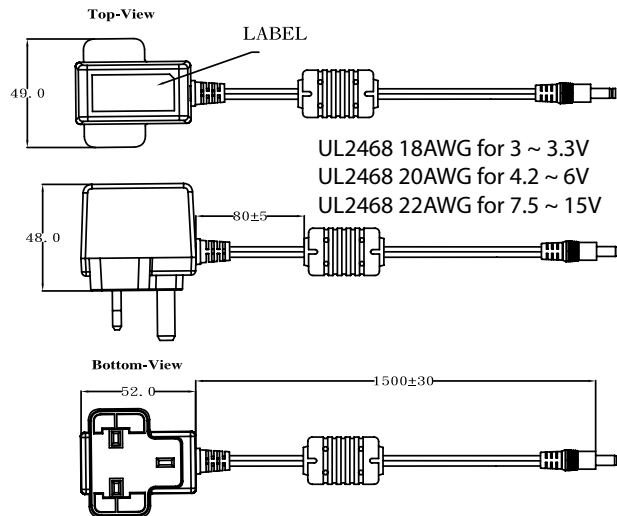
Please Reference Output Plug Type Page 49-50

MECHANICAL SPECIFICATIONS

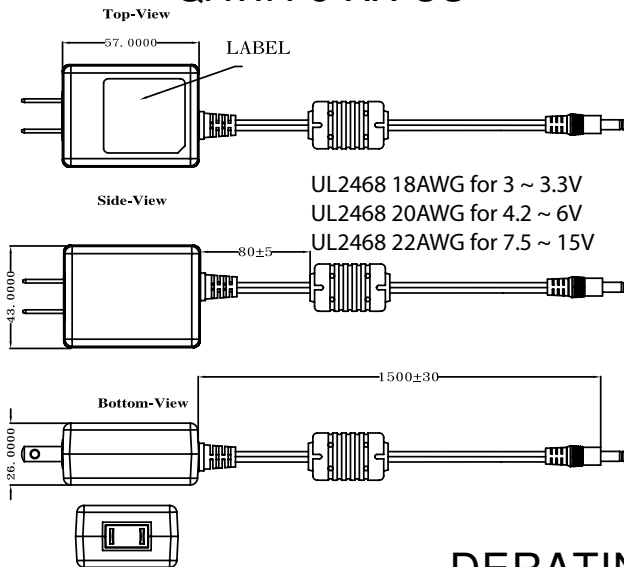
QAWA-5-XX-EU



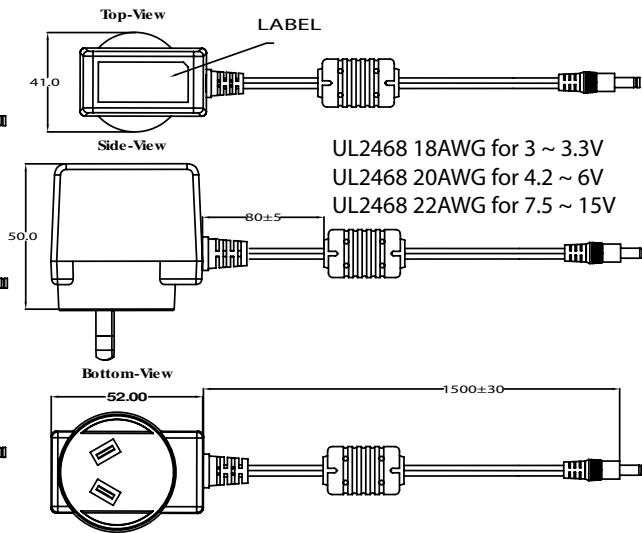
QAWA-5-XX-UK



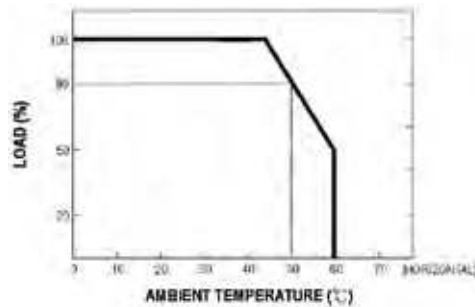
QAWA-5-XX-US



QAWA-5-XX-AU



DERATING CURVE



UNIT: mm



### Features:

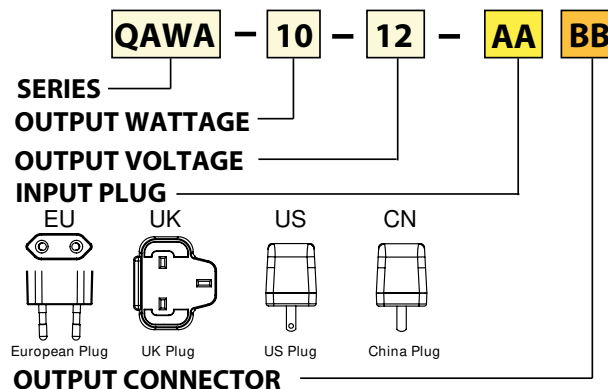
- Universal AC input/ Full Range
- Energy Efficiency Level V
- ErP Step 2 Compliant
- NRCan Compliant
- Output Protections: OVP/SCP/OC
- No Load Power Consumption <0.3W
- 1 Year Warranty



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

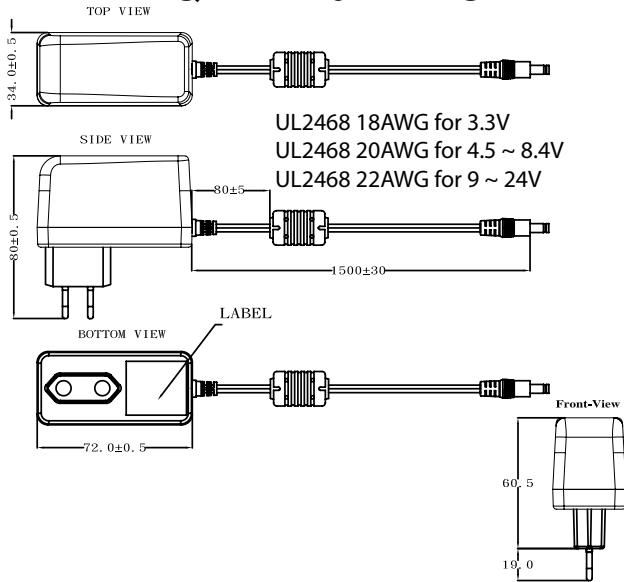
### PART NUMBER SYSTEM



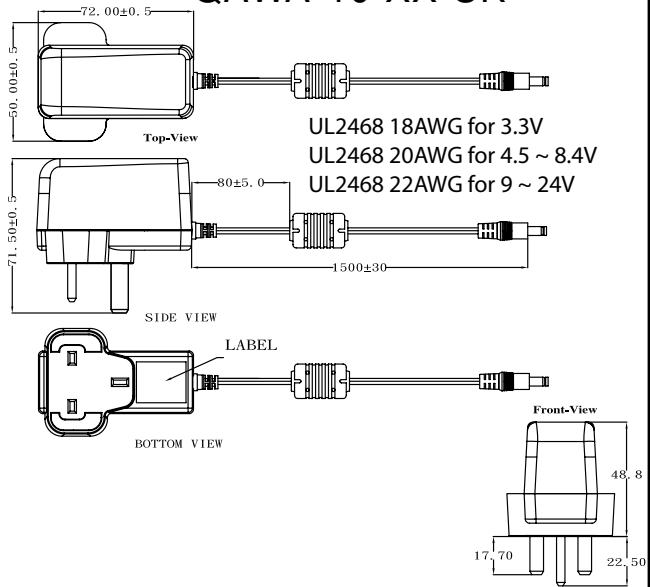
Please Reference Output Plug Type Page 49-50

MECHANICAL SPECIFICATIONS

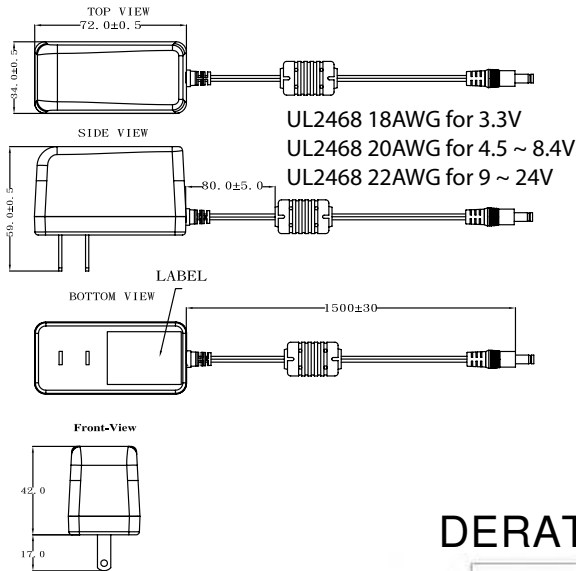
QAWA-10-XX-EU



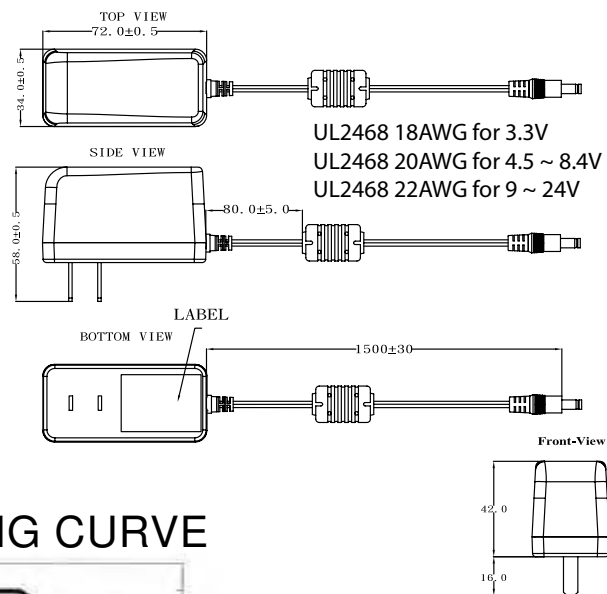
QAWA-10-XX-UK



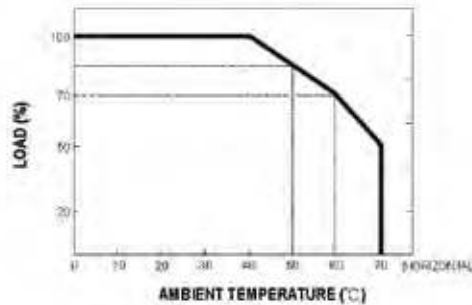
QAWA-10-XX-US



QAWA-10-XX-CN



DERATING CURVE



UNIT: mm



### Features:

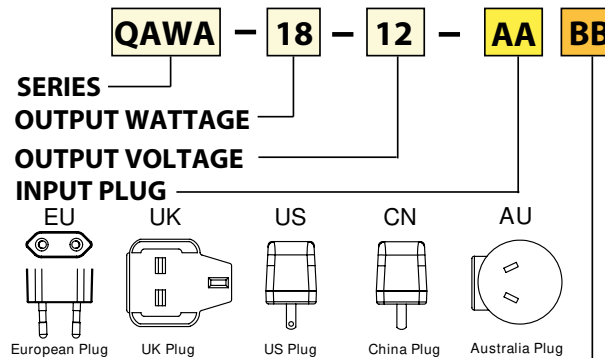
- Universal AC input/ Full Range
- Energy Efficiency Level V
- ErP Step 2 Compliant
- NRCan and GEMS Compliant
- Output Protections: OVP/SCP/OC
- No Load Power Consumption <0.3W
- 1 Year Warranty



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



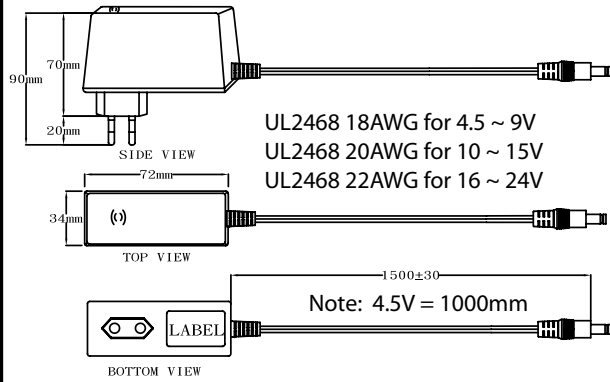
### OUTPUT CONNECTOR

Please Reference Output Plug Type Page 49-50

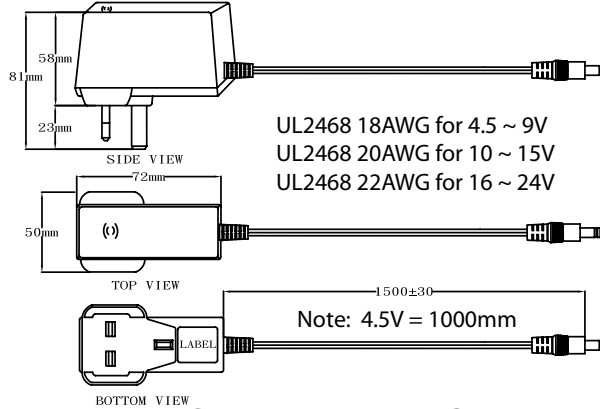


MECHANICAL SPECIFICATIONS

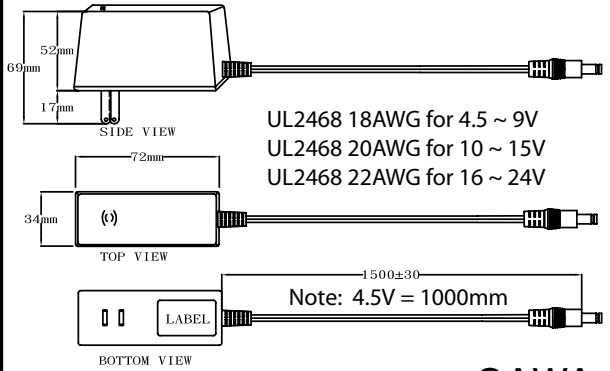
QAWA-18-XX-EU



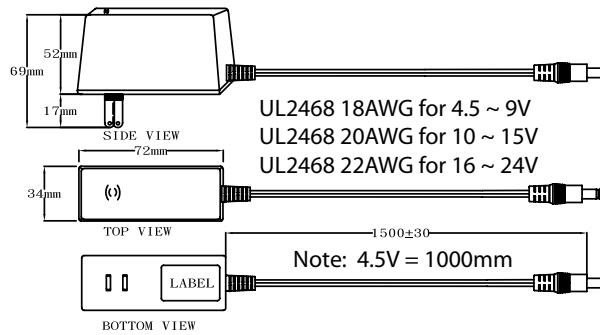
QAWA-18-XX-UK



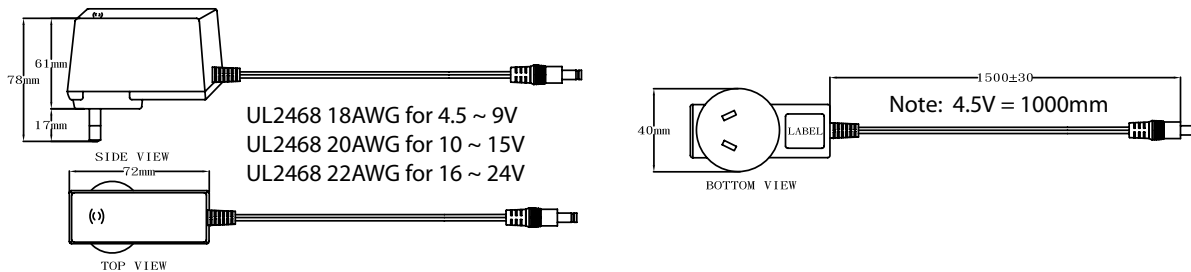
QAWA-18-XX-US



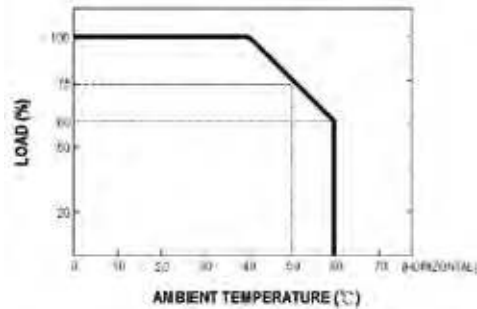
QAWA-18-XX-CN



QAWA-18-XX-AU



DERATING CURVE



UNIT: mm



### Features:

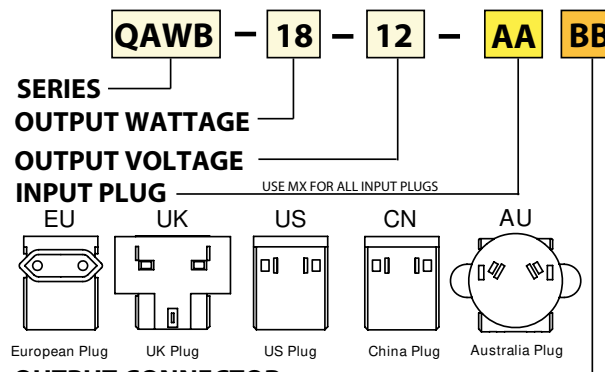
- Universal AC input/ Full Range
- Energy Efficiency Level V
- ErP Step 2 Compliant
- NRCAN and GEMS Compliant
- Output Protections: OVP/SCP/OCV
- No Load Power Consumption <0.3W
- 1 Year Warranty



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

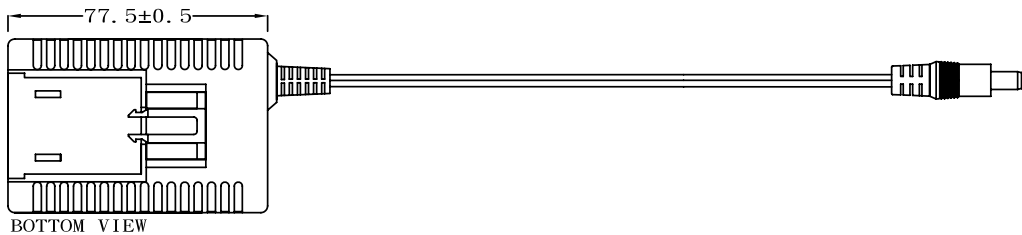
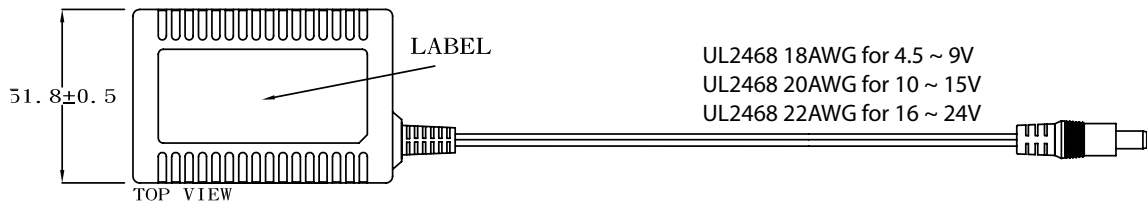
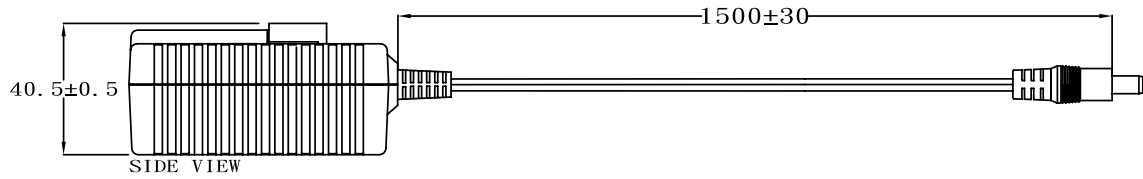
Note: Safety Approvals  
 EU: CB, GS, CE, LPS  
 UK: CB, CE, LPS  
 US: CB, UL, cUL, FCC, PSE, BSMI, LPS  
 AU: CB, RCM, LPS  
 CN: CB, CCC, LPS

### PART NUMBER SYSTEM

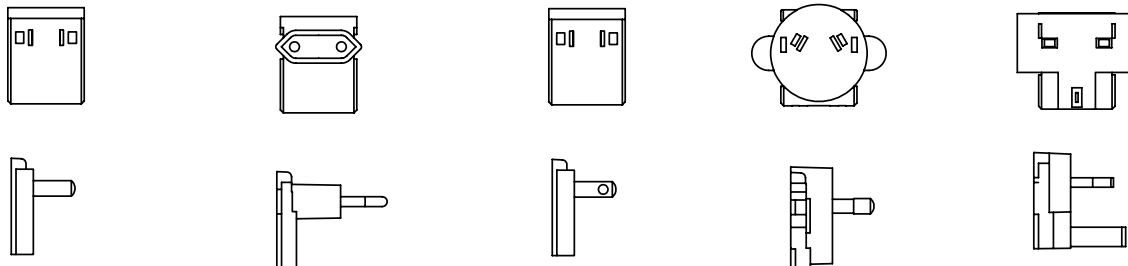


Please Reference Output Plug Type Page 49-50

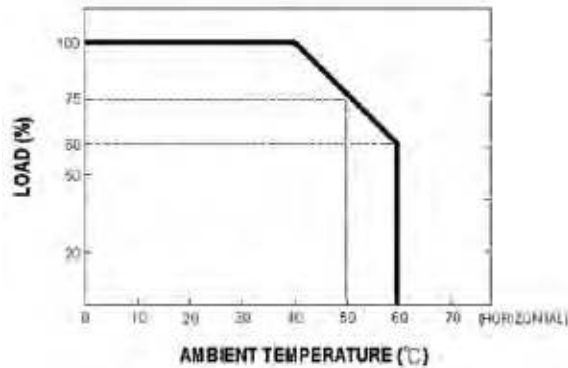
MECHANICAL SPECIFICATIONS



CHANGEABLE PLUGS



DERATING CURVE



UNIT: mm



### Features:

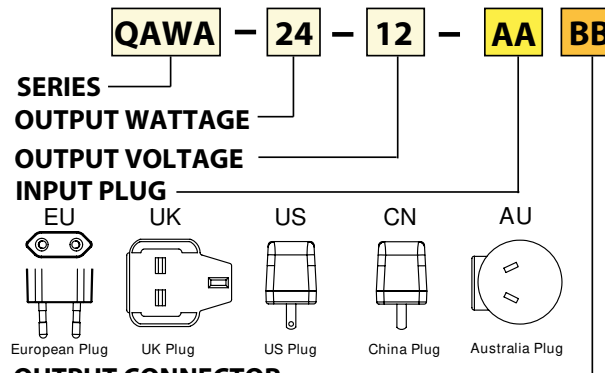
- Universal AC input/ Full Range
- Energy Efficiency Level V
- ErP Step 2 Compliant
- NRCAN and GEMS Compliant
- Output Protections: OVP/SCP/OCV
- No Load Power Consumption <0.3W
- 1 Year Warranty



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

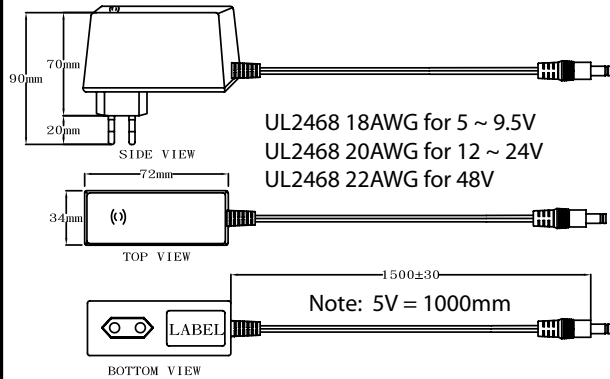
### PART NUMBER SYSTEM



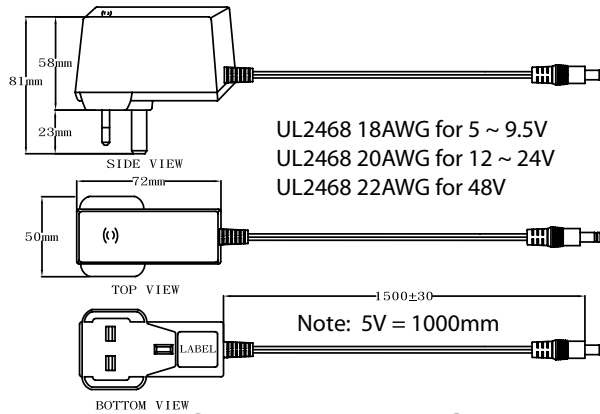
OUTPUT CONNECTOR  
 Please Reference Output Plug Type Page 49-50

MECHANICAL SPECIFICATIONS

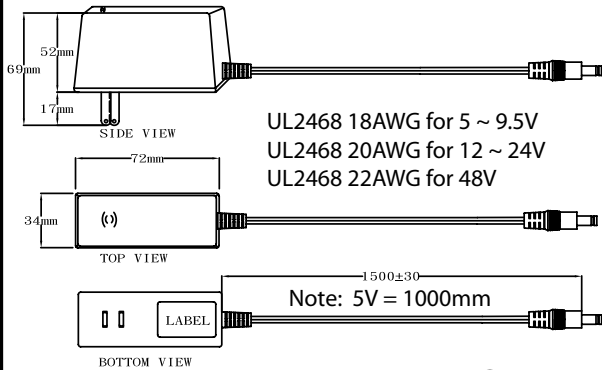
QAWA-24-XX-EU



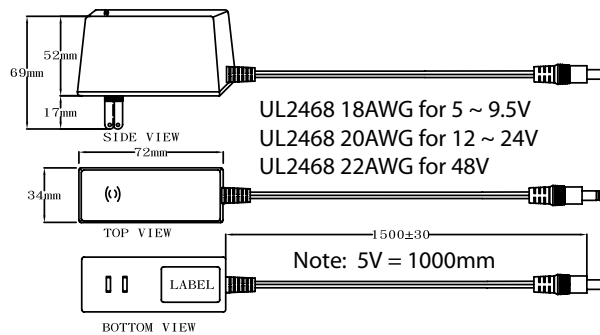
QAWA-24-XX-UK



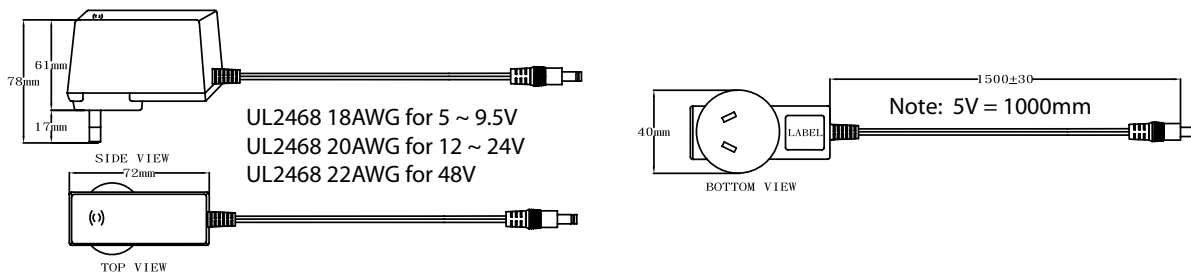
QAWA-24-XX-US



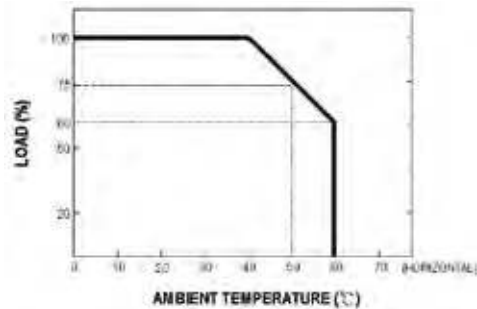
QAWA-24-XX-CN



QAWA-24-XX-AU



DERATING CURVE



UNIT: mm



### Features:

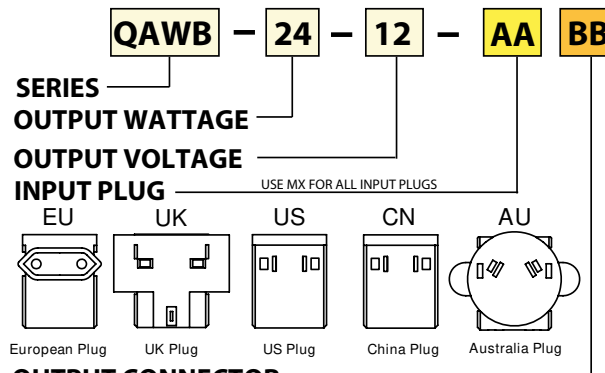
- Universal AC input/ Full Range
- Energy Efficiency Level V
- ErP Step 2 Compliant
- NRCAN and GEMS Compliant
- Output Protections: OVP/SCP/OC
- No Load Power Consumption <0.3W
- 1 Year Warranty



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
<b>Output Characteristics</b>									
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								
<b>Input Characteristics</b>									
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								
<b>Environmental Characteristics</b>									
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								
<b>Characteristics</b>									
MTBF	300,000Hrs (25°C, Telecordia SR-332)								
Dimension (LxWxH)	78x52x41mm								
Weight	158g								

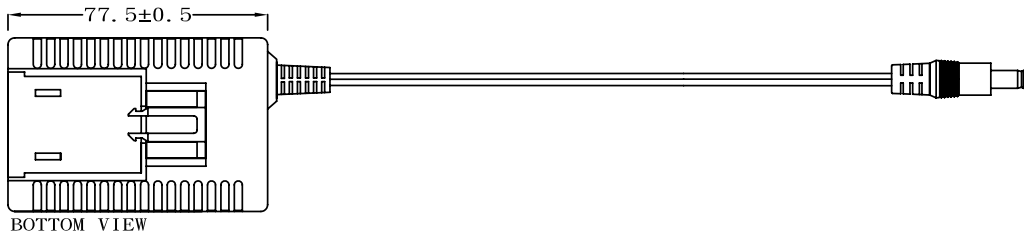
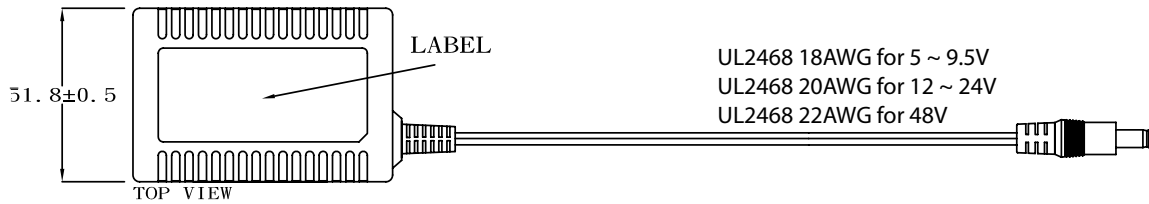
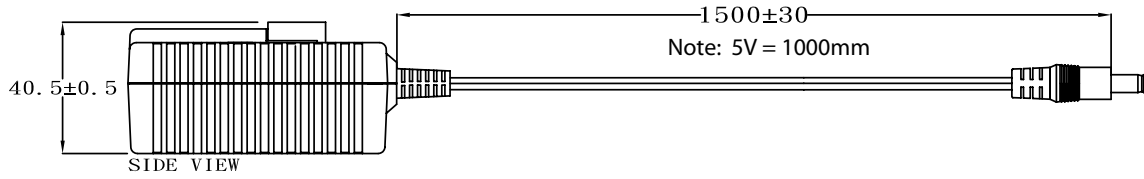
Note: Safety Approvals  
 EU: CB, GS, CE, LPS  
 UK: CB, CE, LPS  
 US: CB, UL, cUL, FCC, PSE, BSMI, LPS  
 AU: CB, RCM, LPS  
 CN: CB, CCC, LPS

### PART NUMBER SYSTEM

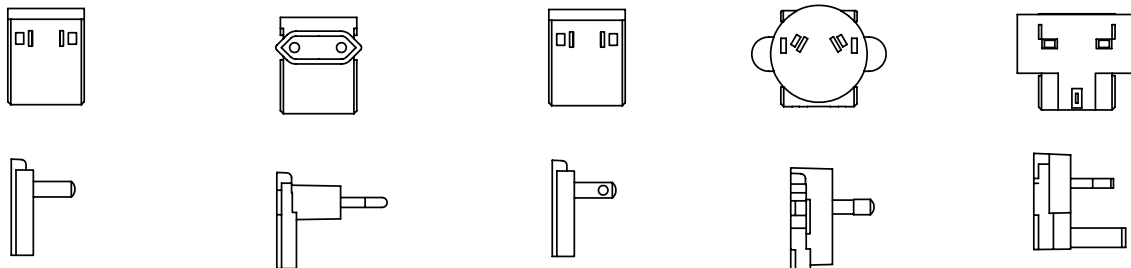


Please Reference Output Plug Type Page 49-50

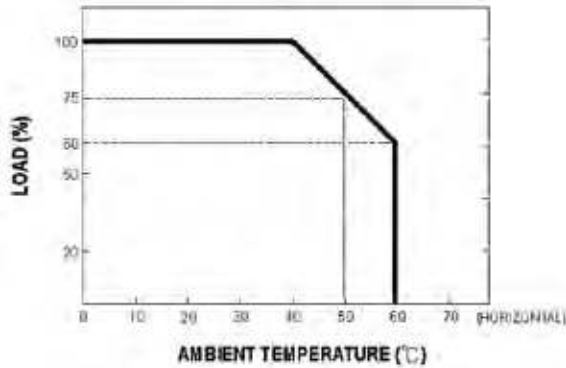
MECHANICAL SPECIFICATIONS



CHANGEABLE PLUGS



DERATING CURVE



UNIT: mm





### Features:

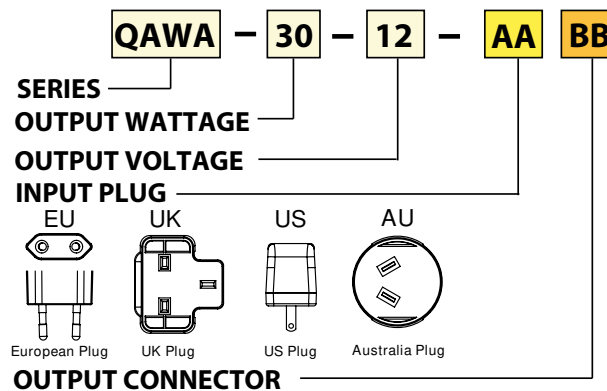
- Universal AC input/ Full Range
- Energy Efficiency Level V
- ErP Step 2 Compliant
- NRCan and GEMS Compliant
- Output Protections: OVP/SCP/OC
- No Load Power Consumption <0.3W
- 1 Year Warranty



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
<b>Output Characteristics</b>											
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										
<b>Input Characteristics</b>											
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										
<b>Environmental Characteristics</b>											
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										
<b>Characteristics</b>											
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

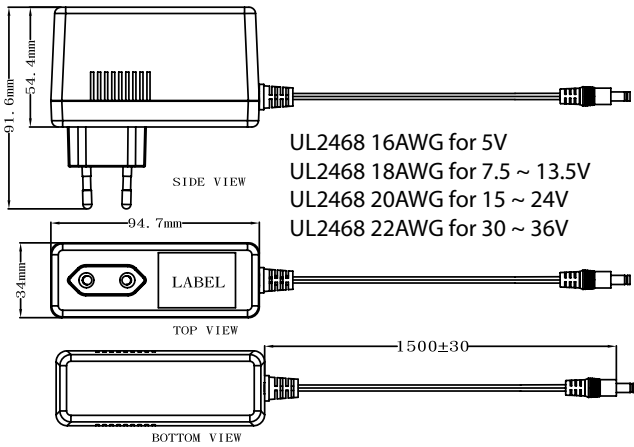
### PART NUMBER SYSTEM



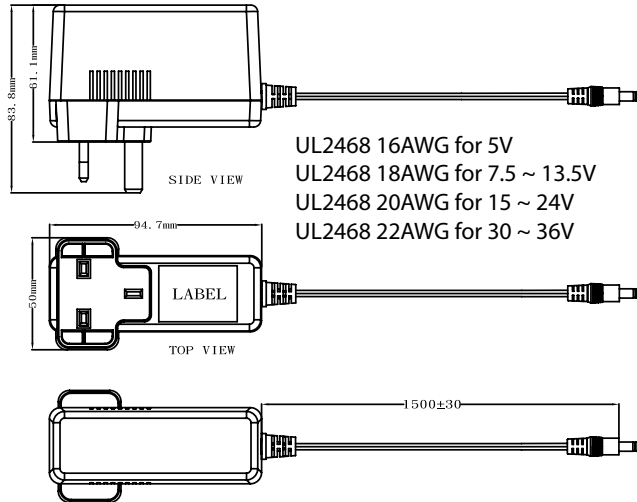
Please Reference Output Plug Type Page 49-50

MECHANICAL SPECIFICATIONS

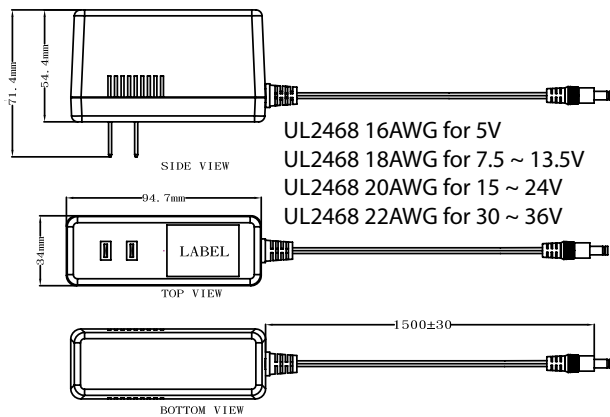
QAWA-30/36-XX-EU



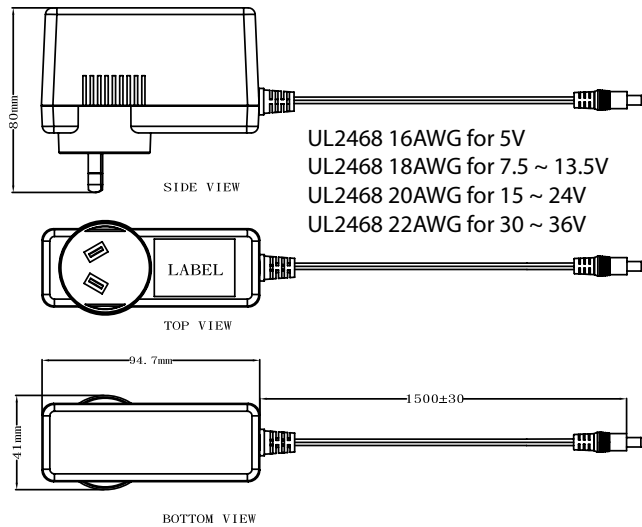
QAWA-30/36-XX-UK



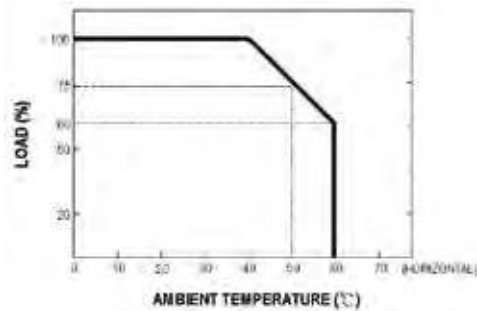
QAWA-30/36-XX-US



QAWA-30/36-XX-AU



DERATING CURVE



UNIT: mm



### Features:

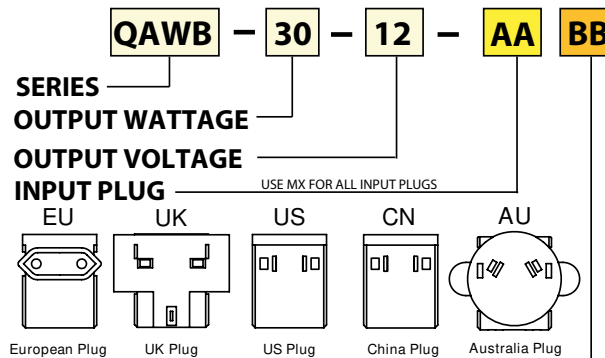
- Universal AC input/ Full Range
- Energy Efficiency Level V
- ErP Step 2 Compliant
- NRCAN and GEMS Compliant
- Output Protections: OVP/SCP/OC
- No Load Power Consumption <0.3W
- 1 Year Warranty



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

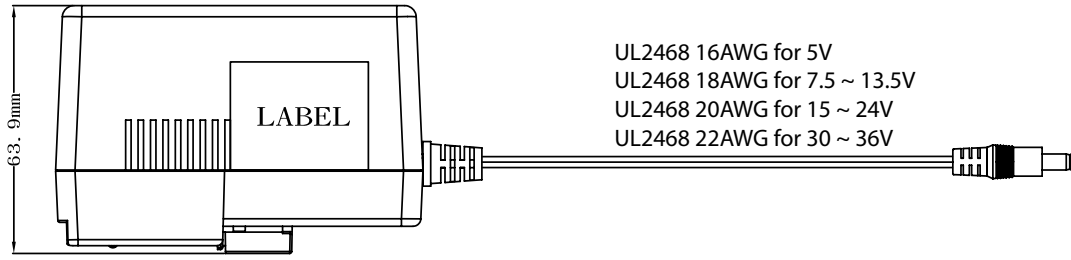
Note: Safety Approvals  
 EU: CB, GS, CE, LPS  
 UK: CB, CE, LPS  
 US: CB, UL, cUL, FCC, PSE, BSMI, LPS  
 AU: CB, RCM, LPS  
 CN: CB, CCC, LPS

### PART NUMBER SYSTEM

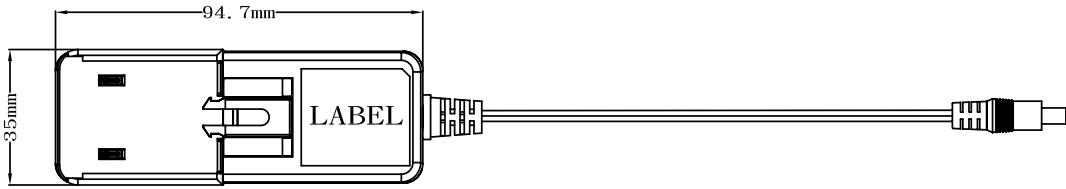


Please Reference Output Plug Type Page 49-50

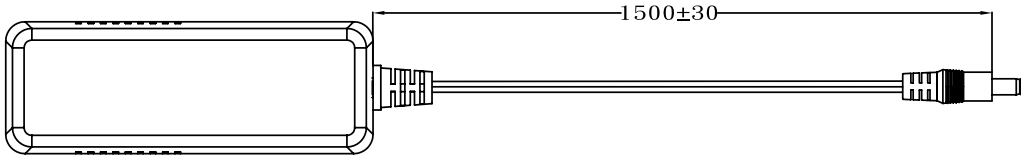
### MECHANICAL SPECIFICATIONS



SIDE VIEW

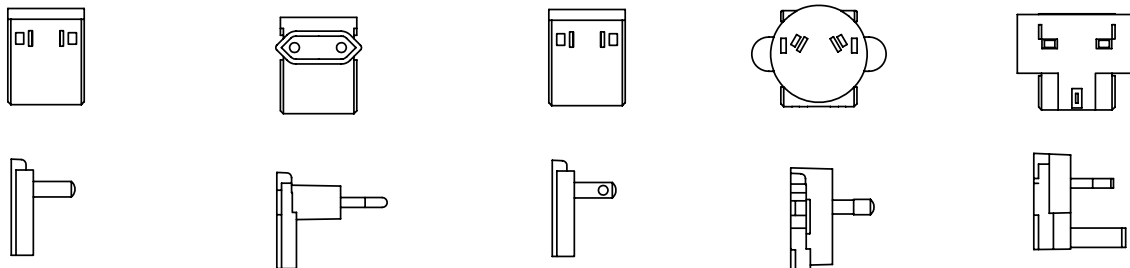


TOP VIEW

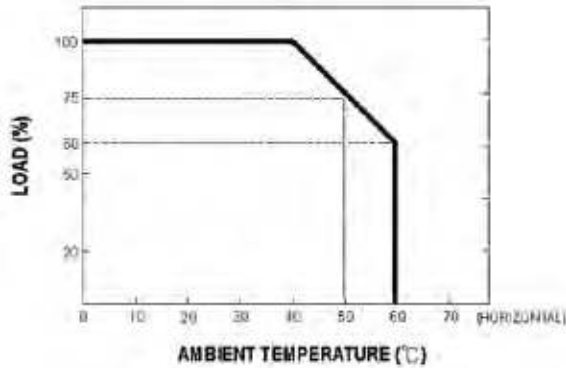


BOTTOM VIEW

### 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





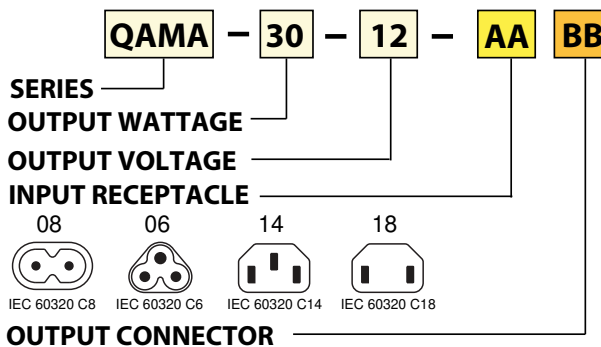
### Features:

- 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/OC
- No Load Power Consumption <0.3W
- 1 Year Warranty



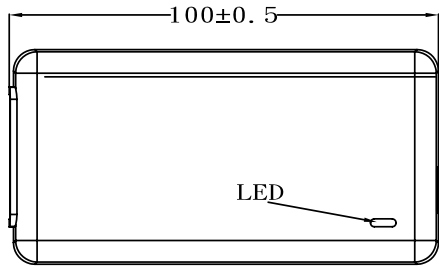
Model	QAMA-30-5	QAMA-30-7.5	QAMA-30-9	QAMA-30-12	QAMA-30-15	QAMA-30-18	QAMA-30-24
<b>Output Characteristics</b>							
DC Output	5V	7.5V	9V	12V	15V	18V	24V
Rated Current	4.00A	4.00A	3.34A	2.50A	2.00A	1.67A	1.25A
Ripple and Noise	±2% Vo @ Rated Load						
Load Regulation (Typ.)	±5%						
Transient Response (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						
<b>Input Characteristics</b>							
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)						
<b>Environmental Characteristics</b>							
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						
<b>Characteristics</b>							
MTBF	300,000Hrs (25°C, Telecordia SR-332)						
Dimension (LxWxH)	100x50x34mm						
Weight	210g						

### PART NUMBER SYSTEM



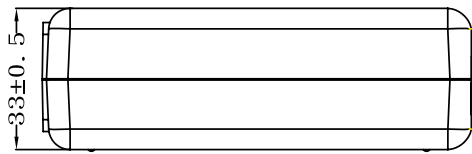
Please Reference Output Plug Type Page 49-50

MECHANICAL SPECIFICATIONS

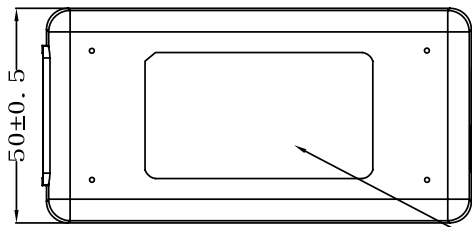


TOP VIEW

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

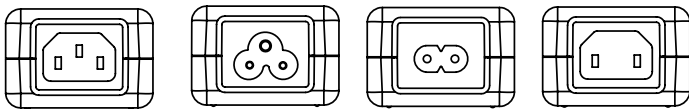


SIDE VIEW



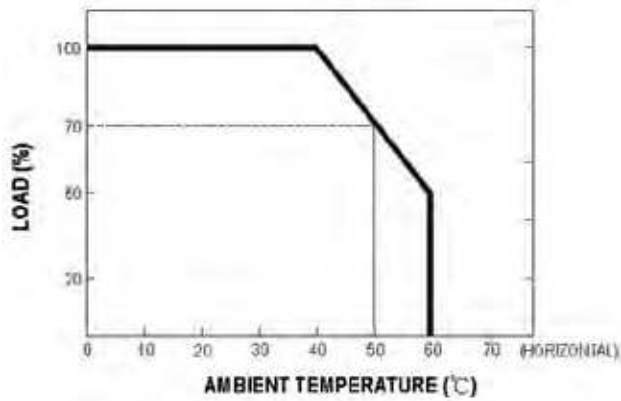
BOTTOM VIEW

Label



FRONT-VIEW

DERATING CURVE



UNIT: mm





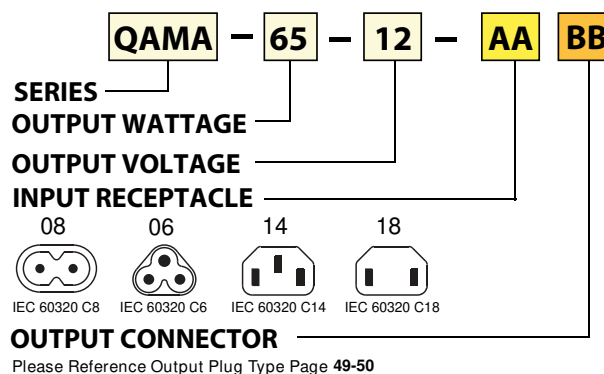
### Features:

- 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/OCV
- No Load Power Consumption <0.5W
- 1 Year Warranty

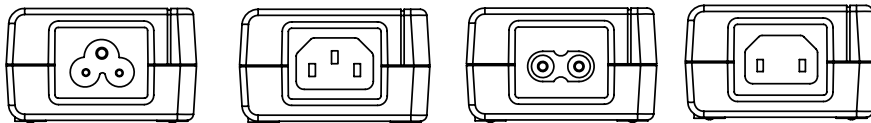
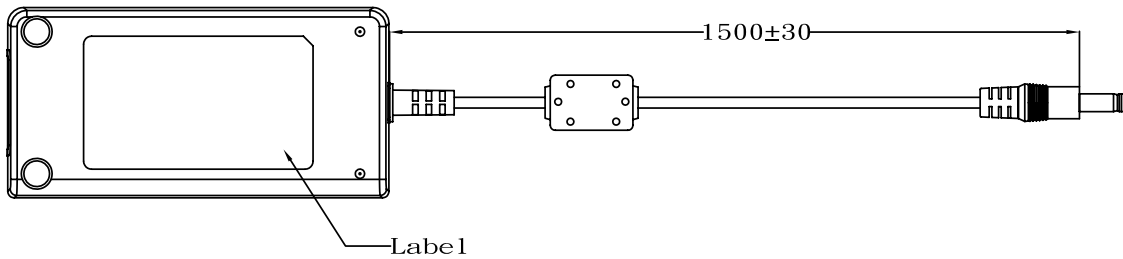
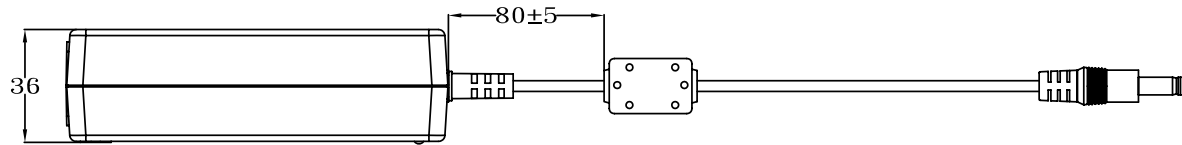
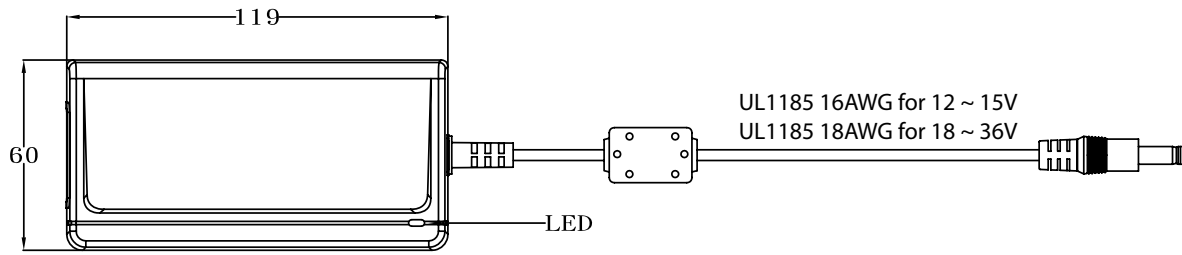


Model	QAMA-65-12	QAMA-65-15	QAMA-65-18	QAMA-65-19	QAMA-65-24	QAMA-65-36
<b>Output Characteristics</b>						
DC Output	12V	15V	18V	19V	24V	36V
Rated Current	5.0A	4.34A	3.62A	3.43A	2.71A	1.81A
Ripple and Noise	±2% Vo @ Rated Load					
Load Regulation (Typ.)	±5%					
Transient Response (Typ.)	0.5mS for 50% Load Change					
Hold-up Time (Typ.)	10mS @ Rated Load					
Output Protection	Short Circuit, Over Voltage, Over Current					
Ferrite Core	Yes					
<b>Input Characteristics</b>						
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)					
<b>Environmental Characteristics</b>						
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					
<b>Characteristics</b>						
MTBF	300,000Hrs (25°C, Telecordia SR-332)					
Dimension (LxWxH)	119x60x36mm					
Weight	350g					

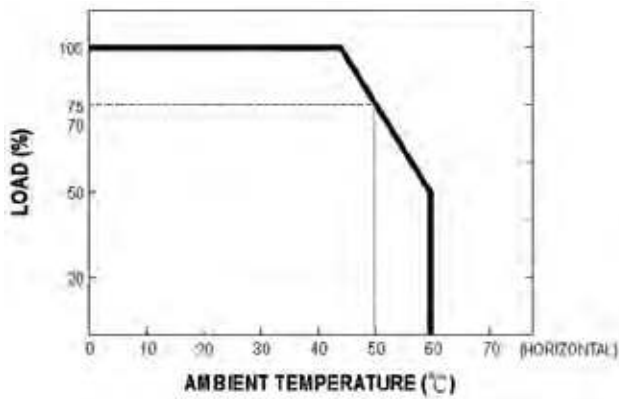
### PART NUMBER SYSTEM



### 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/OCV
- No Load Power Consumption <0.5W
- 2 Year Warranty

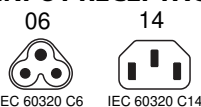


Model	QAMA-90-12	QAMA-90-15	QAMA-90-19	QAMA-90-24	QAMA-90-36	QAMA-90-48
<b>Output Characteristics</b>						
DC Output	12V	15V	19V	24V	36V	48V
Rated Current	7.5A	6.00A	4.74A	3.75A	2.50A	1.88A
Ripple and Noise	±2% Vo @ Rated Load					
Load Regulation (Typ.)	±5%					
Transient Response (Typ.)	0.5mS for 50% Load Change					
Hold-up Time (Typ.)	10mS @ Rated Load					
Output Protection	Short Circuit, Over Voltage, Over Current					
Ferrite Core	Yes					
<b>Input Characteristics</b>						
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					
<b>Environmental Characteristics</b>						
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					
<b>Characteristics</b>						
MTBF	300,000Hrs (25°C, Telecordia SR-332)					
Dimension (LxWxH)	168x66x39mm					
Weight	600g					

### PART NUMBER SYSTEM

**QAMA** - **90** - **12** - **AA** **BB**

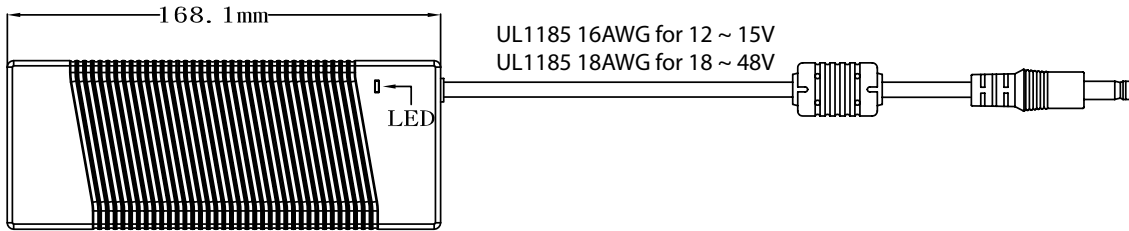
**SERIES**  
**OUTPUT WATTAGE**  
**OUTPUT VOLTAGE**  
**INPUT RECEPTACLE**



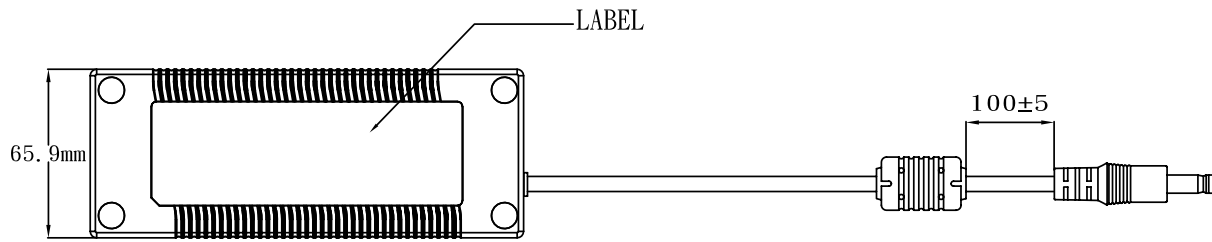
**OUTPUT CONNECTOR**

Please Reference Output Plug Type Page 49-50

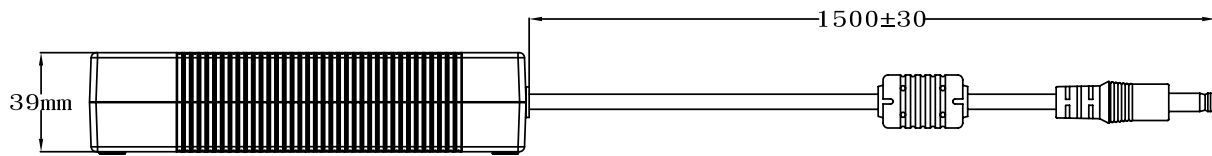
MECHANICAL SPECIFICATIONS



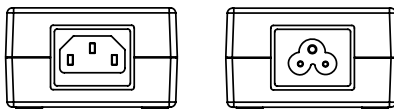
TOP-VIEW



BOTTOM-VIEW

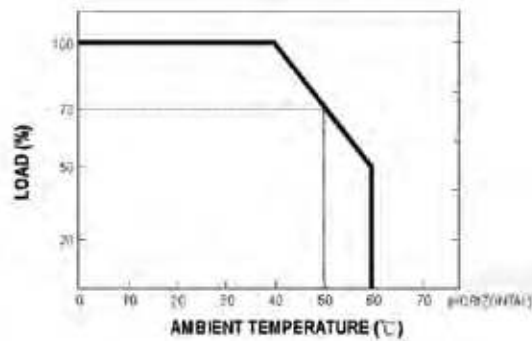


SIDE-VIEW



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/OC/OTP
- No Load Power Consumption <0.5W
- 2 Year Warranty

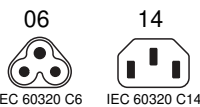


Model	QAMA-120-12	QAMA-120-15	QAMA-120-19	QAMA-120-24	QAMA-120-36	QAMA-120-48
<b>Output Characteristics</b>						
<b>DC Output</b>	12V	15V	19V	24V	36V	48V
<b>Rated Current</b>	10.00A	8.00A	6.32A	5.00A	3.34A	2.50A
<b>Ripple and Noise</b>	±2% Vo @ Rated Load					
<b>Load Regulation (Typ.)</b>	±5%					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

### PART NUMBER SYSTEM

**QAMA** - **120** - **12** - **AA** **BB**

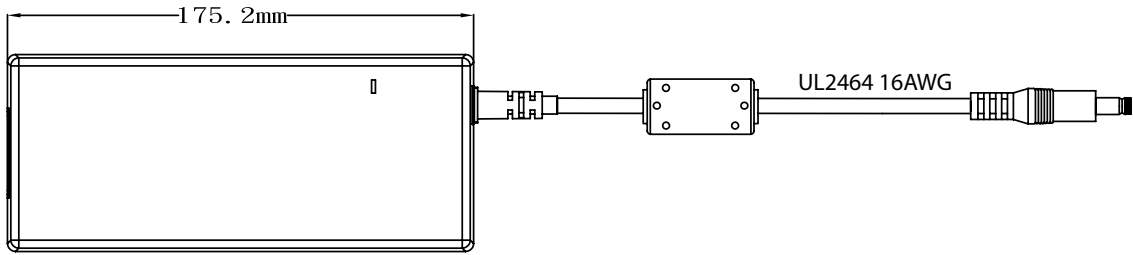
**SERIES**  
**OUTPUT WATTAGE**  
**OUTPUT VOLTAGE**  
**INPUT RECEPTACLE**



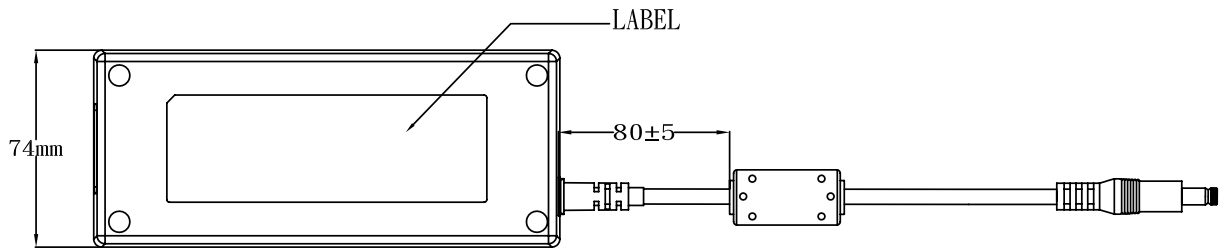
**OUTPUT CONNECTOR**

Please Reference Output Plug Type Page 49-50

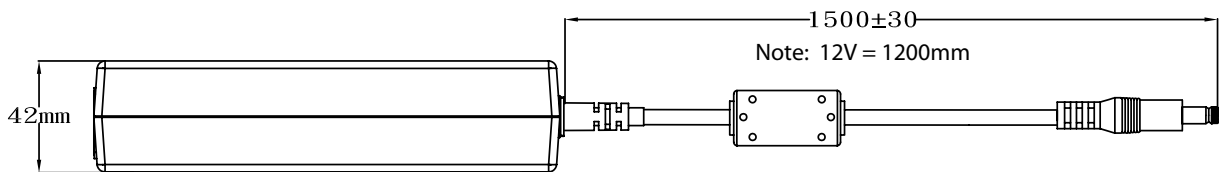
MECHANICAL SPECIFICATIONS



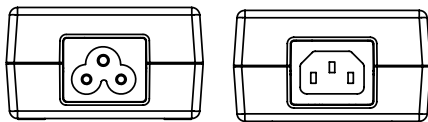
TOP-VIEW



BOTTOM-VIEW

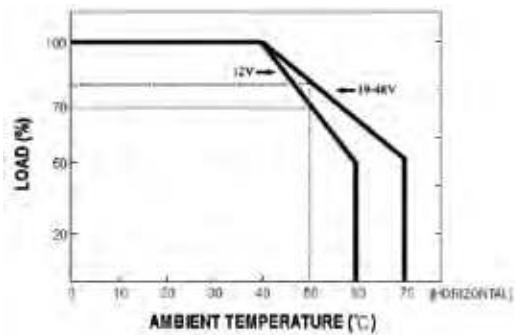


SIDE-VIEW



FRONT-VIEW

DERATING CURVE



UNIT: mm



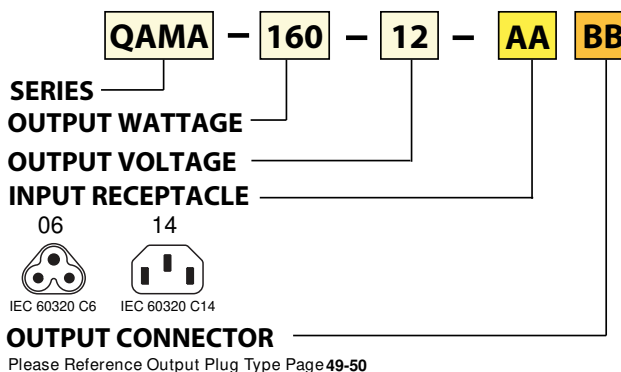
**Features:**

- 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/OC/OTP
- No Load Power Consumption <0.5W
- 2 Year Warranty



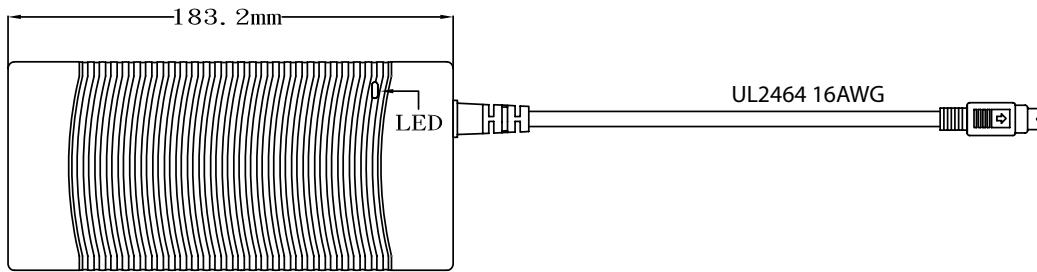
Model	QAMA-160-12	QAMA-160-19	QAMA-160-24	QAMA-160-48
<b>Output Characteristics</b>				
DC Output	12V	19V	24V	48V
Rated Current	12.50A	8.40A	6.60A	3.30A
Ripple and Noise	±2% Vo @ Rated Load			
Load Regulation (Typ.)	±5%			
Transient Response (Typ.)	0.5mS for 50% Load Change			
Hold-up Time (Typ.)	10mS @ Rated Load			
Output Protection	Short Circuit, Over Voltage, Over Current, Over Temp			
Ferrite Core	No			
<b>Input Characteristics</b>				
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			
<b>Environmental Characteristics</b>				
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 & Radlation	Compliance to EN55011 Class B			
Harmonic Current	Compliance to EN61000-3-2			
EMS Immunity	IEC60601-1-2			
<b>Characteristics</b>				
MTBF	300,000Hrs (25°C, Telecordia SR-332)			
Dimension (LxWxH)	183x81x42mm			
Weight	680g			

**PART NUMBER SYSTEM**

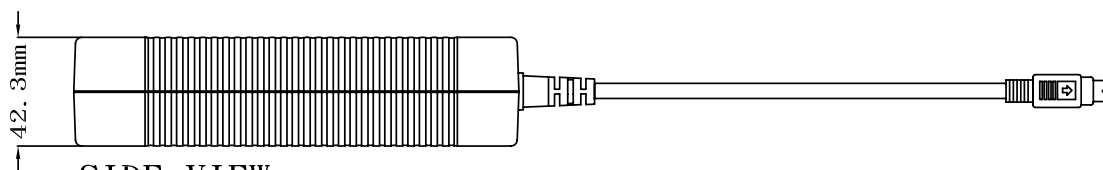




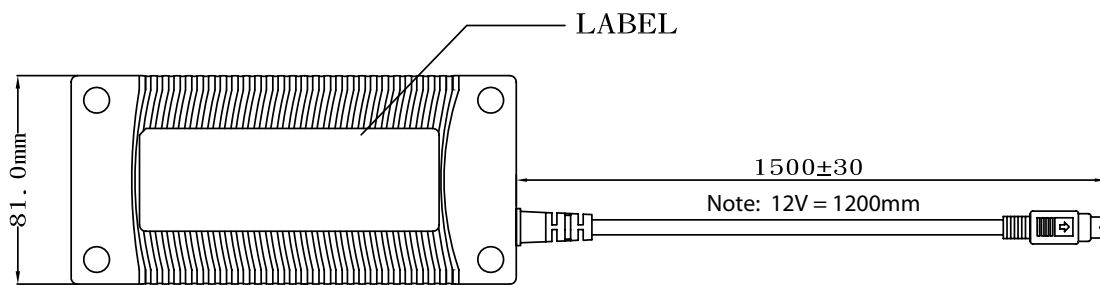
MECHANICAL SPECIFICATIONS



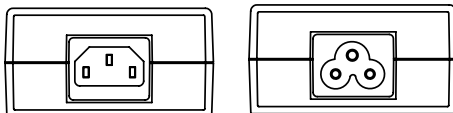
TOP-VIEW



SIDE-VIEW

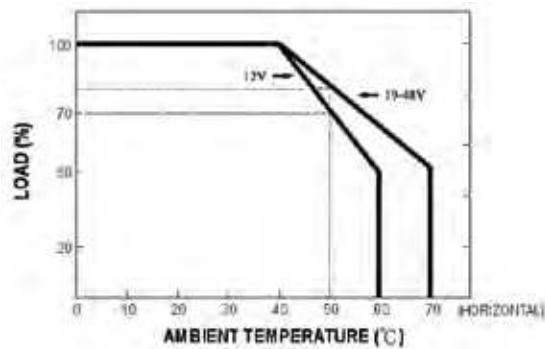


BOTTOM-VIEW



FRONT-VIEW

DERATING CURVE



UNIT: mm

# PRODUCT PROFILE

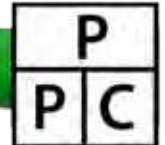


## FAN-S DIVISION

### 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.

**Qualtek** Electronics Corporation

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