

#### 36W Desktop C8 Adapter Series



#### **Features**

- DOE Level VI Efficiency Compliant
- ErP/Ecodesign Directive 2009/125/EC Regulation EU 2019/1782 Compliant
- EU CoC Tier 2 Compliant (except 12V model)
- Over Voltage, Short Circuit and Over Current Protection
- Non-Vented/Spill-Proof Case
- Class B EMI

#### **Applications**

- Networking
- Peripherals
- Consumer Electronics

\*NRCan approval for PPL36W-050, PPL36W-090, PPL36W-120L6. PPL36W-150, PPL36W-180, PPL36W-240, PPL36W-480 models only



# PPL36W Series Specifications<sup>1</sup>

	Model	PPL36W-050*	PPL36W-075	PPL36W-085	PPL36W-090*	
Output	DC Output Voltage	5.0V	7.5V	8.5V	9.0V	
	Max Current	5.0A	4.0A	3.52A	3.34A	
	Output Power	25.0W	30.0W	29.92W	30.06W	
	Regulation	± 6%	± 5%	± 5%	± 5%	
	Ripple & Noise P-P(max) <sup>2</sup>	80mV	75mV	85mV	90mV	
	AC Input Voltage Range	90 to 264VAC				
	AC Input Frequency	47 to 63Hz				
	Input Current	1.0A max				
	Inrush Current	70A max., 230VAC (Cold Start at ambient 25°C)				
Input	No Load Power Consumption at 115VAC Input	0.056W	0.035W	0.058W	0.042W	
	No Load Power Consumption at 230VAC Input	0.076W	0.062W	0.08W	0.059W	
	115VAC Average Efficiency <sup>3</sup>	86.5%	89.1%	88.6%	89.1%	
	230VAC Average Efficiency <sup>3</sup>	86.4%	89.0%	88.7%	89.1%	
	230VAC 10% Load Efficiency <sup>3</sup>	80.1%	85.0%	84.8%	82.9%	
	Leakage Current	<0.25mA				
	Over-Voltage	180% max	180% max	180% max	180% max	
Protection	Short Circuit	Auto-recover after short-circuit fault is removed				
	Over-Current	200% max	200% max	200% max	200% max	
	Operating Temperature	0°C to +40°C				
Environmental	Non-Operating Temperature	-20° to +80°C				
	Operating Humidity	20 to +80%				
	Dielectric Withstand (HI-POT)	Primary to Secondary: 3000VAC for 1min, 10mA				
	Insulation Resistance	Primary to Secondary: 10M ohm for 500VDC				
Safety	Standards			52368-1, IEC 62368-1		
Approvals and	EMI Emissions	FCC Part 15 Class B, CAN ICES-003(B)/NMB-003(B), EN 55032/CISPR 32 Class B Conducted and Radiated				
EMC	Harmonic Current Emissions	IEC 61000-3-2				
	Voltage Fluctuations & Flicker	IEC 61000-3-3				
	Immunity	EN 55035/CISPR 35: IEC 61000-4-2, IEC 61000-4-3, IEC 61000-4-4, IEC 61000-4-5, IEC 61000-4-6, IEC 61000-4-8, IEC 61000-4-11				
	Dimensions (L x W x H)	99mm (3.90in) x 50mm (1.97in) x 33mm (1.30in)				
	Weight	170g				
Mechanical	Cable Length	1000mm 1500mm				
	DC Cable Type	16 AWG	16 AWG	18 AWG	18 AWG	
	DC Output Connector	2.1mm x 5.5mm x 10.0mm				
	DC Plug Pin Assignment	Inner (V+) / Outer GND (V-)				
	Input Connector	IEC 60320 C8				

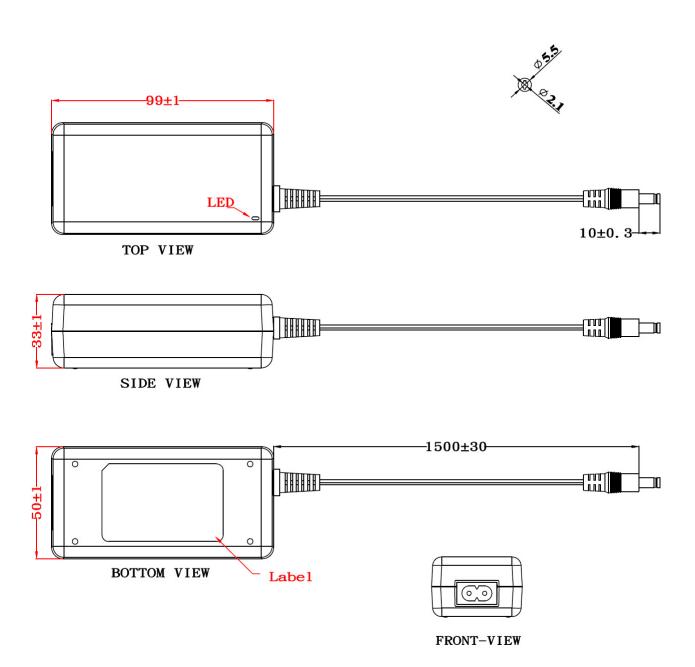
	Model	PPL36W-120L6*	PPL36W-135	PPL36W-150*	PPL36W-160	
Output	DC Output Voltage	12.0V	13.5V	15.0V	16.0V	
	Max Current	3.0A	2.66A	2.4A	2.25A	
	Output Power	36.0W	35.91W	36.0W	36.0W	
	Regulation	± 5%	± 5%	± 5%	± 5%	
	Ripple & Noise P-P(max) <sup>2</sup>	120mV	135mV	150mV	160mV	
	AC Input Voltage Range	90 to 264VAC				
	AC Input Frequency	47 to 63Hz				
	Input Current	1.0A max				
	Inrush Current	70A max., 230VAC (Cold Start at ambient 25°C)				
	No Load Power Consumption at 115VAC Input	0.032W	0.038W	0.045W	0.043W	
Input	No Load Power Consumption at 230VAC Input	0.054W	0.064W	0.066W	0.07W	
	115VAC Average Efficiency <sup>3</sup>	87.6%	88.4%	88.5%	88.1%	
	230VAC Average Efficiency <sup>3</sup>	87.9%	88.4%	88.6%	88.4%	
	230VAC 10% Load Efficiency <sup>3</sup>	84.9%	84.7%	84.4%	84.6%	
	Leakage Current	<0.25mA				
	Over-Voltage	180% max	180% max	180% max	180% max	
Protection	Short Circuit	Auto-recover after short-circuit fault is removed			ved	
	Over-Current	200% max	200% max	200% max	200% max	
	Operating Temperature	0°C to +40°C				
Environmental	Non-Operating Temperature	-20° to +80°C				
	Operating Humidity	20 to +80%				
	Dielectric Withstand (HI-POT)	Primary to Secondary: 3000VAC for 1min, 10mA				
	Insulation Resistance	Primary to Secondary: 10M ohm for 500VDC				
Safety	Standards	cULus 62368-1, IEC 62368-1				
Approvals and	EMI Emissions	FCC Part 15 Class B, CAN ICES-003(B)/NMB-003(B), EN 55032/CISPR 32 Class B Conducted and Radiated				
EMC	Harmonic Current Emissions	IEC 61000-3-2				
	Voltage Fluctuations & Flicker	IEC 61000-3-3				
	Immunity	EN 55035/CISPR 35: IEC 61000-4-2, IEC 61000-4-3, IEC 61000-4-4, IEC 61000-4-5, IEC 61000-4-6, IEC 61000-4-8, IEC 61000-4-11				
	Dimensions (L x W x H)	99mm (3.90in) x 50mm (1.97in) x 33mm (1.3in)				
	Weight	170g				
Mechanical	Cable Length	1500mm				
	DC Cable Type	18 AWG	18 AWG	18 AWG	18 AWG	
	DC Output Connector	2.1mm x 5.5mm x 10.0mm				
	DC Plug Pin Assignment	Inner (V+) / Outer GND (V-)				
	Input Connector	IEC 60320 C8				

	Model	PPL36W-180*	PPL36W-240*	PPL36W-480 <sup>*</sup>		
Output	DC Output Voltage	18.0V	24.0V	48.0V		
	Max Current	2.0A	1.5A	0.75A		
	Output Power	36.0W	36.0W	36.0W		
	Regulation	± 5%	± 5%	± 5%		
	Ripple & Noise P-P(max) <sup>2</sup>	180mV	240mV	480mV		
	AC Input Voltage Range	90 to 264VAC				
	AC Input Frequency	47 to 63Hz				
	Input Current	1.0A max				
	Inrush Current	70A max., 230VAC (Cold Start at ambient 25°C)				
	No Load Power Consumption at 115VAC Input	0.039W	0.046W	0.058W		
Input	No Load Power Consumption at 230VAC Input	0.057W	0.064W	0.074W		
	115VAC Average Efficiency <sup>3</sup>	88.6%	89.2%	90.2%		
	230VAC Average Efficiency <sup>3</sup>	88.5%	89.3%	89.8%		
	230VAC 10% Load Efficiency <sup>3</sup>	83.5%	83.6%	83.5%		
	Leakage Current		<0.25mA			
Protection	Over-Voltage	180% max	180% max	180% max		
	Short Circuit	Auto-recover after short-circuit fault is removed				
	Over-Current	200% max	200% max	200% max		
	Operating Temperature	0°C to +40°C				
Environmental	Non-Operating Temperature	-20° to +80°C				
	Operating Humidity	20 to +80%				
	Dielectric Withstand (HI-POT)	Primary to Secondary: 3000VAC for 1min, 10mA				
	Insulation Resistance	Primary to Secondary: 10M ohm for 500VDC				
Safety	Standards	cULus 62368-1, IEC 62368-1				
Approvals and	EMI Emissions	FCC Part 15 Class B, CAN ICES-003(B)/NMB-003(B), EN 55032/CISPR 32 Class B Conducted and Radiated				
EMC	Harmonic Current Emissions	IEC 61000-3-2				
	Voltage Fluctuations & Flicker	IEC 61000-3-3				
	Immunity	EN 55035/CISPR 35: IEC 61000-4-2, IEC 61000-4-3, IEC 61000-4-4, IEC 61000-4-5, IEC 61000-4-6, IEC 61000-4-8, IEC 61000-4-11				
	Dimensions (L x W x H)	99mm (3.90in) x 50mm (1.97in) x 33mm (1.3in)				
	Weight		170g			
	Cable Length	1500mm				
Mechanical	DC Cable Type	18 AWG	20 AWG	22 AWG		
	DC Output Connector	2.1mm x 5.5mm x 10.0mm				
	DC Plug Pin Assignment	Inner (V+) / Outer GND (V-)				
	Input Connector	IEC 60320 C8				
Notes						

<sup>\*</sup>NRCan approval for PPL36W-050, PPL36W-090, PPL36W-120L6. PPL36W-150, PPL36W-180, PPL36W-240, PPL36W-480 models only



### PPL36W Outline Drawing





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

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

This device complies with/The devices in this product series comply with part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.



## PPL36W Line Cords Sold Separately

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



## PPL36W Line Cords Outline Drawings

