

# 12W Interchangeable Wall Plug Adapter Series















#### **Features**

- Double Insulated
- Field Changeable AC Plugs Sold Separately
- Limited Power Source (LPS)
- US DoE Level VI Efficiency Compliance
- Ecodesign/ErP Lot 7 (EU) 2019/1782 Compliance
- AS/NZS 4665.1:2005, AS/NZS 4665.2:2005 Compliance
- Class B EMI

#### **Applications**

- Wireless Communications
- Peripherals
- Network Equipment
- Gaming

<sup>\*</sup>NRCan approval for PSAC12R-050-R, PSAC12R-090-R, PSAC12R-120-R models only



## PSAC12R Specifications<sup>1</sup>

PHIHONG	Model	PSAC12R-050-R*	PSAC12R-060-R	PSAC12R-075-R
Output	DC Output Voltage	5.0V	5.9V	7.5V
	Max Current	2.4A	2.0V	1.6A
	Output Power	12.0W	11.8W	12.0W
	Regulation	± 5%	± 5%	± 5%
	Ripple & Noise P-P(max) <sup>2</sup>	100mV	100mV	100mV
	AC Input Voltage Range	90 to 264VAC		
	AC Input Frequency	47 to 63Hz		
	Input Current	0.5A (RMS) max for 120Vac/max load 0.25A (RMS) max for 230Vac/max load		
	Inrush Current	<30A (RIMS) Hax for 230VaC/Hax foad <30A for 120VAC, <60A for 230VAC (Cold start at ambient 25°C, full load)		
Input	No Load Power Consumption at 115VAC Input	0.0336W	0.043W	0.046W
IIIput	No Load Power Consumption at 230VAC Input	0.058W	0.072W	0.076W
	115VAC Average Efficiency <sup>3</sup>	84.50%	84.15%	85.49%
	230VAC Average Efficiency <sup>3</sup>	83.30%	83.03%	84.47%
	230VAC 10% Load Efficiency <sup>3</sup>	79.30%	78.72%	79.04%
	Leakage Current		0.25mA max	
	Over-Voltage	<7.5V	<8V	<10V
Protection	Short Circuit	The output can be shorted without damage. Auto recover		
	Over-Current	3A max, Auto restart	3A max, Auto restart	2.2A max, Auto restart
	Operating Temperature	0°C to +40°C		
Environmental	Non-Operating Temperature	-40° to +85°C		
	Operating Humidity	50% to 90%		
	Dielectric Withstand (HI-POT)	Primary to Secondary: 3000VAC for 1min, 10mA		
	Insulation Resistance	Primary to Secondary: >7M ohm for 500VDC		
	Standards	cULus 60950-1, cULus 62368-1, IEC60950-1, IEC 62368-1, AS/NZS 62368.1:2018		
Safety Approvals and	EMI Emissions	FCC Part 15 Class B, CAN ICES-003(B)/NMB-003(B), EN 55032/CISPR 32, AS/NZS CISPR 32 Class B Conducted and Radiated		
EMC	Harmonic Current Emissions	IEC 61000-3-2		
	Voltage Fluctuations & Flicker	IEC 61000-3-3		
	Immunity	EN 55024/CISPR 24: IEC 61000-4-2 (+/- 8kV air, +/-4kV contact), IEC 61000-4-3, IEC 61000-4-4, IEC 61000-4-5 (+/- 1kV), IEC 61000-4-6 IEC 61000-4-8, IEC 61000-4-11		
Mechanical	Dimensions (L x W x H)	71.7mm (2.82in) x 50mm (1.97in) x 33.25mm (1.31in)		
	Weight	112g		
	DC Cord Length	1500mm		
		<b>†</b>	1	
	DC Cable Type	20 AWG	20 AWG	22 AWG

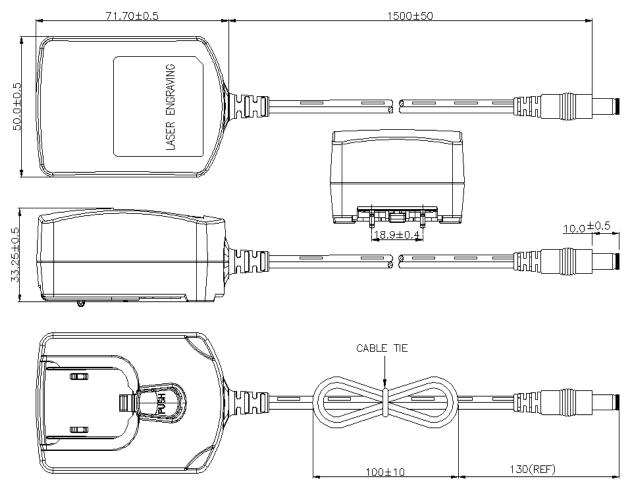
	Model	PSAC12R-090-R*	PSAC12R-120-R*	PSAC12R-150-R
Output	DC Output Voltage	9.0V	12.0V	15.0V
	Max Current	1.33A	1.0A	0.8A
	Output Power	11.97W	12.0W	12.0W
	Regulation	± 5%	± 5%	± 5%
	Ripple & Noise P-P(max) <sup>2</sup>	120mV	120mV	150mV
	AC Input Voltage Range	90 to 264VAC		
	AC Input Frequency	47 to 63Hz		
	Input Current	0.5A (RMS) max for 120Vac/max load 0.25A (RMS) max for 230Vac/max load		
	Inrush Current	<30A for 120VAC, <60A for 230VAC (Cold start at ambient 25°C, full load)		
	No Load Power Consumption at 115VAC Input	0.0615W	0.0229W	0.053W
Input	No Load Power Consumption at 230VAC Input	0.0858W	0.0443W	0.074W
	115VAC Average Efficiency <sup>3</sup>	87.22%	86.43%	85.98%
	230VAC Average Efficiency <sup>3</sup>	85.75%	85.25%	84.55%
	230VAC 10% Load Efficiency <sup>3</sup>	78.53%	74.87%	70.55%
	Leakage Current	0.25mA max		
	Over-Voltage	<12V	<16V	<22V
Protection	Short Circuit	The output can be shorted without damage. Auto-recover		
	Over-Current	1.8A max, Auto restart	1.5A max, Auto restart	1.5A max, Auto restart
	Operating Temperature	ridio rootari	0°C to +40°C	ridio rootan
Environmental	Non-Operating Temperature	-40° to +85°C		
	Operating Humidity	50% to 90%		
	Dielectric Withstand (HI-POT)	Primary to Secondary: 3000VAC for 1min, 10mA		
	Insulation Resistance	Primary to Secondary: >7M ohm for 500VDC		
	Standards	cULus 60950-1, cULus 62368-1, IEC60950-1, IEC 62368-1, AS/NZS 62368.1:2018		
Safety Approvals and	EMI Emissions	FCC Part 15 Class B, CAN ICES-003(B)/NMB-003(B), EN 55032/CISPR 32, AS/NZS CISPR 32 Class B Conducted and Radiated		
EMC	Harmonic Current Emissions	IEC 61000-3-2		
	Voltage Fluctuations & Flicker	IEC 61000-3-3		
	Immunity	EN 55024/CISPR 24: IEC 61000-4-2 (+/- 8kV air, +/-4kV contact), IEC 61000-4-3, IEC 61000-4-4, IEC 61000-4-5 (+/- 1kV), IEC 61000-4-6, IEC 61000-4-8, IEC 61000-4-11		
	Dimensions (L x W x H)	71.7mm (2.82in) x 50mm (1.97in) x 33.25mm (1.31in)		
	Weight	112g		
Mechanical	DC Cord Length	1500mm		
	DC Cable Type	22 AWG	20 AWG	22 AWG
	DC Output Connector	5.5mm x 2.1mm x 10mm center positive		

	Model	PSAC12R-240-R	PSAC12-480-R	
Output	DC Output Voltage	24.0V	48.0V	
	Max Current	0.5A	0.25A	
	Output Power	12.0W	12.0W	
	Regulation	± 5%	± 5%	
	Ripple & Noise P-P(max) <sup>2</sup>	240mV	400mV	
	AC Input Voltage Range	90 to 2	64VAC	
	AC Input Frequency	47 to 63Hz		
	Input Current	0.5A (RMS) max for 120Vac/max load 0.25A (RMS) max for 230Vac/max load		
	Inrush Current	<30A for 120VAC, <60A for 230VAC		
	No Load Power Consumption	(Cold start at ambient 25°C, full load)  0.065W  0.066W		
Input	at 115VAC Input  No Load Power Consumption			
	at 230VAC Input	0.086W	0.090W	
	115VAC Average Efficiency <sup>3</sup>	85.17%	88.02%	
	230VAC Average Efficiency <sup>3</sup>	83.26%	86.63%	
	230VAC 10% Load Efficiency <sup>3</sup>	67.81%	72.17%	
	Leakage Current	0.25m	A max	
	Over-Voltage	<35V	<60V	
Protection	Short Circuit	The output can be shorted without damage. Auto recover		
	Over-Current	0.8A max, Auto restart	0.5A max, Auto restart	
	Operating Temperature	0°C to	+40°C	
Environmental	Non-Operating Temperature	-40° to +85°C		
	Operating Humidity	50% to 90%		
	Dielectric Withstand (HI-POT)	Primary to Secondary: 3000VAC for 1min, 10mA		
	Insulation Resistance	Primary to Secondary: >7M ohm for 500VDC		
	Standards	cULus 60950-1, cULus 62368-1, IEC60950-1, IEC 62368-1, AS/NZS 62368.1:2018		
Safety Approvals and EMC	EMI Emissions	FCC Part 15 Class B, CAN ICES-003(B)/NMB-003(B), EN 55032/CISPR 32, AS/NZS CISPR 32 Class B Conducted and Radiated		
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	Voltage Fluctuations & Flicker	IEC 61000-3-3		
	Immunity	EN 55024/CISPR 24: IEC 61000-4-2 (+/- 8kV air, +/-4kV contact), IEC 61000-4-3, IEC 61000-4-4, IEC 61000-4-5 (+/- 1kV), IEC 61000-4-6, IEC 61000-4-8, IEC 61000-4-11		
	Dimensions (L x W x H)	71.7mm (2.82in) x 50mm (1.97in) x 33.25mm (1.31in)		
	Weight	112g		
Mechanical	DC Cord Length	1500mm		
	DC Cable Type	26 AWG	26 AWG	
	DC Output Connector	5.5mm x 2.1mm x 10	0mm center positive	
Notes				

<sup>\*</sup>NRCan approval for PSAC12R-050-R, PSAC12R-090-R, PSAC12R-120-R models only



## **PSAC12R 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

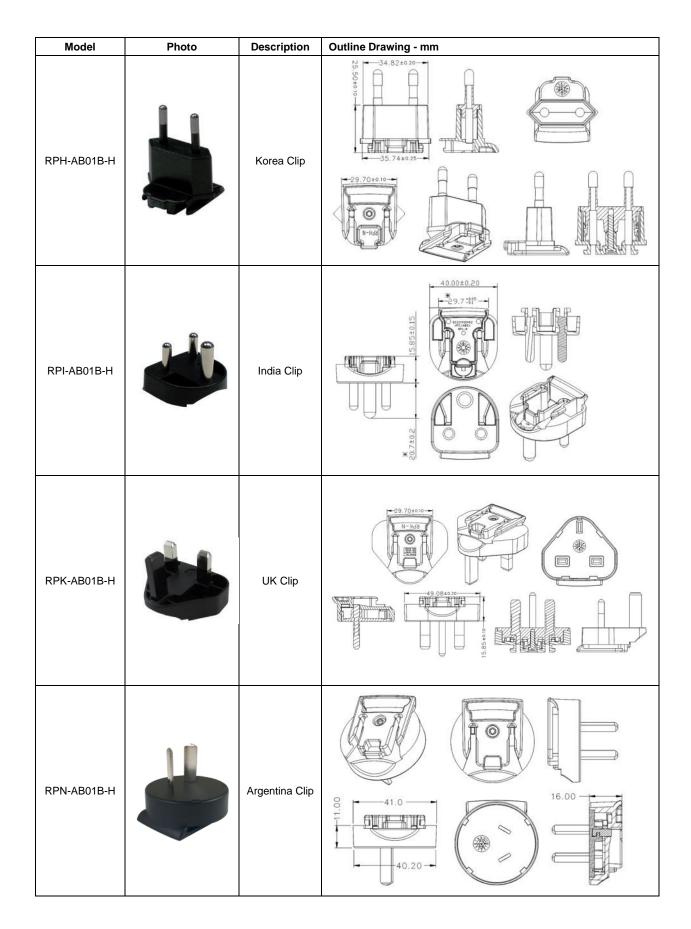
www.phihong.com

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.



# AC Input Clips – Sold Separately

Model	Photo	Description	Outline Drawing - mm
RPA-AB01B-H		US Clip	35.12 69 60 67
RPB-AB01B-H		Brazil Clip	VENDER CODE  VENDE
RPC-AB01B-H		China Clip	34.92-0.10 \$\frac{1}{2} \display \disp
RPE-AB01B-H		Europe Clip	35.74±0.25 -34.82±0.20 - 29.70±0.10 - 34.82±0.20 - 29.70±0.10 - 29.70±0.10 - 29.70±0.10 - 29.70±0.10 - 29.70±0.10 - 29.70±0.10 - 29.70±0.10 - 29.70±0.10 - 29.70±0.10 - 29.70±0.10 - 29.70±0.10 - 29.70±0.10 - 29.70±0.10 - 29.70±0.10 - 29.70±0.10 - 29.70±0.10 - 29.70±0.10 - 29.70±0.10 - 29.70±0.10 - 29.70±0.10 - 29.70±0.10 - 29.70±0.10 - 29.70±0.10 - 29.70±0.10 - 29.70±0.10 - 29.70±0.10 - 29.70±0.10 - 29.70±0.10 - 29.70±0.10 - 29.70±0.10 - 29.70±0.10 - 29.70±0.10 - 29.70±0.10 - 29.70±0.10 - 29.70±0.10 - 29.70±0.10 - 29.70±0.10 - 29.70±0.10 - 29.70±0.10 - 29.70±0.10 - 29.70±0.10 - 29.70±0.10 - 29.70±0.10 - 29.70±0.10 - 29.70±0.10 - 29.70±0.10 - 29.70±0.10 - 29.70±0.10 - 29.70±0.10 - 29.70±0.10 - 29.70±0.10 - 29.70±0.10 - 29.70±0.10 - 29.70±0.10 - 29.70±0.10 - 29.70±0.10 - 29.70±0.10 - 29.70±0.10 - 29.70±0.10 - 29.70±0.10 - 29.70±0.10 - 29.70±0.10 - 29.70±0.10 - 29.70±0.10 - 29.70±0.10 - 29.70±0.10 - 29.70±0.10 - 29.70±0.10 - 29.70±0.10 - 29.70±0.10 - 29.70±0.10 - 29.70±0.10 - 29.70±0.10 - 29.70±0.10 - 29.70±0.10 - 29.70±0.10 - 29.70±0.10 - 29.70±0.10 - 29.70±0.10 - 29.70±0.10 - 29.70±0.10 - 29.70±0.10 - 29.70±0.10 - 29.70±0.10 - 29.70±0.10 - 29.70±0.10 - 29.70±0.10 - 29.70±0.10 - 29.70±0.10 - 29.70±0.10 - 29.70±0.10 - 29.70±0.10 - 29.70±0.10 - 29.70±0.10 - 29.70±0.10 - 29.70±0.10 - 29.70±0.10 - 29.70±0.10 - 29.70±0.10 - 29.70±0.10 - 29.70±0.10 - 29.70±0.10 - 29.70±0.10 - 29.70±0.10 - 29.70±0.10 - 29.70±0.10 - 29.70±0.10 - 29.70±0.10 - 29.70±0.10 - 29.70±0.10 - 29.70±0.10 - 29.70±0.10 - 29.70±0.10 - 29.70±0.10 - 29.70±0.10 - 29.70±0.10 - 29.70±0.10 - 29.70±0.10 - 29.70±0.10 - 29.70±0.10 - 29.70±0.10 - 29.70±0.10 - 29.70±0.10 - 29.70±0.10 - 29.70±0.10 - 29.70±0.10 - 29.70±0.10 - 29.70±0.10 - 29.70±0.10 - 29.70±0.10 - 29.70±0.10 - 29.70±0.10 - 29.70±0.10 - 29.70±0.10 - 29.70±0.10 - 29.70±0.10 - 29.70±0.10 - 29.70±0.10 - 29.70±0.10 - 29.70±0.10 - 29.70±0.10 - 29.70±0.10 - 29.70±0.10 - 29.70±0.10 - 29.70±0.10 - 29.70±0.10 - 29.70±0.10 - 29.70±0.10 - 29.70±0.10 - 29.70±0.10 - 29.70±0.10 - 29.70±0.10 - 29.70±0.10 - 29.70



Model	Photo	Description	Outline Drawing - mm
RPS-AB01B-H		Australia Clip	29.70 to 10 - 10 - 10 - 10 - 10 - 10 - 10 - 10
RPBAG- AB01B-H	RPA-AB01B-H, RPI	E-AB01B-H, RPK-	AB01B-H and RPS-AB01B-H interchangeable clips in a plastic bag.

### **Mouser Electronics**

**Authorized Distributor** 

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#### Phihong:

<u>PSAC12R-050</u> <u>PSAC12R-060</u> <u>PSAC12R-075</u> <u>PSAC12R-090</u> <u>PSAC12R-120</u> <u>PSAC12R-150</u> <u>PSAC12R-240</u> <u>PSAC12R-480</u> <u>PSAC12R-050-R-CR1</u> <u>PSAC12R-060-R-CR1</u> <u>PSAC12R-090-R-CR1</u> <u>PSAC12R-120-R-CR1</u> <u>PSAC12R-050-R-C4</u>