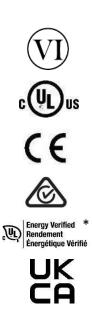


## 12W Interchangeable Wall Plug Adapter Series





#### **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

\*NRCan approval for PSAC12R-050-R, PSAC12R-090-R, PSAC12R-120-R models only



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

|                         | Model  | PSAC12R-050-R*   | PSAC12R-060-R           | PSAC12R-075-R             |
|-------------------------|--|--|-------------------------|---------------------------|
| Output                  | DC Output Voltage                            | 5.0V   | 5.9V                    | 7.5V                      |
|                         | Max Current                                  | 2.4A   | 2.0A                    | 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<br>0.25A (RMS) max for 230Vac/max load  |                         |                           |
|                         | Inrush Current                               | 30A max for 120VAC, 60A max for 230VAC<br>(Cold start at ambient 25°C, full load)  |                         |                           |
| Input                   | No Load Power Consumption<br>at 115VAC Input | ≤ 0.1W   | ≤ 0.1W                  | ≤ 0.1W                    |
| input                   | No Load Power Consumption<br>at 230VAC Input | ≤ 0.075W   | ≤ 0.075W                | ≤ 0.075W                  |
|                         | 115VAC Average Efficiency <sup>3</sup>       | ≥ 79.9%  | ≥ 79.9%                 | ≥ 79.9%                   |
|                         | 230VAC Average Efficiency <sup>3</sup>       | ≥ 80.3%  | ≥ 80.3%                 | ≥ 80.3%                   |
|                         | 230VAC 10% Load Efficiency <sup>3</sup>      | ≥ 71.0%  | ≥ 71.0%                 | ≥ 71.0%                   |
|                         | 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,<br>Auto restart  | 3A max,<br>Auto restart | 2.2A max,<br>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,<br>AS/NZS 62368.1:2018  |                         |                           |
| Safety<br>Approvals and | EMI Emissions                                | FCC Part 15 Class B, CAN ICES-003(B)/NMB-003(B),<br>EN 55032/CISPR 32, AS/NZS CISPR 32<br>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 (+/- 8kV air, +/-4kV contact),<br>IEC 61000-4-3, IEC 61000-4-4, IEC 61000-4-5 (+/- 1kV), IEC 61000-4-6<br>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   |                         |                           |
|                         | DC Cable Type                                | 20 AWG   | 20 AWG                  | 22 AWG                    |
|                         | DC Output Connector                          | 5.5mm x 2.1mm x 10mm center positive   |                         |                           |

Phihong is not responsible for any error and reserves the right to make changes without notice. Please visit our website at www.phihong.com for the most up-to-date specifications and contact information. Revised 9/26/2024

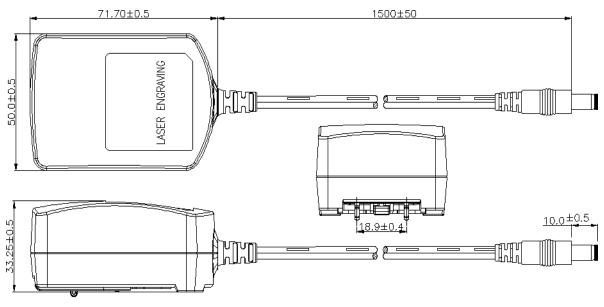
|                         | Model  | PSAC12R-090-R <sup>*</sup>  | PSAC12R-120-R*            | PSAC12R-150-R             |
|-------------------------|--|---|---------------------------|---------------------------|
| Output                  | DC Output Voltage                            | 9.0V  | 12.0V                     | 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<br>0.25A (RMS) max for 230Vac/max load   |                           |                           |
|                         | Inrush Current                               | 30A max for 120VAC, 60A max for 230VAC<br>(Cold start at ambient 25°C, full load)   |                           |                           |
| Input                   | No Load Power Consumption<br>at 115VAC Input | ≤ 0.1W  | ≤ 0.1W                    | ≤ 0.1W                    |
| mpat                    | No Load Power Consumption<br>at 230VAC Input | ≤ 0.075 W   | ≤ 0.075 W                 | ≤ 0.075 W                 |
|                         | 115VAC Average Efficiency <sup>3</sup>       | ≥ 82.9%   | ≥ 83.0%                   | ≥ 83.0%                   |
|                         | 230VAC Average Efficiency <sup>3</sup>       | ≥ 83.2%   | ≥ 83.3%                   | ≥ 83.3%                   |
|                         | 230VAC 10% Load Efficiency <sup>3</sup>      | ≥ 73.2%   | ≥ 73.3%                   | ≥ 73.3%                   |
|                         | 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,<br>Auto restart   | 1.5A max,<br>Auto restart | 1.5A max,<br>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,<br>AS/NZS 62368.1:2018   |                           |                           |
| Safety<br>Approvals and | EMI Emissions                                | FCC Part 15 Class B, CAN ICES-003(B)/NMB-003(B),<br>EN 55032/CISPR 32, AS/NZS CISPR 32<br>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 (+/- 8kV air, +/-4kV contact),<br>IEC 61000-4-3, IEC 61000-4-4, IEC 61000-4-5 (+/- 1kV), IEC 61000-4-6,<br>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  |                           |                           |
|                         | DC Cable Type                                | 22 AWG  | 20 AWG                    | 22 AWG                    |
|                         | DC Output Connector                          | 5.5mm x 2.1mm x 10mm center positive  |                           |                           |

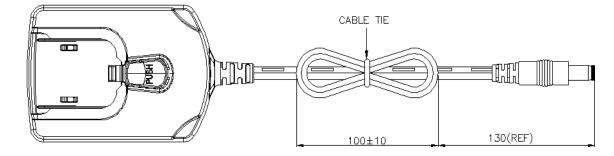
|                         | Model                                     | PSAC12R-240-R   | PSAC12-480-R              |  |
|-------------------------|---|---|---------------------------|--|
|                         | DC Output Voltage                         | 24.0V   | 48.0V                     |  |
| Output                  | 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 264VAC  |                           |  |
|                         | AC Input Frequency                        | 47 to 63Hz  |                           |  |
|                         | Input Current                             | 0.5A (RMS) max for 120Vac/max load<br>0.25A (RMS) max for 230Vac/max load   |                           |  |
|                         | Inrush Current                            | 30A max for 120VAC, 60A max for 230VAC<br>(Cold start at ambient 25°C, full load)   |                           |  |
|                         | No Load Power Consumption                 | ≤ 0.1W  | ≤ 0.1W                    |  |
| Input                   | at 115VAC Input No Load Power Consumption | - 0.1W  | 2 0.1W                    |  |
|                         | at 230VAC Input                           | ≤ 0.075 W   | ≤ 0.075 W                 |  |
|                         | 115VAC Average Efficiency <sup>3</sup>    | ≥ 83.0%   | ≥ 83.0%                   |  |
|                         | 230VAC Average Efficiency <sup>3</sup>    | ≥ 83.3%   | ≥ 83.3%                   |  |
|                         | 230VAC 10% Load Efficiency <sup>3</sup>   | ≥ 73.3%   | ≥ 73.3%                   |  |
|                         | 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,<br>Auto restart   | 0.5A max,<br>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,  |                           |  |
| Safety<br>Approvals and | EMI Emissions                             | AS/NZS 62368.1:2018<br>FCC Part 15 Class B, CAN ICES-003(B)/NMB-003(B),<br>EN 55032/CISPR 32, AS/NZS CISPR 32<br>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 (+/- 8kV air, +/-4kV contact),<br>IEC 61000-4-3, IEC 61000-4-4, IEC 61000-4-5 (+/- 1kV), IEC 61000-4-6,<br>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  |                           |  |
|                         | DC Cable Type                             | 26 AWG  | 26 AWG                    |  |
|                         | DC Output Connector                       | 5.5mm x 2.1mm x 10mm center positive  |                           |  |
| Notes                   |   |   |                           |  |

\*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     |                      |
| RPB-AB01B-H |       | Brazil Clip | VENDER CODE          |
| RPC-AB01B-H |       | China Clip  |                      |
| RPE-AB01B-H |       | Europe Clip |                      |

Phihong is not responsible for any error and reserves the right to make changes without notice. Please visit our website at www.phihong.com for the most up-to-date specifications and contact information. Revised 9/26/2024

| Model       | Photo | Description    | Outline Drawing - mm |
|-------------|-------|----------------|----------------------|
| RPH-AB01B-H |       | Korea Clip     |                      |
| RPI-AB01B-H |       | India Clip     |                      |
| RPK-AB01B-H |       | UK Clip        |                      |
| RPN-AB01B-H |       | Argentina Clip |                      |

Phihong is not responsible for any error and reserves the right to make changes without notice. Please visit our website at www.phihong.com for the most up-to-date specifications and contact information. Revised 9/26/2024

