

RHINO Power Supplies PSC Series

NEC Class 2 Compliant Supplies

The RHINO PSC series power supplies are plastic low-profile housed switching supplies available in 5, 12 and 24 VDC adjustable output models. There are 8 models with power ratings from 12W to 90W. They have an integral DIN rail mounting adapter and feature universal 120/240 VAC input voltage, adjustable DC output, DC-OK LED indication, and output current limitation.

The RHINO PSC series of switching power supplies provide tightly regulated output voltage for sensitive loads in industrial, commercial and residential environments. The plastic housing is lightweight and low-profile, designed to fit in shallow depth control panels often used in the building automation industry. Screw terminals are provided for simple and speedy wiring terminations.

The RHINO PSC series is both UL508 listed for demanding industrial applications and UL1310 recognized for NEC Class 2 compliance in industrial, commercial and residential applications.



Features

- Low-profile housing - only 2.15 inches (55mm) deep (MCB form factor)
- 5, 12, 24VDC adjustable outputs
- Output power ratings from 12 to 90W
- Integral DIN rail mounting adapter
- Universal input voltage range 120/240 VAC
- Tight output voltage regulation
- DC-OK LED indication
- UL508 Listed
- UL1310 Recognized for NEC Class 2 compliance
- CE compliant
- RoHS compliant



**PSC-05-012, PSC-12-015,
PSC-24-015**



PSC-12-030, PSC-24-030



PSC-12-060, PSC-24-060



PSC-24-090

Input Specifications

| Part Number | Input Voltage Range | Input Frequency Range | Input Current [Typical] at full load | | Efficiency [Typ @ 115VAC] | C-Curve Circuit Breaker or Slow-blow Fuse |
|----------------------------|--|-----------------------|--------------------------------------|------------|---------------------------|---|
| | | | 115 VAC | 230 VAC | | |
| PSC-05-012 | 100-240VAC - Nominal 85 to 264VAC - Universal [output power derating 5% / V for operation below 90 VAC] | 47-63 Hz | 0.25A typ. | 0.17A typ. | 76% | 6.0 A |
| PSC-12-015 | | | 0.29A typ. | 0.20A typ. | 78% | |
| PSC-24-015 | | | | | 79% | |
| PSC-12-030 | | | 0.57A typ. | 0.39A typ. | 81% | |
| PSC-24-030 | | | | | 84% | |
| PSC-12-060 | | | 1.00A typ. | 0.68A typ. | 83% | |
| PSC-24-060 | | | 1.10A typ. | 0.70A typ. | 85% | |
| PSC-24-090 | | | 1.60A typ. | 1.07A typ. | 87% | |

Output Specifications

| Output Specifications | | | | | | | | | |
|----------------------------|-----------|---------------------|----------------|----------------------------|------------------------|----------------------|------------------|------------------|------------------------|
| Part Number | Price | Drawing Link | Output Voltage | Output Volt. Adjust. Range | Max Output Current [A] | Max Output Power [W] | Hold-Up Time | | MTBF [IEC 1709 @ 25°C] |
| | | | | | | | 115 VAC | 230 VAC | |
| PSC-05-012 | \$072p: | PDF | 5.0VDC | 5.0 to 5.2VDC | 2.4 | 12 | minimum 10 ms | minimum 20 ms | 1,600,000 hours |
| PSC-12-015 | \$072q: | PDF | 12.0VDC | 12.0 to 16.0VDC | 1.25 | 15 | | | |
| PSC-24-015 | \$-071i: | PDF | 24.0VDC | 24.0 to 28.0VDC | 0.63 | | | | |
| PSC-12-030 | \$072s: | PDF | 12.0VDC | 12.0 to 16.0VDC | 2.5 | 30 | | | 1,300,000 hours |
| PSC-24-030 | \$-071j: | PDF | 24.0VDC | 24.0 to 28.0VDC | 1.25 | | | | |
| PSC-12-060 | \$.072t: | PDF | 12.0VDC | 12.0 to 16.0VDC | 4.5 | 54 | | | 2,100,000 hours |
| PSC-24-060 | \$0071k: | PDF | 24.0VDC | 24.0 to 28.0VDC | 2.5 | 60 | | | |
| PSC-24-090 | \$-0071l: | PDF | 24.0VDC | | 3.75 | 90 | | | 1,300,000 hours |

RHINO Power Supplies PSC Series

| General Specifications | | |
|--|---|---------------------------------------|
| Temperature | Operating: -25 to 60°C [-13 to 140°F] max at nominal load, above +60°C [+140°F] 2.5% / °C derating up to +70°C [+185°F] Storage: -25 to 85°C [-13 to 185°F] max | |
| Humidity | 95% [non-condensing] relative humidity max. | |
| Output Regulation | 1% | |
| Protection Class II | to IEC/EN 60536 | |
| Safety Standards | UL508, UL1310, Class 2 IEC/EN 60950-1, UL60950-1, EN50178 EN60204, EN61558-2-8 | |
| Output Voltage Ripple | <100 mV peak-to-peak | |
| Output Protection | Current limitation at 100 - 150% typ. [automatic recovery] | |
| Electromagnetic Compatibility (EMC) | Emissions - EN61000-6-3 Conducted RI suppression on input - EN55032 class B Radiated RI suppression - EN55032 class B FCC Class B | Immunity - EN61000-6-2 EN61000-4-X |
| Enclosure Rating | IP 20 [IEC 60529] | |
| Enclosure Material | Plastic FR2010-110C [UL 94V-0 rated] | |
| Mounting | DIN rails as per EN50022-35x15/735 [snap-on with self-locking springs] | |
| Connection | Screw terminals with combi-type screw heads for wire size 24 to 12AWG [0.20 to 3.30mm ²] | |
| Agency Approvals | UL508 Listed, File No. E197592 UL1310 Class 2 Recognized, File No. E198298 | |

| Wiring | | |
|------------------|---|--|
| Input/Output | Description | Wire size |
| AC Input | all models: L, N only [2 pin terminal] | 24 -12AWG / 3.30mm ² max |
| DC Output | 15 -30 Watt models: single + and - terminals | 24 -12AWG / 3.30mm ² max |
| DC Output | 60 - 90 Watt models: double + and - terminals | 24 -12AWG / 3.30mm ² max |

| Weight | |
|-------------------|---------------|
| Part No. | Weight oz [g] |
| PSC-05-012 | 3.53 [100] |
| PSC-12-015 | 3.53 [100] |
| PSC-24-015 | 3.53 [100] |
| PSC-12-030 | 5.64 [160] |
| PSC-24-030 | 5.64 [160] |
| PSC-12-060 | 8.11 [230] |
| PSC-24-060 | 8.11 [230] |
| PSC-24-090 | 12.0 [340] |