

# RHINO PSS-S Series Panel Mount Power Supplies



## Overview

AutomationDirect's RHINO PSS-S low profile, panel mount, power supplies accept a universal AC input and feature a highly efficient convection cooling construction that operates from -30°C to 70°C [-22 to 158°F].

## Features

- Universal AC input voltage range 90–264 VAC
- Adjustable output voltage
- No load power consumption <0.3 W
- Low profile design
- Overload, overvoltage and thermal protection
- Output voltage status LED
- Rugged aluminum housing, screw mounts in three different orientations
- Wide operating temperature -30 to 70°C (-40°C cold start) [-22 to 158°F]
- 3-year warranty



## PSS-S Series Input Specifications

Part Number	Price	Input Voltage Range	Input Frequency Range	Input Current	Max. Inrush Current (cold start)	Leakage Current	*Recommended Circuit Breaker
<a href="#">PSS12-035-S</a>	\$13.00	90 – 264 VAC	47 – 63 Hz	0.7 A typ. @ 115VAC, 0.42 A typ. @ 230VAC	45A typ. @ 230VAC	< 0.5 mA @ 240 VAC	10A "B" Curve
<a href="#">PSS12-050-S</a>	\$15.00			0.95 A typ. @ 115VAC, 0.6 A typ. @ 230VAC	45A typ. @ 230VAC		16A "B" Curve
<a href="#">PSS12-100-S</a>	\$20.00			1.9 A typ. @ 115VAC, 1.2 A typ. @ 230VAC	55A typ. @ 230VAC		20A "B" Curve
<a href="#">PSS24-035-S</a>	\$13.00			0.7 A typ. @ 115VAC, 0.42 A typ. @ 230VAC	45A typ. @ 230VAC		10A "B" Curve
<a href="#">PSS24-050-S</a>	\$15.00			0.95 A typ. @ 115VAC, 0.6 A typ. @ 230VAC	45A typ. @ 230VAC		16A "B" Curve
<a href="#">PSS24-100-S</a>	\$20.00			1.9 A typ. @ 115VAC, 1.2 A typ. @ 230VAC	55A typ. @ 230VAC		20A "B" Curve

\*Note: Input circuit breaker is based on Input and Inrush current. Defined Inrush is based on cold start at 25°C.

## PSS-S Series Output Specifications

Part Number	Output Voltage (Vnom) / Adjustment Range	Output Power	Output Current	Ripple and Noise (20MHz)	Startup with Capacitive Loads	Start-Up Time	Hold-Up Time	Rise Time	Efficiency	
<a href="#">PSS12-035-S</a>	10.8–13.2 VDC	35W	3A	< 120 mVpp @ 0 to 70°C 360 mVpp typ. @ -30 to 0°C	8000µF	1,000ms typ. @ 115VAC	16ms typ. @ 115 VAC, 70ms typ. @ 230 VAC	30ms typ. @ 115VAC & 230VAC	86.0% typ.	
<a href="#">PSS12-050-S</a>		50W	4.2 A			500ms typ. @ 230VAC	12ms typ. @ 115 VAC, 60ms typ. @ 230 VAC		85.0% typ.	
<a href="#">PSS12-100-S</a>		100W	8.5 A			500ms typ. @ 115VAC & 230VAC	9ms typ. @ 115 VAC, 42ms typ. @ 230 VAC		87.5% typ.	
<a href="#">PSS24-035-S</a>	21.6–26.4 VDC	35W	1.5 A	< 150 mVpp @ 0 to 70°C 450 mVpp typ. @ -30 to 0°C		1,000ms typ. @ 115VAC	16ms typ. @ 115 VAC, 70ms typ. @ 230 VAC		30ms typ. @ 115VAC & 230VAC	88.5% typ.
<a href="#">PSS24-050-S</a>		50W	2.2 A			500ms typ. @ 230VAC	12ms typ. @ 115 VAC, 60ms typ. @ 230 VAC			88.0% typ.
<a href="#">PSS24-100-S</a>		100W	4.5 A			500ms typ. @ 115VAC & 230VAC	9ms typ. @ 115 VAC, 42ms typ. @ 230 VAC			90.0% typ.

# RHINO PSS-S Series Specifications

General Specifications	
<b>Output Line Regulation</b>	± 0.5% (@ 115VAC & 230VAC input)
<b>Output Load Regulation</b>	± 0.5% (@ 115VAC & 230VAC input)
<b>Overload/Short Circuit Protection</b>	110-175% of rated load current, Hiccup Mode, Non-Latching (Auto-Recovery when the fault is removed)
<b>Overvoltage Protection</b>	PSS12 - 13.2 V - 17.4 V, SELV Output, Latch Mode PSS24 - 26.4 V - 33.6 V, SELV Output, Latch Mode
<b>Case Chassis / Cover</b>	Aluminum / SGCC (Galvanized Steel)
<b>Signals</b>	Green LED (DC OK)
<b>MTBF</b>	> 700,000 hrs as per Telcordia SR-332 I/P: 230 Vac, O/P: 100% Load, Ta: 25°C)
<b>Noise</b>	Sound pressure level (SPL) < 25 dBA
<b>Cooling</b>	Convection
<b>Terminal</b>	M3.5 x 5 Pins (Rated 300V / 20A)
<b>Shock Test</b>	Non-Operating IEC 60068-2-27, Half Sine Wave: 50G for a duration of 11ms, 3 shocks for each 3 directions Operating IEC 60068-2-27, Half Sine Wave: 10G for a duration of 11ms, 3 shock for each 3 directions.
<b>Vibration</b>	Non-Operating IEC 60068-2-6, Random: 5Hz to 500Hz (2.09G); 20 min per axis for all X, Y, Z direction Operating IEC 60068-2-6, Sine Wave: 20Hz to 500Hz (5G); 10 min per cycle, 60 min for each axis (X, Y, Z)
<b>Operating Temperature</b>	-30 to 70°C (-40°C Cold Start) [-22 to 158°F]
<b>Storage Temperature</b>	-40 to 85°C [-40 to 185°F]
<b>Humidity</b>	20 to 90% RH (Non-Condensing)

Safety and Agency Approvals	
<b>EMC / Emissions</b>	EN 55032
<b>Immunity</b>	EN 55035, IEC 61000-4-2, IEC 61000-4-3, IEC 61000-4-4, IEC 61000-4-5, IEC 61000-4-6, IEC 61000-4-8
<b>Voltage Dips</b>	Conform to IEC 61000-4-11
<b>Galvanic Isolation</b>	Input to output 4.0 KVAC, Input to Ground 2.0 KVAC, Output to Ground 1.25 KVAC
<b>Approvals</b>	cURus File: E508040, UL 62368-1, CAN/CSA C22.2 No. 62368-1 CB scheme: IEC 62368-1, IEC 60335-1, IEC 61558-1/-2-16 CE: In conformance with EMC Directive 2014/30/EU and Low Voltage Directive 2014/35/EU

To obtain the most current agency approval information, see the Agency Approval Compliance & Certifications Checklist section on the specific part number's web page.

Additional Data						
Part Number	Wire Size / Torque		Terminal Block Type	Chassis Mounting Torque	Weight	Drawing Link
	Input	Output				
<a href="#">PSS12-035-S</a>	0.82-3.31 mm <sup>2</sup> [AWG 18-12] 0.78 N•m [6.94 lb•in]	0.82-3.31 mm <sup>2</sup> [AWG 18-12] 0.78 N•m [6.94 lb•in]	M3.5 x 5 Pins (Rated 300V / 20A)	0.39-0.69 N•m [3.47-6.08 lb•in]	0.165 kg [0.363 lb]	<a href="#">PDF</a>
<a href="#">PSS12-050-S</a>					0.176 kg [0.389 lb]	<a href="#">PDF</a>
<a href="#">PSS12-100-S</a>			M3.5 x 7 Pins (Rated 300V / 20A)		0.285 kg [0.628 lb]	<a href="#">PDF</a>
<a href="#">PSS24-035-S</a>			M3.5 x 5 Pins (Rated 300V / 20A)		0.165 kg [0.363 lb]	<a href="#">PDF</a>
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