

RHINO PSS Series Panel Mount Power Supplies

AutomationDirect's RHINO PSS series of panel mount power supplies is perfect for applications that require a basic DC voltage power supply. These low cost power supplies offer high performance and reliability without all the additional features of higher cost full-featured power supplies. The RHINO PSS series is available with universal single-phase input and with output voltages of 12 and 24VDC from 35 to 100 Watts. The PSS0524-100 unit provides both a 24VDC and a 5VDC output. The rugged aluminum housing easily screw mounts in three different mounting orientations. These high-quality power supplies include overload, overvoltage and thermal protection, and are UL 60950 recognized, CE marked and RoHS compliant.

Features

- Universal input voltage, 120/240 VAC or 100–375 VDC
- 12VDC, 24VDC or dual 5 and 24VDC, 35 to 100 Watts
- Adjustable output voltage
- Rugged aluminum housing, screw mounts in three different orientations
- Output voltage status LED
- Robust fixed-screw terminal strips
- Overload, overvoltage and thermal protection
- UL 60950 recognized, CE marked and RoHS compliant
- Two year warranty



PSS Series Input Specifications								
Part Number	Price	Weight	Input Voltage	Input Frequency Range	Max. Input Current	Inrush Current Limitation I_{t} @ 77°F (+25°C) typ.	Leakage Current	Recommended Circuit Breaker
PSS12-035		0.21 kg [0.46 lb]	85–264 VAC (DC input range 100–375 VDC)	47–63 Hz (0Hz @ DC Input)	<0.75A Max @ 115VAC, <0.5A Max @ 230 VAC	<30A @ 115VAC, 60A @ 230VAC	<1mA	16A "B" Curve
PSS12-050		0.26 kg [0.57 lb]			<1.1A Max @ 115VAC, <0.7A Max @ 230VAC	<30A @ 115VAC, 60A @ 230VAC		
PSS12-100		0.45 kg [0.99 lb]			<2 A Max @ 115VAC, <1.1A Max @ 230VAC	<60A @ 115VAC, 130A @ 230VAC		
PSS24-035		0.237 kg [0.52 lb]			<0.75A Max @ 115VAC, <0.5A Max @ 230VAC	<30A @ 115VAC, 60A @ 230VAC		10A "B" Curve
PSS24-050		0.255 kg [0.56 lb]			<1.1A Max @ 115VAC, <0.7A Max @ 230VAC	<30A @ 115VAC, 60A @ 230VAC		
PSS24-100		0.410 kg [0.90 lb]			<2A Max @ 115VAC, <1.1A Max @ 230VAC	<50A @ 115VAC, 100A @ 230VAC		16A "B" Curve
PSS0524-100		0.52 kg [1.15 lb]	85–264 VAC (DC input range 125–375 VDC)					

PSS 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 at Nominal Load (Typ.) (Mains Buffering)	Rise Time	Efficiency (Typ @115VAC)
PSS12-035	12VDC / 11–14 VDC	35W	3Amp	<100 mVpp	6000µF	<2500ms @ 100% load (25°C [77°F]) and typical line input	>15ms @ 115VAC, >80ms @ 230VAC with 35W load (25°C [77°F])	<30ms @ 100% load (25°C [77°F])	85%
PSS12-050		50W	4.17 Amp				>15ms @ 115VAC, >80ms @ 230VAC with 50W load (25°C [77°F])		84%
PSS12-100		100W	8.33 Amp				<1000ms @ 100% load (25°C [77°F]) and typical line input		>15ms @ 115VAC, >80ms @ 230VAC with 100W load (25°C [77°F])
PSS24-035	24VDC / 22–28 VDC	35W	1.46 Amp	<150 mVpp	8000µF	<2500ms @ 100% load (25°C [77°F]) and typical line input	>15ms @ 115VAC, >80ms @ 230VAC with 35W load (25°C [77°F])		85%
PSS24-050		50W	2.1 Amp				>15ms @ 115VAC, >80ms @ 230VAC with 50W load (25°C [77°F])		86%
PSS24-100			4.17 Amp				<1000ms @ 100% load (25°C [77°F]) and typical line input		
PSS0524-100	V1: 24VDC / 22.8–26.4 VDC V2: 5VDC / Fixed	100W	V1: 2.7 Amp V2: 7.0 Amp	V1: <200 mVpp; V2: <80 mVpp	4000µF	<1000ms @ 100% load (25°C [77°F]) and typical line input	>15ms @ 115VAC, >80ms @ 230VAC with 100W load (25°C [77°F])	V1: <30ms, V2: <20ms @ 100% load (25°C [77°F])	82%

RHINO PSS Series Panel Mount Power Supply Specifications

General Specifications	
Output Line Regulation	<0.5% typical (@ 85–264 VAC input, 100% load)
Output Load Regulation	<1% typical (@ 85–264 VAC input, 0–100% load)
Overload/Short Circuit Protection	>120% rated load current, hiccup mode with auto recovery (PSS0524-100: >150% of total rated output power, hiccup mode, non-latching, auto-recovery)
Overvoltage Protection	32VDC max. (PSS0524-100 V1: <32.4 VDC max., V2: 6.75 VDC max.), hiccup mode, non-latching (auto recovery)
Case Cover	Aluminium (Al1100)
Signals	Green LED DC OK
MTBF	>700,000 hrs.
Noise	Sound pressure level (SPL) <40dBA
Cooling	Convection
Input/Output Terminal	Terminal block 5-Pin rated 300V/20A (PSS0524-100: 7-Pin rated 300V/15A)
Shock Test	30g half sine, 3 times per direction, 6 directions, per IEC60068-2-27
Vibration	10 to 150Hz, 5g, 20 min. each axis per IEC60068-2-6
Operating Temperature	-10°C to +70°C* [14°F to 158°F]
Storage Temperature	-25°C to +85°C [-13°F to 185°F]
Humidity at +25 °C [77°F], no condensation	<95% RH non-condensing

* Operating to 70°C [158°F] possible with a linear derating to half power from 50°C to 70°C [122°F to 158°F]

Safety and Agency Approvals	
EMC / Emissions	FCC Title 47, Class B/EN 55032/CISPR32, Class B
Immunity	EN 61000-4-2,1995; EN 61000-4-3,1998; EN 61000-4-4,1995; IEC61000-4-5,1995; EN 61000-4-6,1996; EN 61000-4-8 or IEC61000-4-12 or IEEE C62.41; EN 61000-3-2,1994
Voltage Dips	Conform to EN 61000-4-11
Galvanic Isolation	Input to Output : 3 KVAC, Input to Ground : 1.5 KVAC, Output to Ground : 0.5 KVAC
Approvals	UR/cUR recognized to UL60950-1 (file no. E198298); CB test certificate and report to IEC60950-1, CE (EMC and Low Voltage directive)
RoHS Compliant	Yes

Additional Data					
Part No.	Wire Size / Torque		Terminal Block Type	Chassis Mounting Torque	Dimensional Drawing
	Input	Output			
PSS12-035	0.32-2.1 mm² [AWG 22–14] / 1.3 Nm [11.3 lb-in]	0.32-2.1 mm² [AWG 22–14] / 1.3 Nm [11.3 lb-in]	Fixed screw terminals	0.4–0.8 Nm [3.5–7 lb-in]	PDF
PSS12-050					PDF
PSS12-100					PDF
PSS24-035	0.32-3.3 mm² [AWG 22–12] / 1.3 Nm [11.3 lb-in]	0.32-3.3 mm² (AWG 22–12) / 1.3 Nm [11.3 lb-in]			PDF
PSS24-050					PDF
PSS24-100					PDF