

# 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 24 VDC from 35 to 100 Watts. 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, 85-264 VAC / 100-375 VDC
- 24 VDC or 12 VDC outputs, 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 No.	Price	Weight	Input Voltage	Input Frequency Range	Nominal Current	Inrush Current Limitation $P_t$ @ 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 (0 Hz @ DC Input)	0.72A Max @ 115 VAC, 0.45A Max @ 230 VAC	<30A @ 115 VAC, 60A @ 230 VAC	<1 mA	16A
PSS12-050	<--->	0.26 kg (0.57 lb)			1.1A Max @ 115 VAC, 0.7A Max @ 230 VAC	<30A @ 115 VAC, 60A @ 230 VAC		
PSS12-100	<--->	0.45 kg (0.99 lb)			2.0A Max @ 115 VAC, 1.1A Max @ 230 VAC	<60A @ 115 VAC, 130A @ 230 VAC		
PSS24-035	<--->	0.237 kg (0.52 lb)			0.72A Max @ 115 VAC, 0.4A Max @ 230 VAC	<30A @ 115 VAC, 60A @ 230 VAC		10A
PSS24-050	<--->	0.255 kg (0.56 lb)			1.1A Max @ 115 VAC, 0.7A Max @ 230 VAC	<30A @ 115 VAC, 60A @ 230 VAC		
PSS24-100	<--->	0.410 kg (0.90 lb)			2.0A Max @ 115 VAC, 1.1A Max @ 230 VAC	<50A @ 115 VAC, 100A @ 230 VAC		

\*Characteristic B

PSS Series Output Specifications								
Part No.	Output Voltage (Vnom) / Adjustment Range	Output Power	Output Current	Ripple and Noise (20MHz)	Start-Up Time	Hold-Up Time	Rise Time	Efficiency
PSS12-035	12 VDC / 11-14 VDC	35 Watts	3 Amp	<100mVpp (@ nominal values)	<2500ms @ 100% load (25°C [77°F]) and typical line input	>15ms @ 115 VAC, >80ms @ 230 VAC with 35W load (25°C [77°F])	<30ms @ 100% load (25°C [77°F])	>84% (typical)
PSS12-050		50 Watts	4.17 Amp					>83% @ 115 VAC & >84% @ 230 VAC
PSS12-100		100 Watts	8.33 Amp					>84% (typical)
PSS24-035	24 VDC / 22-28 VDC	35 Watts	1.46 Amp	<150mVpp (@ nominal values)	<2500ms @ 100% load (25°C [77°F]) and typical line input	>15ms @ 115 VAC, >80ms @ 230 VAC with 35W load (25°C [77°F])		>85% @ 115 VAC & >84% @ 230 VAC
PSS24-050		50 Watts	2.1 Amp					>86% (typical)
PSS24-100		100 Watts	4.17 Amp					>86% (typical)



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# RHINO PSS Series Panel Mount Power Supply Specifications

General Specifications	
<b>Output Line Regulation</b>	<0.5% typical (@ 85-264 VAC input, 100% load)
<b>Output Load Regulation</b>	<1% typical (@ 85-264 VAC input, 0-100% load)
<b>Overload/Short Circuit Protection</b>	<120% rated load current, hiccup mode with automatic recovery
<b>Overvoltage Protection</b>	32 VDC max.
<b>Case Cover</b>	Aluminium (Al1100)
<b>Signals</b>	Green LED DC OK
<b>MTBF</b>	> 700,000 hrs.
<b>Noise</b>	Sound pressure level (SPL) < 40 dBA
<b>Cooling</b>	Convection
<b>Input/Output Terminal</b>	Terminal block 5 Pin rated 300V/20A
<b>Shock Test</b>	30g half sine, 3 time per direction, 6 directions, per IEC60068-2-27
<b>Vibration</b>	10 to 150Hz, 5g, 20 min. each axis per IEC60068-2-6
<b>Operating Temperature</b>	-10 °C to +70 °C* (14°F to 158°F)
<b>Storage Temperature</b>	-25 °C to +85 °C (-13°F to 185°F)
<b>Humidity at +25 °C (77°F), no condensation</b>	< 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	
<b>EMC / Emissions</b>	FCC Title 47, Class B/EN 55022; CISPR22, Class B
<b>Immunity</b>	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
<b>Voltage Dips</b>	Conform to EN 61000-4-11
<b>Galvanic Isolation</b>	Input to Output : 3KVAC, Input to Ground : 1.5KVAC, Output to Ground : 0.5KVAC
<b>Approvals</b>	UR/cUR recognized to UL60950-1 (#E198298); CB test certificate and report to IEC60950-1, CE (EMC and Low Voltage directive)
<b>RoHS Compliant</b>	Yes

Additional Data			
Part No.	Dimensions (L x W x H)	Wire Size / Torque	Chassis Mounting Torque
<b>PSS12-035</b>	98 mm x 97 mm x 38 mm (3.86 in x 3.82 in x 1.50 in)	0.32-2.1 mm <sup>2</sup> (AWG 22-14) / 1.3 Nm (11.3 lb-in)	0.4 to 0.8 Nm (3.5 to 7 lb-in)
<b>PSS12-050</b>	128 mm x 97 mm x 38 mm (5.04 in x 3.82 in x 1.50 in)		
<b>PSS12-100</b>	158 mm x 97 mm x 38 mm (6.22 in x 3.82 in x 1.50 in)		
<b>PSS24-035</b>	128 mm x 97 mm x 38 mm (5.04 in x 3.82 in x 1.50 in)	0.32-3.3 mm <sup>2</sup> (AWG 22-12) / 1.3 Nm (11.3 lb-in)	
<b>PSS24-050</b>	128 mm x 97 mm x 38 mm (5.04 in x 3.82 in x 1.50 in)		
<b>PSS24-100</b>	158 mm x 97 mm x 38 mm (6.22 in x 3.82 in x 1.50 in)		

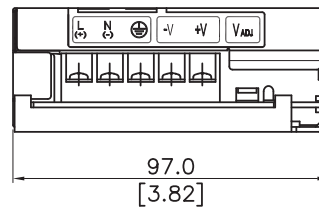
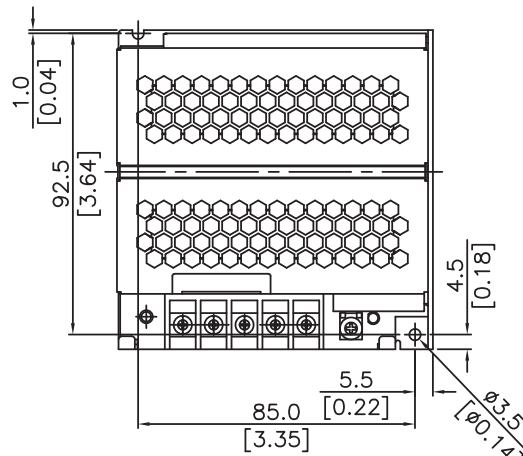
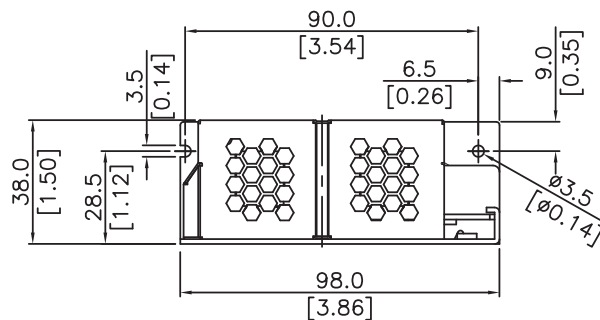
# RHINO PSS Series Panel Mount Power Supply Dimensions

All dimensions in mm [inches]

Drill template available for download at [www.AutomationDirect.com](http://www.AutomationDirect.com)

## PSS12-035

Wiring Connection			
Input		Output	
L	Line	-V	Out -
N	Neutral	+V	Out +
	AC Ground		

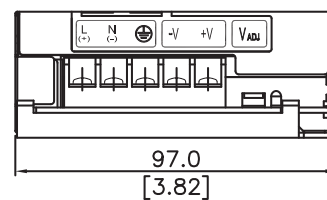
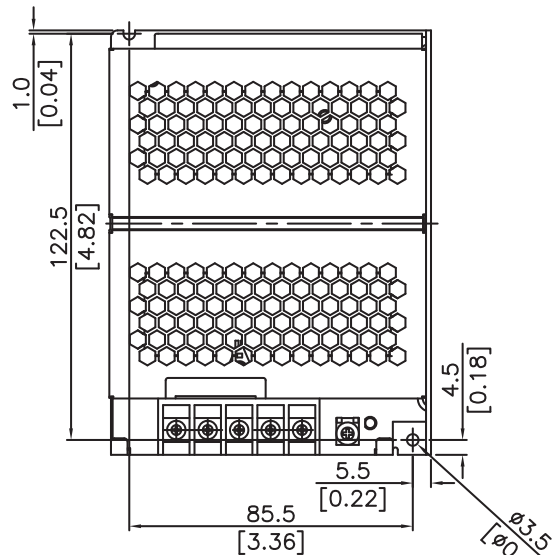
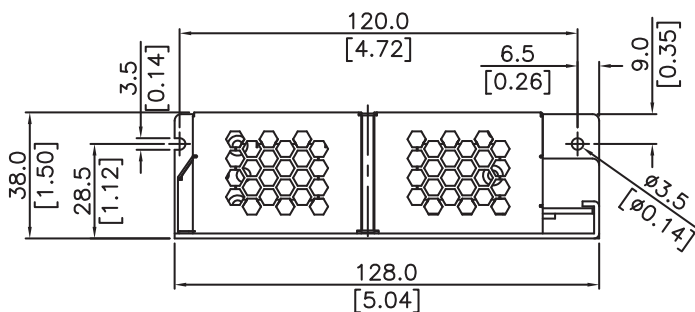


## PSS12-050

## PSS24-035

## PSS24-050

Wiring Connection			
Input		Output	
L	Line	-V	Out -
N	Neutral	+V	Out +
	AC Ground		



# RHINO PSS Series Panel Mount Power Supply Dimensions

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PSS12-100  
PSS24-100

Wiring Connection			
Input		Output	
L	Line	-V	Out -
N	Neutral	+V	Out +
	AC Ground		

