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]
- Three year warranty

Please Note: $US prices shown
For current $AUD visit www.directautomation.com.au

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
PSS12-035-S	$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
PSS12-050-S	$15.00			0.95 A typ. @ 115VAC, 0.6 A typ. @ 230VAC	45A typ. @ 230VAC		16A "B" Curve
PSS12-100-S	$20.00			1.9 A typ. @ 115VAC, 1.2 A typ. @ 230VAC	55A typ. @ 230VAC		20A "B" Curve
PSS24-035-S	$13.00			0.7 A typ. @ 115VAC, 0.42 A typ. @ 230VAC	45A typ. @ 230VAC		10A "B" Curve
PSS24-050-S	$15.00			0.95 A typ. @ 115VAC, 0.6 A typ. @ 230VAC	45A typ. @ 230VAC		16A "B" Curve
PSS24-100-S	$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
PSS12-035-S	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.
PSS12-050-S		50W	4.2 A			500ms typ. @ 230VAC	12ms typ. @ 115 VAC, 60ms typ. @ 230 VAC		85.0% typ.
PSS12-100-S		100W	8.5 A			500ms typ. @ 115VAC & 230VAC	9ms typ. @ 115 VAC, 42ms typ. @ 230 VAC		87.5% typ.
PSS24-035-S	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		88.5% typ.
PSS24-050-S		50W	2.2 A			500ms typ. @ 230VAC	12ms typ. @ 115 VAC, 60ms typ. @ 230 VAC		88.0% typ.
PSS24-100-S		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	
Output Line Regulation	± 0.5% (@ 115VAC & 230VAC input)
Output Load Regulation	± 0.5% (@ 115VAC & 230VAC input)
Overload/Short Circuit Protection	110-175% of rated load current, Hiccup Mode, Non-Latching (Auto-Recovery when the fault is removed)
Overvoltage Protection	PSS12 - 13.2 V - 17.4 V, SELV Output, Latch Mode PSS24 - 26.4 V - 33.6 V, SELV Output, Latch Mode
Case Chassis / Cover	Aluminum / SGCC (Galvanized Steel)
Signals	Green LED (DC OK)
MTBF	> 700,000 hrs as per Telcordia SR-332 I/P: 230 Vac, O/P: 100% Load, Ta: 25°C)
Noise	Sound pressure level (SPL) < 25 dBA
Cooling	Convection
Terminal	M3.5 x 5 Pins (Rated 300V / 20A)
Shock Test	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.
Vibration	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)
Operating Temperature	-30 to 70°C (-40°C Cold Start) [-22 to 158°F]
Storage Temperature	-40 to 85°C [-40 to 185°F]
Humidity	20 to 90% RH (Non-Condensing)

Safety and Agency Approvals	
EMC / Emissions	EN 55032
Immunity	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
Voltage Dips	Conform to IEC 61000-4-11
Galvanic Isolation	Input to output 4.0 KVAC, Input to Ground 2.0 KVAC, Output to Ground 1.25 KVAC
Approvals	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

Additional Data

Part Number	***Wire Size / Torque***		***Terminal Block Type***	***Chassis Mounting Torque***	***Weight***	***Drawing Link***
	Input	***Output***				
PSS12-035-S	0.82-3.31 mm^2 [AWG 18-12] 0.78 N•m [6.94 lb•in]	0.82-3.31 mm^2 [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]	PDF
PSS12-050-S					0.176 kg [0.389 lb]	PDF
PSS12-100-S			M3.5 x 7 Pins (Rated 300V / 20A)		0.285 kg [0.628 lb]	PDF
PSS24-035-S			M3.5 x 5 Pins (Rated 300V / 20A)		0.165 kg [0.363 lb]	PDF
PSS24-050-S					0.176 kg [0.389 lb]	PDF
PSS24-100-S			M3.5 x 7 Pins (Rated 300V / 20A)		0.285 kg [0.628 lb]	PDF