

PSRT Series Switching Power Supplies

Overview

AutomationDirect's RHINO TOUGH PSRT series of switching power supplies are designed for industrial applications outside of the control cabinet. These field-mountable power supplies offer a compact footprint and allow machine mounting near the load.

Features

- High efficiency
- Compact size
- Integrated device protection
- Quick connection with 7/8" connectors
- Internal isolating transformer with reinforced insulation
- IP67 protection class safe to touch even at full load





PSRT Series Switching Power Supplies Selection Chart					
Part Number	Price	Output Voltage	Output Current	Output Power	Drawing Link
PSRT-24-100	\$263.00	241/DC	3.8 A	91.2 W	PDF
PSRT-24-200	\$341.00	24VDC	8A	192W	PDF

PSRT Series Switching Power Supplies Input Specifications								
Part Number	Nominal Input Voltage	Input Voltage Range	Nominal Frequency Range	Max. Input Current	Max. Inrush Current (after 1ms)	Nominal Watts	Efficiency	Circuit Breaker
PSRT-24-100	120/240 VAC 100/230 VDC	90-265 VAC/VDC	50/60 Hz ±6 %	1.1 A @ 100VAC 0.5 A @ 240VAC	8.9A @ 230VAC	0.95 kW @ 230VAC	91.4% @ 115VAC 92.1% @ 230VAC	C4
PSRT-24-200		90-265 VAC 90-372 VDC		2.1 A @ 100 VAC 0.9 A @ 240 VAC	7A @ 230VAC	0.95 kW @ 230VAC	93.7% @ 115VAC 94.4% @ 230VAC	B or C

PSRT Series Switching Power Supplies Output Specifications							
Part Number	Output Voltage	Output Hold-up Time (Min.)	Output Current (Continuous 24VDC)	Output Current (Power Boost)	Output Current (Short-Circuit)	MTBF (@ 40°C)	
PSRT-24-100	24VDC	80ms (230VAC) 3.8 A (24VDC)	3.8 A (+60 °C) 2.4 A (+70 °C)	N/A	4.4 A	> 1,000,000h	
PSRT-24-200	(SELV) ±2%	≥ 35ms (230VAC) 8A (24VDC)	8A (+60 °C) 4.8 A (+70 °C)	150% for 5s	9A	> 700,000h	



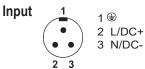


PSRT Series Switching Power Supplies

PSRT Series Switching Power Supplies General Specifications						
Part Number		<u>PSRT-24-100</u>	<u>PSRT-24-200</u>			
T	Operating	-40 to 85°C [-40 to 185°F]				
Temperature	Storage	-40 to 85°C [-4	40 to 185°F]			
Humidity		4 to 100%				
Line Regulation		5mV				
Load Regulation		110mV				
Short Circuit Protection		Yes				
Leakage Current		< 1mA @ 230VAC / 50 Hz				
Start-up Time		≤ 330ms @ 100VAC ≤ 330ms @ 230VAC	≤ 500 ms			
Short Circuit Protection		Yes				
Overload Protection		Yes				
Overvoltage Shutdown		N/A				
Status Indicators		LED (red): overload, over	LED (green): output voltage OK LED (red): overload, overheating or short-circuit No color - No input voltage			
Ripple (max.)		50 mVrms	< 30 mVeff/rms			
Spikes (max.)		130 mVp-p	300 mVss/pp			
Vibration		IEC 60068-2-6; 2-17.8Hz: 7.84 mm, 17.8-500 Hz: 5g				
Shock		IEC 60068-2-27 [50g / 8ms]				
Enclosure Rating		IP67				
Mounting		Chassis				
Housing Material		Aluminum (encapsulated)				
Connection		(1) 7/8in - 16 UN2 4-pin female (1) 7/8in - 16 UN2 3-pin male Diagram 1	(1) 7/8in - 16 UN2 3-pin male (1) 7/8in - 16 UN2 5-pin female Diagram 2			
Tightening Torque		1.5 N•m [13.27 lb-in]				
Weight kg [lb]		1.22 [2.68]	1.65 [3.63]			
Agency Approval		UL 508 File E197592, CE				

Wiring Diagrams





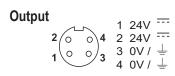
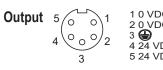


Diagram 2





Input



1 ① DC+ 2 L / DC+ 3 N / DC-