

## **Switching Power Supplies PSRT Series**

### **Overview**

Part Number

PSRT-24-100

PSRT-24-200

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.



Price

\$05oh8:

\$05oh9:

#### **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





192W

PDF

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

24VDC

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

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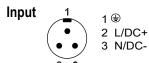


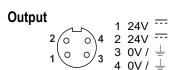
# **Switching Power Supplies PSRT Series**

| General Specifications   |           |  |   |  |  |  |
|--------------------------|-----------|--|---|--|--|--|
| Part Number              |           | PSRT-24-100  | <u>PSRT-24-200</u>  |  |  |  |
| Temperature              | Operating | -40 to 85°C [-40 to 185°F]   |   |  |  |  |
|                          | Storage   | -40 to 85°C [-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<br>≤ 330ms @ 230VAC   | ≤ 500 ms  |  |  |  |
| Short Circuit Protection |           | Yes  |   |  |  |  |
| Overload Protection      |           | Yes  |   |  |  |  |
| Overvoltage Shutdown     |           | N/A  |   |  |  |  |
| Status Indicators        |           | LED (green): output voltage OK<br>LED (red): overload, overheating or short-circuit<br>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<br>(1) 7/8in - 16 UN2 3-pin male<br>Diagram 1                                      | (1) 7/8in - 16 UN2 3-pin male<br>(1) 7/8in - 16 UN2 5-pin female<br>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  |   |  |  |  |

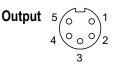
## **Wiring Diagrams**







#### Diagram 2





Input



