



Switched Reluctance Traction Drive Controller

The **SRTD-5050** is a low cost, reliable traction controller for 3 and 4 phase switched reluctance motors.

Special features include:

- Four Phase, Fault Tolerant Motor Construction
 - ◆ Fully compatible with Rocky Mountain Technology's line of switched reluctance motors
- Full 4 quadrant control with regenerative braking (no relay)
- Compact design with integral heatsink eliminates the need for fan cooling
- Integral DC/DC converter
 - ◆ Fully compatible with Rocky Mountain Technology's line of switched reluctance motors
- Drive Efficiency up to 97.5%

Reliable, Switched Reluctance Technology:

- **Simple, reliable, Fail-Safe Construction:** The lack of magnets and the characteristics of the switched reluctance motor allow for reliable, high speed operation at excellent efficiency
- **High torque and efficiency:** The VSR design allows for simplification of the system design and improvement of total system efficiency
- **Regenerative capability:** The VSR motor technology is well suited for both motor and power generating applications. For electric vehicle applications, four quadrant regenerative braking dramatically improves the range
- **Wide Operating Speed Range:** The VSR motor technology is well suited operation at very high speeds. The standard motors are rated for 12,000 RPM. Special versions of the standard motors are available up to 30,000 RPM
- **Competitive with Rare Earth Brushless DC/AC Motor Technology:** The SR motor can achieve performance similar to that of state-of-the-art brushless DC/AC motors with Rare Earth magnets with the use of costly magnets
- **Compact Size:** 6" x 8" x 4"

Ratings:

Supply Voltage:	24V – 48V input (nominal)
Output Current:	50A cont, 100A peak (60 sec)
Commutation:	digital input (hall sensor)
Protection:	current limit, thermal

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Specification subject to change without notice.