Falcon 150

Brushless Permanent Magnet Motor Drive



As part of Nidec's diverse lineup of Ultra Low Voltage drives, the Falcon 150 offers additional flexibility to drive larger motors. Multiple communication interfaces allow the Falcon 150 to be a versatile solution that provides up to 150A of peak current, while remaining compatible with a wide variety of brushless motors.

Input Voltage: 20 Vdc - 90 Vdc Continuous Current: 100 Amps Peak Current: Up to 150 Amps Motor Speed: Up to 6,000 rpm

Warranty: One year limited warranty



Motor Options

- Sinusoidal commutation
- Designed for Brushless Permanent Magnet motors
- Compatible with 2,4,6,8,10,12, or 14 pole motors
- · Hall effect sensors
- Full quadrature encoder

Operating Modes

- · Open loop speed
- · Closed loop speed
- Closed loop current
- Closed loop position (optional)

Communication Interfaces

- CANopen or EtherCAT (CANopen over Ethernet)
- RS-485
- USB
- 0-5V
- PWM
- Output for electronic brakes

Safety Features

- Safe torque off (STO)
- · Safe speed
- Safe stop compliant
- · Reverse polarity protection
- Internal thermal protection
- External thermocouple connection

Environment Ratings

- Storage: -40°C to 125°C
- Operating temperature: -30°C to 55°C
- Withstands 95% relative humidity (non-condensing)

Dimensions and Weight

Width: 134 mm

· Length: 95 mm

· Height: 72 mm

Weight: 700 g (24.7 oz) [1.5 lb]

Agency Approvals

- IEC 61800-5-1
- UL 61800-5-1
- CSA C22.2 NO.14-13

Programming and Indicators

- · Power indicator red
- Status indicator green

