Osprey 40

Brushless Permanent Magnet Motor Drive



As part of Nidec's diverse lineup of Ultra Low Voltage drives, the Osprey 40 features an innovative stacked PCB design. This unique layout optimizes the board for a smaller footprint without sacrificing functionality.

Input Voltage: 10 Vdc - 60 Vdc Continuous Current: 20 Amps Peak Current: Up to 40 Amps Motor Speed: Up to 10,000 rpm Warranty: One year limited warranty



Motor Options

- Trapezoidal or sinusoidal commutation
- Designed for Brushless Permanent Magnet motors
- Compatible with 2,4,6,8 or 10 pole motors
- · Hall effect sensors
- Incremental encoder A/B with index

Operating Modes

- · Open loop speed
- · Closed loop speed
- Closed loop current
- Closed loop position

Communication Interfaces

- CANopen
- RS-485
- USB
- 0-5V
- PWM

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: 45.7 mm

· Length: 40 mm

· Height: 24 mm

PCB Mounted Weight: 55 g (1.94 oz) [.12 lb]

• Industrial Terminals: 100 g (3.5 oz) [.22 lb]

Agency Approvals

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

Programming and Indicators

- Field programmable
- Programmable input/output
- · Power indicator red
- · Status indicator green



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