# Servo Systems

B8001 Servo Drive

#### **Power Input**

Motor Output Current Capability Protection

Power Dump Capacity Encoder Input Type

Maximum Rate Power Diagnostic Output

Format

Variables

### Serial Interface

Data Format

#### Commutation

Vector Error Calculation Rate Environmental Temperature

Humidity Analog Command Input (Velocity or Torque)

Format Impedance Scale

## **Step & Direction Input**

Format

**Brushless Servo Systems** 

Max. Rate Resolution



90-240VAC, single phase, 50/60 Hz, 1150VA @ 115 VAC max, 2300VA @ 230 VAC max

5A continuous, 10A peak Protected against phase-to-phase shorts and shorts to ground. Fused. See page H-40 for details.

Differential quadrature incremental encoder, with or without index 2MHz (post-quadrature) +5V @ 200 mA power encoder

0 to 5V analog signal (centered at 2.5V) Configurable as actual, and commanded velocity; position error; velocity error; actual, and commanded torque – programmable scaling

RS-232C, half-duplex, no parity, 8 data bits, one stop bit, no handshaking, 9600 baud (fixed)

0.1% or less 10 kHz

Thermal shutdown occurs if heatsink temperature exceeds 55°C (131°F). Heatsink temperature is a function of motor current, motor regen, and ambient temperature. 0% to 90% non-condensing

±10V differntial signals Greater than 10K Digitally programmable via configuration ports in velocity mode. Fixed at 10% of output capability per volt in torque mode.

Opto-coupler diodes with 330 series resistance, intended to be driven by a 5V digital signal pulled up to +5V 1.25MHz Any even number from 200 to 65,534 steps per revolution.

#### Mounting Dimensions in [mm] B8001

Side View









B8001 Servo Drive

#### **System Configuration**





Model	Description	Options	Description
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B8001	1 Axis Servo Drive	-LMTR	For operation of a B8001 with an IDC Linear Motor
RPACK-1, 115 VAC	External regenerative power dissipation module.	-FK1	115 VAC Fankit (p. H-39)
, , ,	Only for exceptionally large inertial and/or	-FK2	230 VAC Fan kit (p. H-39)
RPACK-2, 230 VAC	vertical loads with ballscrew actuators. See page H-40.		
Limit Switches, NPN	Mounted on IDC mechanics to provide end of travel limit sensing.		



To confirm your selection,

review the checklist on page H-8.