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- FAST SHIPPING AND DELIVERY
- TENS OF THOUSANDS OF IN-STOCK ITEMS
- EQUIPMENT DEMOS
- HUNDREDS OF MANUFACTURERS SUPPORTED
- LEASING/MONTHLY RENTALS
- ITAR CERTIFIED SECURE ASSET SOLUTIONS

SERVICE CENTER REPAIRS

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Contact us: (888) 88-SOURCE | sales@artisanng.com | www.artisanng.com



SERVOSTAR® PD SERIES PERFORMANCE FEATURES

Feedback

- Resolver, Incremental Encoder, Sine Encoder (including HEIDENHAIN EnDat™ support) or halls-only operation
- Auxiliary encoder feedback, used for Dual Loop or Master/Slave Operation.
- Commutation initialization with minimal motion

Servo Control

- Advanced patented sinewave commutation technology provides smooth, precise low-speed control and high-speed performance
- Accurate torque control due to precision balanced current loops with closed loop sensors
- Velocity loop bandwidths to 400 Hz
- Self-tuning to the load
- S-curve acceleration feature for reducing acceleration “jerk” and machine wear
- Patented torque angle control enhances motor performance
- Fully digital control loops
- Compact and attractive rugged metal package for space-saving, modern appearance - metal package minimizes electrical noise emission and susceptibility
- Pole Placement, PI, and PDFF control options
- Low Pass or Notch Filters for compliant & resonance machines
- Command modes:
Torque (analog or serial); Velocity (analog or serial);
Position (analog, serial, SERCOS, stored or pulse)

Reference Command

- 14-bit Analog-to-Digital conversion for ± 10 VDC operation
- SERCOS operation, designed for use with the Kollmorgen SERVOSTAR MC, multi-axis motion controller
- Pulse following control, configured as an encoder follower, up/down counter or pulse/direction counter
- Serial command

Motion Options

- Point-to-point, incremental or absolute
- Store up to 4 motion indexing profiles in memory
- Homing functions

Configurable I/O

- Three digital inputs and 1 digital output;
can be configured to a variety of functions

Windows® Start-up Environment – MOTIONLINK®

- Advanced motion “wizard” automatically walks you through set-up
- Auto configuration function checks for correct wiring of motor and feedback
- PC “Oscilloscope” for measuring real-time motion performance

Robust Design

- Self-protecting intelligent power modules
- Full protection against short circuit, overvoltage, undervoltage, heatsink overtemperature, motor overtemperature, overspeed, overcurrent, and feedback loss
- Flexible current foldback protection

SERVOSTAR® PD DRIVES

SERVOSTAR® PD Brushless Servo Drives

AMPLIFIER SPECIFICATIONS

Electrical characteristics

- Closed loop velocity bandwidth up to 400 Hz
- Motor current ripple frequency (16-32 kHz)
- Long term speed regulation (0.01%)
- Position loop update rate 500 µs (2 kHz)
- Velocity loop update rate 250 µs (4 kHz)
- Commutation update rate 62.5 µs (16 kHz)
- Current loop update rate 62.5 µs (16 kHz)

Fault protection

- Output phase to phase short circuit protection
- Overvoltage
- Undervoltage
- Overtemperature (motor and amplifier)
- Overspeed
- Overcurrent
- Feedback loss
- Foldback
- Supply loss
- Excessive position error

Environmental

- Operation range
 - Ambient 5°C to 45°C
 - Storage 0°C to 70°C
- Humidity (non-condensing) 10% to 90%

Velocity Loop Compensation

- **MOTIONLINK** software provides tuning programming via RS-232 serial interface

Position Loop Compensation

- PID

Operational modes

- Torque control — from analog or serial command
- Velocity control — from analog or serial command
- Pulse following/Up-Down count
- Gearing from quad encoder input
- Position control

Inputs

- 15 bit resolution provides up to 32,000 to 1 dynamic speed range
- Remote enable: 24 V
- Three multi-purpose 24 V inputs Configurable to: CW limit switch, CCW limit switch, gear enable, start motion, second current limit, change velocity to torque mode, home switch, search for home, move to home registration capture, active disable, control fault relay, hold position plus using two inputs, up to four stored indexes or speeds can be executed
- Pulse command: up/down, pulse/direction, pulse or quadrature encoder format into RS-422 opto-isolated receivers

Communications

- RS-232 at 9600 or 19200 bps
- Daisy-chain capability
- SERCOS interface™

Outputs

- Fault: contact closure rated for 1 amp, 24 volt
- One multi-purpose 24 V output configurable to: speed exceeded, current exceeded, amplifier in foldback, brake enable, motion complete, in position, zero speed detect, encoder INIT complete

Diagnostics

- Seven segment LED display
- Error history log
- Internal variable monitoring
- PC scope

Motor Feedback

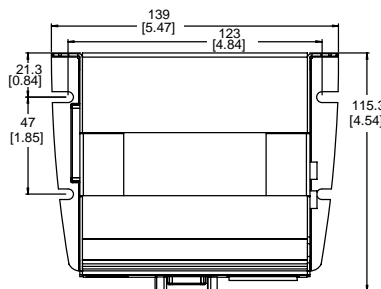
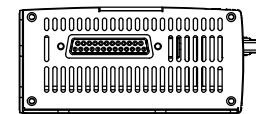
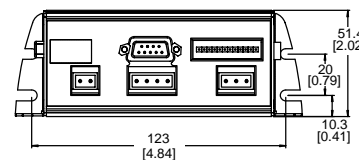
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AMPLIFIER RATINGS

Model	PE2 05	PE2 10	PE8 05
Output Continuous Current Per Phase (RMS/phase) @ 45°C	5 amps	10 amps	5 amps
Output Peak Current Per Phase (RMS/phase)	10 amps (0.5 sec)	20 amps (0.5 sec)	10 amps (0.5 sec)
DC Bus Input Voltage	16-56 VDC	16-56 VDC	40-100 VDC
Rated Input Power (W)	128	256	428
Rated Output Continuous Power (W)	120	240	400

SERVOSTAR® PD

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