

## PD Series

### Packaged Ministepping Systems

PD Series drives and drive/indexer systems are innovative single-axis packaged ministepping systems, ideal for in-house automation projects and original equipment manufacturers that require a convenient neat solution for their stepper drive applications. These drives are fully packaged and come complete with all connectors, power cords and full documentation. The ability of these products to run local AC supply voltages virtually anywhere in the world makes them ideal for machine manufacturers that export their machines. Documentation in some foreign languages is also available for machine exporters.

The PDX drives are ideal for single-axis applications or multi-axis applications that do not require complex coordinated motion control. The integral indexer reduces panel real estate, external cabling and installation problems. Typically referred to as an "Intelligent Drive" the PDX can be programmed with complete motion programs, which interact with the drive's I/O to synchronize motion to other external events.

PDS drives are recommended for applications that require coordinated multi-axis motion control or alternatively applications that have very simple control functions. Typically referred to as a "Dumb Drive," the PDS uses our standard Step & Direction interface, allowing an intelligent multi-axis indexer to command each drive's motion. The Compumotor 6000 Series indexers are high-performance multi-axis indexers that are directly compatible with the standard Step & Direction interface.

A very popular feature of the PDS drives is the internal oscillator. This feature allows the use of push-buttons to manually position a load, or allows a PLC to run and stop motion according to the status of the PLC I/O points.

The PDS and PDX drives are available in two power levels, providing the machine builder with an opportunity to source the most cost-effective solution for each axis of motion. The 3A peak version is ideal for applications requiring 23 frame steppers, while the 34 and 42 frame steppers typically require the higher power capability of the 5A peak drives. See ordering information for actual part numbers.

All drives have ministepping resolutions with four options in the range 400-4000 Steps/Rev. The 4000 Step/Rev range offers smoother motion than conventional full-/half-step drives without the expense of a microstepping drive.



CE (LVD)

#### Features

##### Performance

- Designed and manufactured in accordance with an ISO9001-approved Quality Management System
- Torques from 60 oz-in (0.4 N-m) to 900 oz-in (6.4 N-m)
- Speeds to 50 rps (3000 rpm)
- Two current ranges 0.9-3.0A and 2.5A-5.0A peak
- Recirculatory current control reduces drive and motor heating and increases motor duty cycle performance
- Four selectable motor resolutions between 400 and 4000 step/rev
- Selectable standby mode reduces drive and motor heat

##### Protection

- Extensive drive protection features—short-circuit, overtemperature, over/undervoltage and internal supply fail
- Regenerative power dump option available on 5A drives to increase deceleration performance on large inertial loads

##### Physical

- LED indicators for power and fault
- Single connector for all control signals reduces cabling costs
- Eight optional motors with 10 ft. (3 m) cable. Available in 23, 34 and 42 frame sizes.
- Drives come complete with all mating connectors
- Wide range AC Supply input 105-240VAC  $\pm$  10% at 47-63 Hz