BURNY

SERVOPAK K-Series

Digital Drive Systems



Performance Benefits

The ServoPak K-Series family of drive amplifiers are high performance drive systems that combine high quality with flexible operational functionality. The K-Series drives are applicable for a wide variety of machine applications including plasma cutting, routing, waterjet, oxyfuel cutting, glass cutting, marking, welding, stitching and many multi axis machine configurations where performance, accuracy and precision are important. This ServoPak K-Series will provide superior performance when interfaced to a wide variety of machines including small lightweight models to the largest and heaviest machines especially where critical machine movement and positioning is required.

Design Features

State-of-the-Art sinusoidal K-Series drive design makes precise and accurate motion control attainable. Whether you need the packaged solution available in the D80 model or a modular amplifier design available in the D50P and D60P models, Burny has a pre-engineered solution to fit your design requirements. The modular D50P and D60P models allow you to integrate our drive in your cabinet to make a seamless package. With each drive amplifier in model D60P boasting 15A of continuous current and 30A of peak current, no machine is too large. Each amplifier in models D50P and D80 is rated at 8A of continuous current and 15A of peak current. Add as many D50P/D60P axes to a machine as necessary.



Highly Flexible and Capable Software Features

Burny K-Series Tuning Software provides fast and easy setup and servo motor tuning. The Tuning utility offers flexible setup and the most powerful diagnostics in the industry. All motors supplied by Cleveland Motion Controls have been pre-tested and setup with the ServoPak K-Series drives so tuning is as easy as loading a tuning configuration file.





Flexible Configurations

The ServoPak K Series can adapt to any machine or performance configuration. The D80 model is a self contained system containing up to four drive amplifiers for up to four axis of coordinated motion. The enclosure also contains all interface circuitry. The D80 is mounted inside a sealed enclosure and can easily be mounted to any machine. The D50P and the D60P models are sold as individual modular drive amplifiers for custom mounting. Individual amplifiers allow for complete flexibility when mounting the drive amplifiers along with ability to drive an unlimited number of motors. For high duty cycle applications where high current operation is required, the D60P includes additional heat dissipation.





D50P and D60P models

D50P / D60P Features	D80 Features
Modular Compact Design for a High Wattage System.	Premier Retrofit Package for Quick Integration
Easily Integrate with Existing Enclosures	Sinusoidal Digital Brushless Amplifier utilizing State-of-the-Art SVM Technology (Space Vector Modulation).
Intuitively Designed Software with Pre-Engineered Tuning Configuration Files from Burny	Intuitively Designed Software with Pre-Engineered Motor Files from Burny
Integrate Fast with Burny Peripherals	Matched Performance with Motors and Gearboxes Delivered from ONE Manufacturer
Sinusoidal Digital Brushless Amplifier	8 Amps of Continuous Current. Capable of up to 1kW continuous power and 2kW of peak power per axis
Matched Performance with Motors and Gearboxes Delivered from ONE Manufacturer	System Kits come COMPLETE with Plug-and-Play Cable Sets. Internal cable glands afford automatic cable shield grounding
Move the Heaviest Equipment with 3-Phase Power for 2500W Applications	One side Cable Exit from Drive Enclosure makes for Neater Integration and Easier Retrofit Planning
Single Phase Use for Smaller Apps	Configure the Drive via Laptop or Burny 10 LCD Plus controller
Configure the Drive for Less Power if Necessary.	No need to open the cabinet once the system is tuned even for diagnosing issues
State-of-the-Art SVM Technology (Space Vector Modulation).	Complete System Testing at the Factory Before Shipment

OTHER INFORMATION

The K-Series is fully digital and operates in current, velocity or position mode and utilizes advanced design technologies, like SVM (Space Vector Modulation), which results in superior bus voltage utilization and reduced heat dissipation compared to other PWM drive systems in the market today.

The ServoPak K-Series family is a multi axis system and is available in an OEM panel mount version that allows the OEM or integrator the flexibility to mount and interface the drives in a variety of configurations. In addition to the OEM panel mount version, the K-Series can be purchased as an integrated system (D80) complete with interface circuitry in a cabinet style enclosure.

Features and Specifications

Peak Current 30A (21.2 Arms) Continuous Current 15A (10.6 Arms)

Supply Voltage 40 270 VAC

Operational Mode Current, Position or Velocity

Command Source +/- 10 volt analog

Encoder following

Feedback Halls

Incremental Encoder Aux. Incremental Encoder

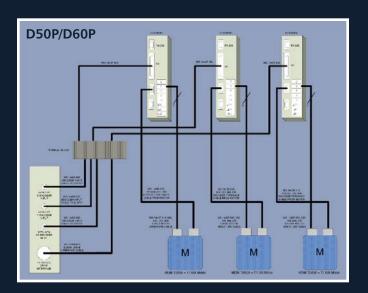
+/- 10 volt Analog

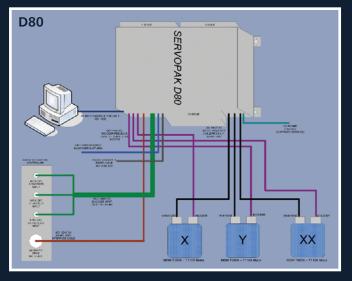
Programmable gain settings

Fully configurable current, voltage, velocity

and position limits PIDF velocity loop

PID and FF Position Loop





Approvals



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