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**Nidec**

All for dreams

# INDUSTRIAL AUTOMATION FOR PACKAGING MACHINERY



**CONTROL  
TECHNIQUES**



**KB Electronics**

"The Right Control  
for Your Application"

# GENERAL PURPOSE DRIVES

Most applications in the Packaging Industry involve a speed control strategy in which the drive regulates the operatin speed at a setpoint that may be adjusted from time to time. Our drives are designed to accommodate the rapid changes, rising cost, and the numerous challenges faced by the packaging industry today. Our drives have significant advantages that reduce power consumption and mechanical wear. We offer best-in-class solutions for the packaging industry customer base that spans the globe. Our goal is to stay ahead of the competition with the latest trends and designs.

## Control Techniques

Fractional to 200 HP AC Controls



## KB Electronics

Fractional to 5 HP AC Controls



## KB Electronics

Fractional to 5 HP DC Controls



## Key Applications

- Open Loop Control of Feeder Conveyors
- Stretch Wrappers
- Winders and Auxilliary Motors
- Automatic Stretch Wrappers
- Capping Machines
- Cartoning Machines
- Converting Machines
- Feeding Machines
- Label Dispensers
- Placing Machines
- Slitting Machines

## Key Benefits

- 1 Lower Cost of Ownership • Reduced Machine Cost
- 2 Increase Operator Safety • Maximize Production Uptime
- 3 Improve Finished Product Quality • Energy Savings
- 4 Rapid Installation and Simple to Operate

## Key Features

- 1
  - Free 5-Year Warranty (terms and conditions apply) -CT
  - Wide Power Range up to 200 HP -CT
  - Built-in PLC (Programmable Logic Controller) -CT
  - Built-in RFI filter (Radio Frequency Interference) -CT
  - Economical Indoors or Out (eliminates secondary enclosure) -KB
  - Rugged dye-cast aluminum NEMA 4X / IP65 -KB
  - Dual voltage input up to 2 HP (one drive fits all) -KB
  - Optional Power On/Off AC Line Switch -KB

2

- Built-in STO (Safe Torque Off) COMMANDER C300 -CT
- FDA approved version for food applications (KBAC & KBDA Series) -KB
- GFCI compatible with sensitivity adjustment -KB

3

- High Performance Induction Motor Control (RFC) -CT
- Efficient Permanent Magnet Motor Control (KBVF 4G Series) -KB

4

- Communications Plug-In Options: PROFIBUS, EtherCAT, Ethernet, EtherNet/IP, DeviceNet, CANopen, Modbus RTU, Modbus TCP and PROFINET -CT
- Easy to install and simple to operate -KB
- Customization: Ready to Use "Out-of-the-Box" (MOQ as low as 100 pcs) -KB





**WE'VE GOT IT  
CANNED**



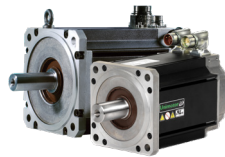
# MOTION AND MACHINE CONTROL

Packaging machine builders face a variety of challenges ranging from rapidly changing customer demands, to overall competitive pressures on throughput and cost. Packaging machines are inherently motion-centric and Control Techniques' Motion Made Easy® solution - PTi210 Integration Module and PowerTools Studio software is the easiest, most reliable way to quickly build and execute many of the high performance motion profiles used by packaging machines today.

Digitax HD Servo Drives



Unimotor hd Servo Motors



Unidrive M700 AC/Servo Drives



## Key Applications

- Pressure Sensitive Labeling – Utilize queues, camming, or registration moves
- Filling – Servo piston filling and capping
- Form, Fill and Seal – Winding, feeding, sealing, and cutting
- Wrapping – Material registration control
- Palletizing – Controlling gantry pick and place

## Key Benefits

- 1 Increase throughput - augment speed, accuracy and reliability of discrete operations and positioning to reduce scrap and increase yield
- 2 Decrease costs - minimize enclosure size, changeover time, total cost of ownership
- 3 Increase Operator Safety - Ease of Use

## Key Features

- 62.5us Current Loop and 250us Position and Speed Loop update rates that can increase the line speed of most applications
  - 1 • 300% peak overload ability for 250ms for high acceleration and deceleration dynamic performance
  - Maximize control capability - access speed, positioning, registration, camming, and queuing
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- Built-in PLC
  - Digitax HD common bus structure
  - 2 • Harsh environments protection - conformal coating
  - Drive and Motor temperature monitoring and protection
  - Programming software included (no charge)
  - Patented air flow management design
- 
- Built-in Safe Torque Off Rated SIL3/PLe
  - MiS210 Safety Module for Unidrive M700 with SIL3/PLe motion functions and CIP Safety communications
  - 3 • Functional Safety encoder options with Unimotor HD
  - Motion Made Easy - PTi210 and PowerTools Studio software