CHAIN & DRIVES
COMPLETE POWER TRANSMISSION

POWER > SPEED > TORQUE

KBDA
Digital AC Drive with CSP™*

Rugged Die-Cast Aluminum NEMA 4X / IP 65 Enclosure with Hinged Cover

Primary Features

Horsepower 1/8 to 5 HP, Programmable
1Ø & 3Ø Input 115/230/460 VAC, 50/60 Hz
3Ø Output 230/460 VAC
200% Starting Torque
Digital Display with LED Status Indicators
FDA Approved Finish**

Benefits

Saves Time

Easy to Install and Simple to Operate
Does not require commissioning
With CSP™ you are up and running in less than 10 minutes.

Motors Last Longer

Proprietary CL Software
Provides overload protection, prevents motor burnout and eliminates nuisance tripping. UL approved as electronic overload protector for motors.

Energy Saving

Uses only the power the application requires
Replacing constant speed with variable speed will significantly reduce energy costs.

Economical to Use: Indoors or Out

Eliminates secondary enclosure
No holes to drill, no switches to install. No need to derate drive for high starting torque applications.
Combines Soft Start with Variable Speed
Adjustable Soft Start.

Customization for OEM's

When an off the shelf drive does not meet your needs, we will work with you to provide a custom drive solution, Ready to Use, "Out-of-the-Box."
Customization includes: Pre-calibrating or programming of a stock control, adding a custom label or branding, custom software, PLC functions or designing a new control.

GFCI Software *allows the equipment to operate with Ground Fault Circuit Interruption circuit breakers or outlets.*

**CSP™ = Common Sense Programming. Parameters are organized into easy-to-understand intuitive groups. **White case only*

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Unit 1 / 45 Inspiration Drive Wangara WA 6065 (08) 9303 4966 (08) 9303 4977
chainanddrives.com.au info@chainanddrives.com.au
ABN 81 121 105 173

Additional Features

Sensorless Flux Vector Control
Flux Vector Compensation with Static Auto-Tune provides excellent speed regulation with high torque loads throughout the entire speed range. Auto energy saving at light loads. Smooth motor torque.

Electronic Inrush Current Limit (EICL™) Protection
Eliminates harmful inrush AC line current during power up.

Multi-Function Output Relay
Can be used to turn equipment on or off, to signal a warning if the drive is put into "Stop" mode, or to signal if a fault has occurred.

Jog-Local/Remote
Set the drive to Jog Mode or changes between Local (Keypad) or Remote Operation.

Built-in Potentiometer
Quickest way to change motor speed.

Ride-Through
Provides smooth recovery to the previous set speed during a momentary power loss.

Holding Torque at Zero Speed
Resists motor shaft rotation when the drive is in "Stop" mode.

Regeneration Protection
Eliminates tripping due to high bus voltage caused by rapid deceleration of high inertial loads.

Undervoltage and Overvoltage Protection
Shuts down the drive if the AC line input voltage goes above or below the operating range.

Short Circuit Protection
Shuts down the drive if a short circuit occurs at the motor (phase-to-phase).

Drive Options

IODA Input/Output Multi-Function Board
Adds up to 17 points of additional I/O.

Modbus Serial Communication Module
See instruction manual for complete description.

Drive-Link™ Programming Kit
Allows PC programming.

On/Off AC Line Switch
Disconnects the AC line.

Class "A" (CE) RFI Filter
Installs inside the drive.

Liquidtight Fittings
Provides a liquid-tight seal for wiring the drive. Kit includes necessary liquidtight fittings.

Applications

- Actuators • Air Cleaners • Amusement Rides
- Ball Pitching Machines • Blowers • Boat Lifts
- Bowling Alley Lane Cleaners • CNC • Conveyors
- Door and Gate Openers • Drilling • Duct Cleaners
- Dumbwaiters • Elevators and Hoists
- Exercise Equipment • Fabric Processing • Fans
- Feeders • Film Processing • Floor Cleaning
- Food Processing • Garment Cutting
- Grinding and Polishing • Hoppers • Horse Walkers
- HVAC • Indexers • Irrigation • Laminating
- Lift Station Pumps • Machine Tools
- Medical • Milling • Mixers • Oven Conveyors
- Packaging • Paint Blenders, Shakers, and Sprayers
- Paper Handling • Portable Equipment Used with GFCIs
- Pottery Wheels • Printing
- Pumps • Range Hoods • Sandblasting • Saws
- Sewing • Stretch Wrap • Textile • Treadmills
- Therapeutic Vibrators • Washing Machines
- Wave Soldering • Web Processing • Wheelchair Lifts
- Whole House Vacuums and Attic Fans
- Wire Feeders • Wood and Metal Lathes and Cutters
- Winders and Unwinders

Visit kbelectronics.com
to learn about Build-A-Drive™ , KB's New AC Inverter Program.

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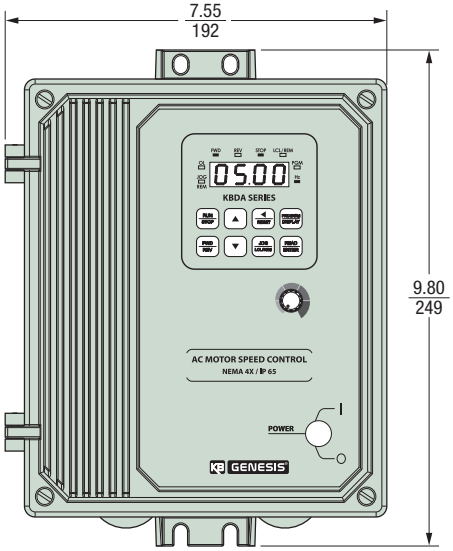
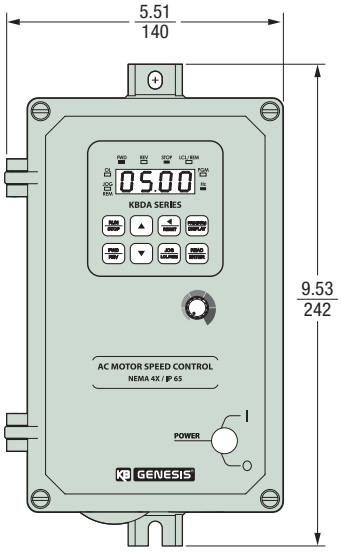
Case "B" – (Inches/mm)



Maximum Depth: 7.25 / 184

Case "A" – (Inches/mm)



Maximum Depth: 5.86 / 149

Ratings

115/230 VAC 1-Phase Input • 230 VAC 3-Phase Output

Model No.	Part No.		Ratings		Net Weight		Case
	Gray	White*	HP, (kW)	Amps	Lbs.	kg	
KBDA-24D	9536	9537	1, (0.75)	3.6	5.9	2.7	A
KBDA-27D	9543	9544	2, (1.5)	6.7	10.3	4.7	B

230 VAC 1-Phase Input • 230 VAC 3-Phase Output

Model No.	Part No.		Ratings		Net Weight		Case
	Gray	White*	HP, (kW)	Amps	Lbs.	kg	
KBDA-29 (1P)	10003	10004	3, (2.25)	9.0	10.3	4.7	B

230 VAC 3-Phase Input • 230 VAC 3-Phase Output

Model No.	Part No.		Ratings		Net Weight		Case
	Gray	White*	HP, (kW)	Amps	Lbs.	kg	
KBDA-24P	9766	9767	1, (0.75)	3.6	5.9	2.7	A
KBDA-29	9545	9546	3, (2.25)	9.0	10.3	4.7	B

460 VAC 3-Phase Input • 460 VAC 3-Phase Output

Model No.	Part No.		Ratings		Net Weight		Case
	Gray	White*	HP, (kW)	Amps	Lbs.	kg	
KBDA-42	9763	9764	1, (0.75)	2.0	5.9	2.7	A
KBDA-45	9659	9660	3, (2.25)	4.6	10.3	4.7	B
KBDA-48	9661	9662	5, (3.75)	8.3	10.3	4.7	B

**FDA approved (white case only).*

Specifications

Maximum Load (% of Current Overload for 2 Minutes)	150
Switching Frequency (kHz)	8, 10, 12
Output Frequency Resolution (Hz)	0.06
Minimum Output Frequency to Motor (Hz)	0.3
Acceleration Time (Seconds)	0.1 – 180.0
Deceleration Time (Seconds)	0.3 – 180.0
Speed Range (Ratio)	60:1
Speed Regulation (30:1 Speed Range, 0 – Full Load) (% Base Speed)	2.5
Stalled Motor Trip Time (Seconds)	6
Braking	DC Injection
Operating Temperature Range (ºC / ºF)	0 – 40 / 32 – 104
Storage Temperature (ºC / ºF)	-25 – +85 / -13 – +185

General Connection Diagram