

150 Series

DART CONTROLS



SCR CONTROL IN A COMPACT,
OEM-READY FORM FACTOR

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OVERVIEW

About Dart Controls

Since 1963, Dart Controls has been a leader in industrial motor speed control solutions, known for durable, high-quality products. Our SCR, VFD, PWM, BLDC and triac controls are designed for simple implementation, precision, and reliable performance, meeting the demands of industrial applications across diverse industries.

Industries Served

- Manufacturing & Automation
- HVAC & Energy Management
- Food & Beverage Processing
- Agriculture & Irrigation
- Water & Wastewater Treatment



Why Choose Us?

High-Quality Products

- Made in the USA
- Dedicated to produce and provide certified products, manufactured and tested with proven quality methods

Superior Service and Support

- Rapid, US-based, expert technical assistance
- Product shipped next, or often same, day
- Online resources including product manuals and troubleshooting guides

150 Series

Product Overview & Specifications

Key Features

- Precise speed control with an optional programmable (rate, %, time) digital display set point
- 120 and 240 VAC input with no rewiring required
- NEMA 4X / IP67 enclosures protect against dust, moisture, and washdowns

KB Replacment

- This drive has the potential to replace the following KB/Nidec product series: KBMM, KBIC, KBLC, KBPB, KBMD, KBMA, KBPC, KBWM, KBCC



Technical Specifications

FEATURE	SPECIFICATION
Input Voltage	120/240V, 50/60 Hz
Output Voltage	0-90/180VDC
Output Amps	150mA - 10A
HP Range	1/50HP - 2HP
Control Inputs	Manual speed pot, digital display set point, 0-5VDC, 0-250VDC, 4-20mA
Enclosure Options	Open Chassis / NEMA 4X Enclosed
Operating Temp	-10°C to +40°C (14°F to 104°F)
Protection Features	Current Limit with Foldback, Dynamic Braking (optional), MOV Transient Protection, Fusing Options,
Dimensions	5.53" x 7.3" x 5.74" (Enclosed) 3.61" x 4.25" x 1.29" (Chassis)



RECOMMENDED APPLICATIONS

The 150 Series provides precise speed control and efficiency for:

- ✓ Mixers, Conveyors, & Portioning systems
- ✓ Automated Packaging Machinery
- ✓ Agricultural or Industrial Pumps

APPLICATION SCENARIOS

The 150 Series is engineered for compact, reliable DC motor control in OEM systems, offering flexible input, digital speed setting, and sealed or open configurations for a wide range of variable-speed applications.

OEM Equipment Integration

Application: Embedded speed control in compact machinery (e.g., benchtop lab tools, small production gear)

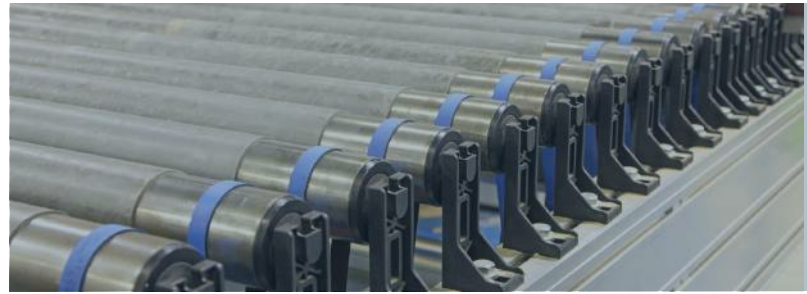
Benefits: Reduces wiring complexity, supports dual voltage input, and offers field-settable HP for product flexibility



Light-Duty Conveying Systems

Application: Controls belt drives in low-to-medium load conveyor systems

Benefits: Enables consistent motion, minimizes slippage, and allows for repeatable speed with digital setpoint



Remote-Controlled Systems (Analog Follower Input)

Application: Follows 0–10V or 4–20mA signals from PLCs or sensors for automated control

Benefits: Enhances integration with industrial automation, supports closed-loop logic, and reduces manual tuning



Environmental Systems (DC Fans, Blowers)

Application: Regulates airflow via permanent magnet DC fans in portable or mobile systems

Benefits: Improves energy efficiency and noise control



Washdown-Resistant Applications

Application: Food packaging or wet environments where a sealed enclosure is critical

Benefits: Protects control electronics from water, dust, and corrosion while delivering consistent performance



Motor Retrofits or Replacements

Application: Replaces outdated or imported SCR controls with reliable, US-built solutions

Benefits: Simplifies compliance, minimizes tariff impacts, and supports OEM footprints

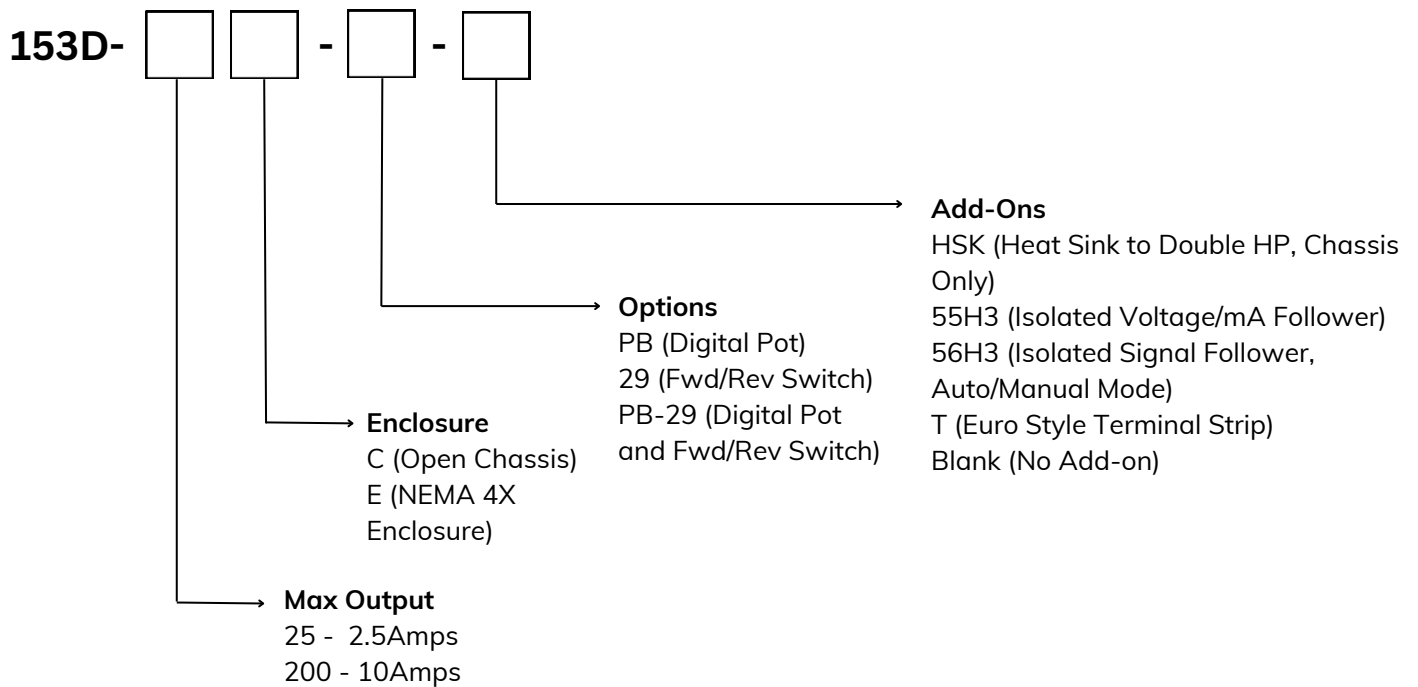


150 Series Ordering + Model Number Breakdown

MODEL NUMBER BREAKDOWN

Example Order Code:

153D-200E-PB → Enclosed model, between 1/8 and 2HP with Digital Pot



➔ HOW TO ORDER A 150 SERIES

To order the correct 150 model, consider:

- Enclosure Type: Open chassis or NEMA 4X enclosed
- Max Amps DC Output: up to 2.5A or 10A
- Additional Features: Forward/reverse switch, Signal Follower, etc
- Note: Fuse holders available separately



PRODUCT LINEUP



DC Drives

120/240VAC supply to 90/ 80VDC armature DC motors

High torque, high speed, quiet operation for 3 phase motor brushless DC

Brushless DC Drives



Low Voltage DC PWM Drives

12-48VDC PWM low voltage controls with current limit shutdown and drive status LEDs

Accurate, repeatable, on-board diagnostics, integral digital display, flexible configuration, and support for analog signal following and serial communications

DC Digital Drives



PRODUCT LINEUP CONTINUED

Scan for more



Digital Potentiometers

Display percent of motor full speed or engineering units to replace 3-wire analog speed potentiometers

Control single phase AC motors and restrictive loads

Triac Speed Controls



Encoders

Encoders to provide position and speed feedback

Ask us about private label services

Private Label Services



150 Series

Compact. Configurable. DC Control Built to Perform.

Learn More



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