Digitized Automation for a Changing World

Delta Industrial Automation

2025 Full Range Catalogue

www.deltaww.com

DELTA

AC Servo Drive & Motor
ASDA-H3

3.1 kHz High Response Bandwidth
27-bit High Resolution Absolute Encoder
PR Mode for Advanced Motion Command Planning

400 V Single-Axis 4.5 ~ 155 kW | Rated Current 13 ~ 300 A
400 V Dual-Axis 0.75 ~ 20 kW | Rated Current 3.1 ~ 40 A

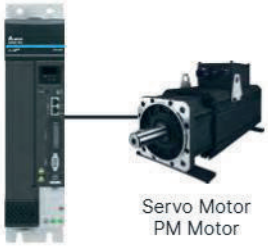
Space-Saving

- ASDA-H3 (Single-Axis 7.5 kW × 6)

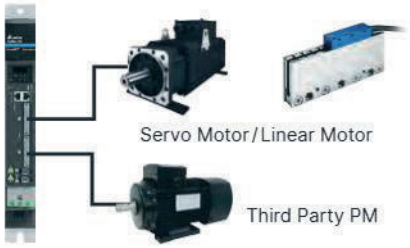
- ASDA-A3 (7.5 kW)

Single-Axis / Dual-Axis Drive Module

Single-Axis

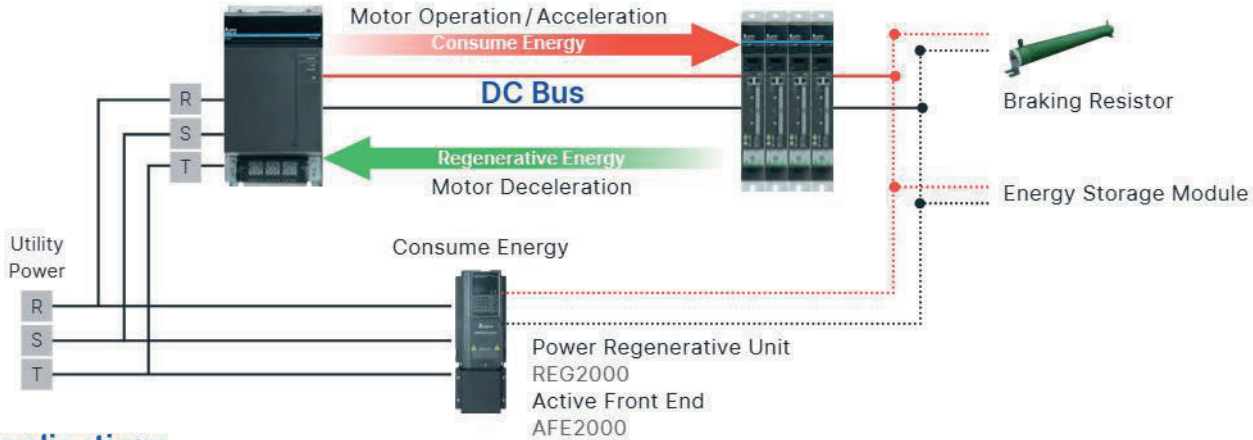


Dual-Axis



High Energy Efficiency

Common DC bus transfers the regenerative energy into power



Applications

Metal processing, Rubber & plastics, Multi-wire cutting, Carton cutting

AC Servo Drive & Motor

ASDA-W3

Seamless Multi-Axis Control
New Chapter for Servo Tech

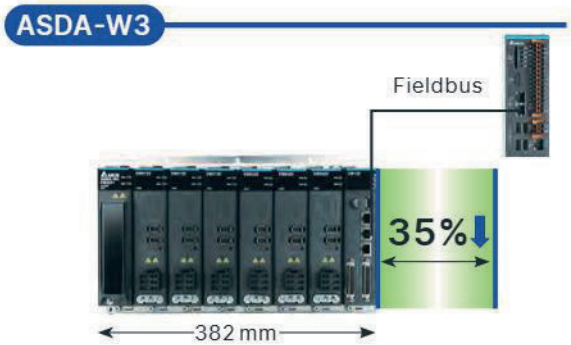
200 V Dual-Axis 0.1 ~ 1.5 kW
Rated Current 0.9 A ~ 8.3 A

200 V Single-Axis 2 ~ 3 kW
Rated Current 13.4 A ~ 19.4 A

Modular Design

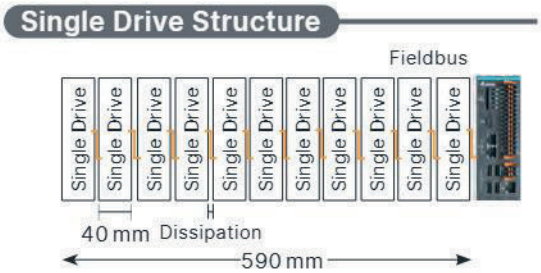
- Power, drive, and control modules are mounted on the backplane
- No dissipating space needed between modules
- Every drive module can drive two motors*

* 2 kW and 3 kW drive module can only control one motor



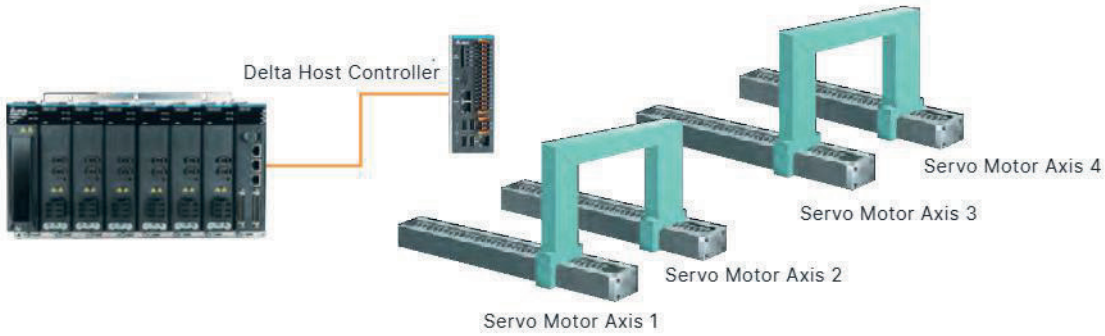
Simple Wiring

- Saves installation time and cost
- Power modules supply power via backplane, reducing power wiring
- High speed backplane communication protocol. No network wiring is required between modules
- Organizes cables easily, keeping panels tidy



Built-in Motion Control - Supports Multiple Sets of Gantry Motion

- High performance control module coupled with high speed backplane communication. Under the speed of 16 kHz, capable of controlling the host and slave motor
- Flexible selection of master axis and follows by designated slave axis, achieving multi-gantry control
- Host controller delivers master axis motion command



Applications

Semiconductors, Electrics & electronics, New energy (lithium batteries), Woodworking, Packaging, Logistics

AC Servo Drive & Motor

ASDA-A3

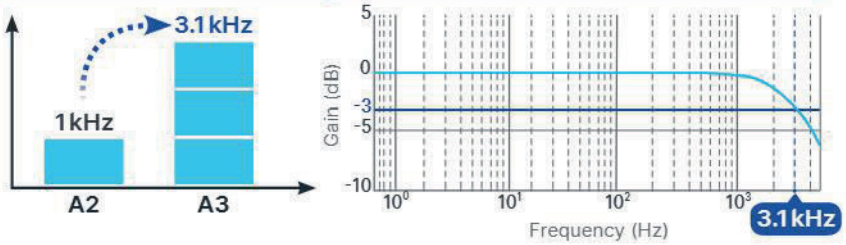
24-bit Absolute Encoder / 3.1 kHz Bandwidth
Advanced Motion Control Functions
Supports Functional Safety (only 400 V model)

200 V: 0.1 ~ 15 kW | 400 V: 0.4 ~ 15 kW

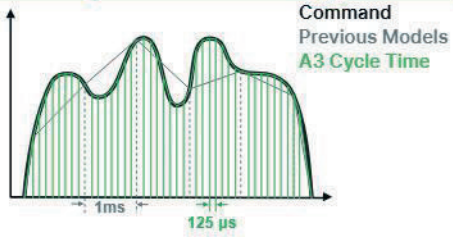
3.1 kHz Bandwidth and Shorter Synchronization Cycle

- Response bandwidth increased by 3.1 times (compared to the ASDA-A2 Series), providing higher speed for commands
- Higher responsiveness and shorter settling time increases productivity
- The synchronization cycle of the ASDA-A3 Series is 125 μs, which is 8 times faster than that of the ASDA-A2 Series

Response Bandwidth



Synchronization Cycle

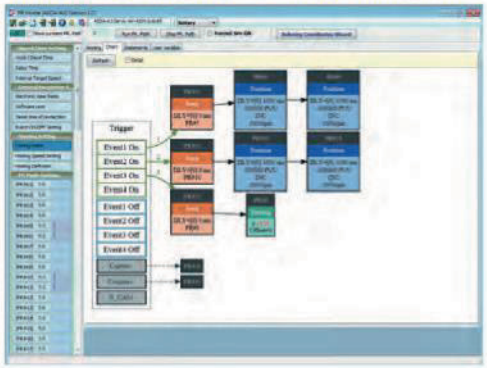


24-bit Absolute Encoder

16,777,216 pulses
for one single turn

46,603 pulses
for one degree

Advanced Motion Control Functions



Model Types

Type		Linear Motor	PT Mode Pulse Train	PR Mode	RS-485	CANopen	DMCNET	EtherCAT	Analog Voltage Control	Full-Closed Loop Control	E-CAM	STO	New Functional Safety
A3	L	✓	✓	✓	✓	-	-	-	✓	✓	-	-	-
	M	✓	✓	✓	✓	✓	-	-	✓	✓	✓	✓	-
	F	✓	-	✓	-	-	✓	-	-	✓	✓	-	-
	E	✓	-	✓	-	-	-	✓	-	✓	✓	✓	-
New	EP	-	-	-	-	-	-	✓	-	✓	-	✓	✓

Applications

Machine tools, Electronics assembly or detection equipment, Industrial robots, Packaging machines, Labeling machines, Semiconductor processing equipment, Textiles equipment

AC Servo Drive & Motor

ASDA-B3

24-bit Absolute Encoder / 3.1 kHz Bandwidth
Advanced Motion Control Functions

200 V: 0.1 ~ 3 kW | 400 V: 1 ~ 7.5 kW

Model Types

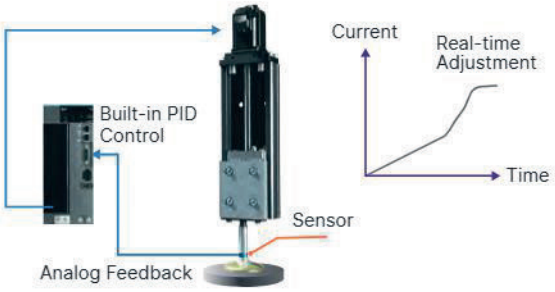
Type		PT Mode Pulse Train	PR Mode	RS-485	Analog Voltage Control	CANopen	DMCNET	EtherCAT	PROFINET	STO	Dynamic Brake
B3	L	√	√	√	√	-	-	-	-	-	-
	M	-	√	-	√	√	-	-	-	-	-
	F	-	√	-	√	-	√	-	-	-	-
	E	-	√	-	√	-	-	√	-	-	-
B3A	L	√	√	√	√	-	-	-	-	√	√
	M	√	√	√	√	√	-	-	-	√	√
	F	√	√	-	√	-	√	-	-	√	√
	E	√	√	-	√	-	-	√	-	√	√
	P	-	√	-	-	-	-	-	√	√	√

High Response Bandwidth and Shorter Synchronization Cycle

- Higher responsiveness: From 0.5 kHz of the ASDA-B2 Series to 3.1 kHz of the ASDA-B3 Series
- Increased productivity: Settling time decreased by 40%
- The synchronization cycle of the ASDA-B3 Series is 125 µs, which is 8 times faster than that of the ASDA-A2 Series

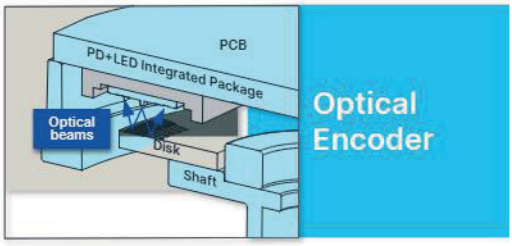
Analog Feedback PID Control

- Supports analog signal input
- Achieves real-time and precise PID control with the analog signals from the external sensor, which enhances production yields and processing performance



High Resolution Encoder

- B3 series drivers support absolute type motors
- 24-bit optical encoder: The encoder is lighter and thinner with the reflective sensor technology; the exclusive optical sensor compensation function enhances product reliability
- 17-bit magnetic encoder: The magnetic induction technology enhances the capability to prevent vibration and increases the oil resistant level
- Battery-less absolute encoder: Reduces maintenance efforts, avoids abnormal failures caused by battery exhaustion, and prevents the complicated process of lithium battery transportation



Applications

Machine tools, Electronics assembly equipment, Tool magazines and turrets, Industrial robots, Packaging machines, Labeling machines, Semiconductor equipment, Textiles equipment, Diamond cutting machines

AC Servo Drive & Motor

ASDA-M

Three-in-One Intelligent Servo System Integrating Motion Controller and Servo Drive

Outstanding Motion Control

- 3-axis synchronous servo module with higher performance
- Built-in motion control and PLC functions
- Multi-axis synchronous interpolation and built-in motion control require high synchronous control accuracy
- Advanced synchronous gantry control
- Versatile PR mode for various continuous motion movements

New PC Software Functions

- ASDA-Soft provides built-in contour analysis function
- EzASD provides PLC programming and motion commands editing environment

High Precision, High Performance Servo Motors

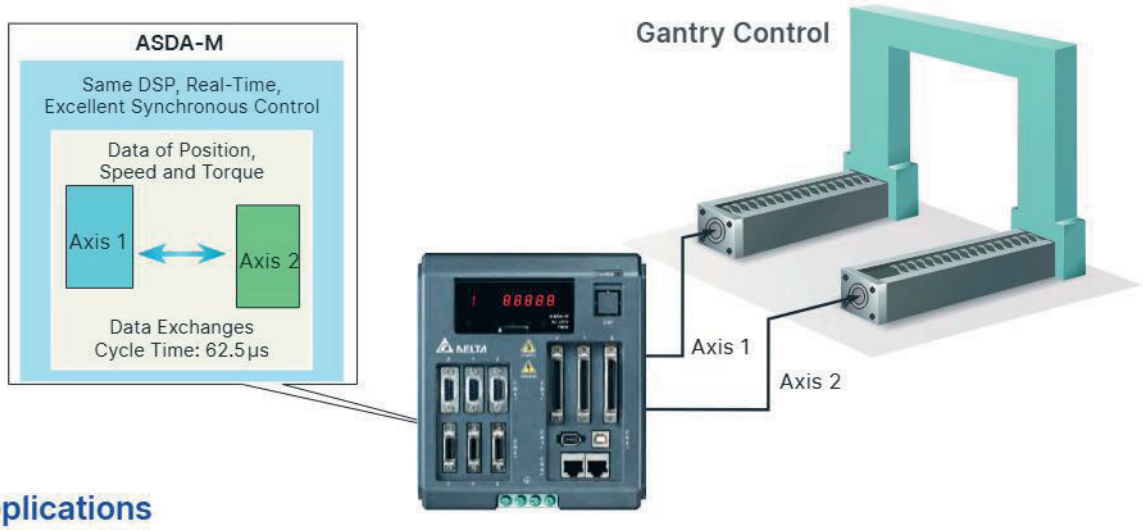
- Supports incremental and absolute encoders
- Incremental encoder provides up to 1,280,000 p/rev resolution for high-precision positioning

Real-Time, Reliable and High-Speed Motion Control Network

- Supports DMCNET and CANopen communication protocols
- Builds an integrated system configuration by DMCNET with the aid of Delta's Controller with Human Machine Interface (HMC)
- Supports DMCNET extension digital input and output modules

Advanced Gantry Control

- Real-time data exchange among 3 axes greatly increases the efficiency and performance of gantry control
- Simultaneously performs precise motion control and drive for each axis in rigid or general mechanical systems whether the loading on multiple axes is equal or not



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