Saved from manuals.plus.
Open the live page for links to other documents and user manuals.

DAVITU ASD-A2-0421-L

DAVITU Delta ASD-A2-0421-L AC Servo Drive

User Manual

1. Introduction

The DAVITU Delta ASD-A2-0421-L is a 400W, 220V AC servo drive from the Delta A2 series, designed for precise motor control in various industrial applications. This drive supports full-closed control, offering high accuracy and performance. This manual provides essential information for the proper installation, operation, and maintenance of the servo drive.

2. Safety Information

WARNING:

- Disconnect all power and wait 10 minutes before servicing. Residual voltage may cause electric shock.
- Do not touch heatsink when power is on. High temperatures may cause burns.
- Use proper grounding techniques to prevent electric shock and ensure stable operation.
- Installation and maintenance should only be performed by qualified personnel.
- Ensure the power supply matches the specifications of the servo drive (220V AC).

CAUTION:

- Protect the device from moisture, dust, and corrosive gases.
- Avoid installing in areas with excessive vibration or direct sunlight.
- Ensure adequate ventilation around the unit to prevent overheating.

3. Setup and Installation

Proper installation is crucial for the optimal performance and longevity of the servo drive. Follow these steps carefully:

3.1 Unpacking and Inspection

Upon receiving the servo drive, carefully unpack it and inspect for any signs of damage during transit. Verify that all components are present according to the packing list.



Figure 1: Rear view of the Delta ASD-A2-0421-L AC Servo Drive. This image displays the product label with model number ASD-A2-0421-U, power specifications (400W, 200-230V 3PH 50/60Hz), and safety warnings regarding power disconnection and grounding.

3.2 Mounting

Mount the servo drive vertically on a stable surface within an enclosure that provides sufficient cooling. Ensure there is adequate clearance around the unit for airflow.

3.3 Wiring Connections

Connect the power supply, motor, and control signals according to the wiring diagrams provided in the full technical manual. Pay close attention to polarity and grounding.



Figure 2: Side view of the Delta ASD-A2-0421-L AC Servo Drive. This image highlights the input terminals for 220V AC power (R, S, T) and connections for an external braking resistor.



Figure 3: Another side view of the Delta ASD-A2-0421-L AC Servo Drive. This image displays the motor output terminals (U, V, W) and various control signal connectors, including CN8.

- **Power Supply:** Connect the 220V AC power to the designated input terminals.
- **Motor Connection:** Connect the stepper motor to the U, V, W output terminals.
- **Control Signals:** Connect control signals (e.g., pulse, direction, enable) to the appropriate connectors (e.g., CN8).
- **Grounding:** Ensure the drive is properly grounded to a common ground point.

4. Operating Instructions

Once the servo drive is correctly installed and wired, you can proceed with operation:

4.1 Powering On

After verifying all connections, apply power to the servo drive. The status indicators on the drive should illuminate, indicating successful power-up.

4.2 Parameter Settings

The Delta ASD-A2 series servo drives require specific parameter settings for optimal performance with your motor and

application. Refer to the detailed Delta A2 series programming manual for instructions on how to access and modify parameters using the drive's keypad or a dedicated software interface.

4.3 Running the Motor

Initiate motor movement through your control system (e.g., PLC, motion controller) by sending appropriate commands (e.g., pulse train, analog voltage). Monitor the motor's response and the drive's status indicators.

5. Maintenance

Regular maintenance helps ensure the longevity and reliable operation of your servo drive:

- **Cleaning:** Periodically clean the exterior of the drive to prevent dust accumulation, especially on cooling fins and ventilation openings. Use a soft, dry cloth. Do not use liquid cleaners.
- **Connection Check:** Regularly inspect all wiring connections for tightness and signs of wear or corrosion. Loose connections can lead to intermittent operation or damage.
- **Environmental Conditions:** Ensure the operating environment remains within the specified temperature and humidity ranges.
- **Fan Inspection:** If the drive has a cooling fan, check it periodically for proper operation and clear any obstructions.

6. Troubleshooting

This section provides solutions to common issues you might encounter:

Problem	Possible Cause	Solution
Drive does not power on	No power supply; Incorrect wiring; Blown fuse	Check power source; Verify wiring connections; Replace fuse if necessary
Motor does not move	Motor not connected; Enable signal not active; Incorrect parameters; Overload	Check motor wiring; Activate enable signal; Verify parameter settings; Reduce load
Drive displays an error code	Overvoltage; Undervoltage; Overcurrent; Overheat	Refer to the Delta A2 series manual for specific error code meanings and corrective actions.
Motor vibrates or makes unusual noise	Improper tuning; Loose mechanical connections; Motor damage	Perform auto-tuning or manual tuning; Check mechanical connections; Inspect motor for damage

If the problem persists after attempting these solutions, contact technical support.

7. Specifications

Feature	Specification
Model Number	ASD-A2-0421-L
Motor Type	Stepper Motor (compatible)
Power Supply	AC 220V
Rated Power	400W

Feature	Specification
Control Method	Full-Closed Control
Material	Copper (internal components)
Manufacturer	DAVITU

8. Warranty and Support

For warranty information, please refer to the terms and conditions provided at the time of purchase or contact your vendor. For technical support, product inquiries, or assistance with troubleshooting beyond the scope of this manual, please contact DAVITU customer service or your authorized distributor. When contacting support, please have your product model number (ASD-A2-0421-L) and any relevant error codes ready.
You can find additional resources and detailed technical documentation on the official Delta Electronics website for the A2 series servo drives.

© 2024 DAVITU. All rights reserved.

Ask a question about this manual

Ask about setup, troubleshooting, compatibility, parts, safety, or missing instructions. Manuals+ will review the question and use this page's manual context to help answer it.

Name

Anonymous

Email

you@example.com

After a successful submission, we securely hash the supplied account or form email before sending it to Microsoft Advertising for conversion attribution. Privacy details.

Question

Example: How do I reset this device or fix this error?

Details

Model number, symptoms, what you tried, or the section of the manual you are using.

Submit question

Open the live page

https://manuals.plus/asin/B09FY6GCLC

More documents and user manuals: **https://manuals.plus/**