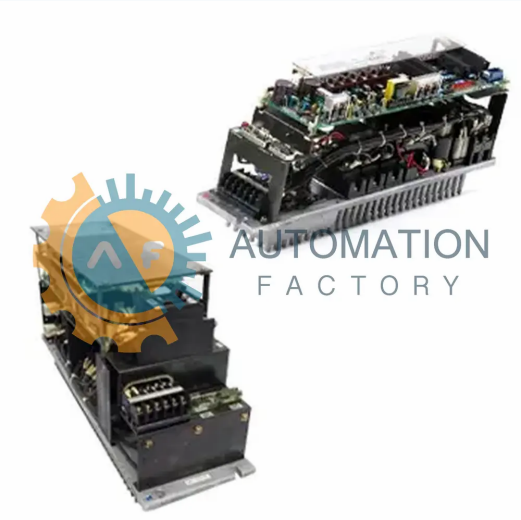
Okuma — BDU Servomotor Drives

BDU-30A



In-Stock, Ships 3-5 Days

- ☑ Get a Quote in 5 minutes
- ☑ Parts ship in as little as 24 hours
- ☑ Up to half the cost of the manufacturer

Secure Online Checkout

Free Ground Shipping

One Year Warranty

The **BDU-30A** is a servo amplifier module produced by Okuma for the BDU Servomotor Drives series. Serving as the intermediary between the OSP motion controller and a brushless servomotor, it conditions line power and processes closed-loop feedback so commanded torque, speed, and position are maintained under varying mechanical loads. In a typical machining center, the drive accepts digital motion data from the host control, monitors encoder signals, and modulates its transistor bridge to keep the connected axis synchronized with programmed tool paths. This arrangement supports precise axis movement during cutting, positioning, and rapid-traverse operations.

The power stage uses transistor-based PWM switching, allowing fine duty-cycle control of the motor voltage. On the supply side, the amplifier is rated for **200-220 VAC** mains at **50/60 Hz**, which are rectified to a **300 VDC** internal bus. The input and motor output use **three-phase power** for balanced current distribution. The amplifier can provide up to **21 A** of continuous output current, which is monitored and limited by onboard current shunts. Motion references arrive through the Digital RCON command channel, while rotor position data return through the high-resolution OSP encoder interface. Each amplifier operates one motor, preventing the control parameters for separate axes from affecting one another.

The BDU-30A chassis is supplied in the Base Unit, BDC, SVC configuration, providing access to the diagnostic panel and power section in one enclosure. Protection circuitry disconnects the bridge if the DC bus rises to**430 VDC** or falls below **220 VDC**, reducing component stress during line surges or brownouts. One DC power supply can support as many as **6 axes**, and the amplifier reports its share of that resource through a seven-lamp DCPS status array.

Automation Factory sells factory new and pre-owned surplus products and maintains channels to procure supply. Automation Factory is not affiliated with nor an authorized distributor or representative of any manufacturers, brands or products listed. Designated trademarks, brand names, and brands appearing herein are the property of their respective owners.

© 2026 Automation Factory. All rights reserved.

Servo condition codes appear on a front panel with **10 LEDs**, making operating states and alarms easy to identify. The visible indicators provide status information without requiring access to the enclosed power electronics.

Specifications

Amplifier Build:	Base Unit, BDC, SVC	**Command Signal:**	Digital RCON	**Dc Bus Voltage:**	300 VDC
Dcps Led Count:	7	**Drive Technology:**	Transistor PWM	**Feedback Encoder:**	High-Res OSP Encoder
High-voltage Trip:	430 VDC	**Input Frequency:**	50/60 Hz	**Input Phases:**	3-Phase
Input Voltage:	200-220 VAC	**Low-voltage Trip:**	220 VDC	**Max Axes Per Dcps:**	6
Motors Per Amplifier:	1	**Output Current:**	21 A	**Output Phases:**	3-Phase
Svc Led Count:	10	**Last Verified:**	11/15/2026 8:44 PM		

Contact Us

1620 Old Apex Road, Cary, NC 27513, USA

Toll Free: 1-888-551-3082

International: 1-919-443-0207

Fax: 1-919-867-6204

Email: sales@wakeindustrial.com

Shipping Options

DHL · FedEx · UPS · Freight

Payment Methods

American Express · MasterCard · VISA · Wire Transfer

Automation Factory sells factory new and pre-owned surplus products and maintains channels to procure supply. Automation Factory is not affiliated with nor an authorized distributor or representative of any manufacturers, brands or products listed. Designated trademarks, brand names, and brands appearing herein are the property of their respective owners.

© 2026 Automation Factory. All rights reserved.