

MDS-B-V2-0505

Industrial automation components

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| Manufacturer | Mitsubishi |
| Catalog number | mds-b-v2-0505 |
| Category | Industrial automation components |
| Product type | Industrial automation components |
| Status | Active product |

Technical specification

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| Weight | 2.27 kgs |
| Voltage | AC |
| Frequency | 50 - 60 Hz |
| Product Type | Drive |
| Signal Type | 230 |
| Signal Level | 230 V |
| Relay Specifications | 230 VAC |

Description

The Mitsubishi MDS-B-V2-0505 is a dual-axis AC servo drive unit designed for precise control in industrial automation applications. Manufactured by Mitsubishi Electric, this unit is part of the MDS-B series, which is compliant with European safety standards and serves as a successor to the MDS-A series. It integrates two independent drive stages within a single housing, each capable of delivering 0.5 kW of power, totaling 1.0 kW. This configuration is ideal for controlling two servo motors simultaneously, making it suitable for applications requiring synchronized motion control. The MDS-B-V2-0505 operates with an input voltage of 200–230V AC (single-phase) and a DC bus voltage of 270–311V DC, accommodating standard industrial power supplies. It utilizes a sine wave PWM control method and features Intelligent Power Modules (IPM) to enhance efficiency and reduce heat generation. The unit supports high-resolution encoders up to 100,000 pulses per revolution, enabling sub-micron precision in motion control. Designed for natural convection cooling, it operates without the need for external fans, contributing to a compact and reliable design. The MDS-B-V2-0505 is compatible with Mitsubishi's HC series servo motors, including models HC-HF, HC-KR, and HC-MF, providing flexibility in motor selection. Its robust design and precise control capabilities make it a valuable component in CNC systems, robotics, and other applications where accurate and reliable motion control is essential.