

### MDS-A-CR-75

Industrial automation components

<b>Manufacturer</b>	Mitsubishi
<b>Catalog number</b>	mds-a-cr-75
<b>Category</b>	Industrial automation components
<b>Product type</b>	Industrial automation components
<b>Status</b>	Legacy / discontinued

### Technical specification

<b>Weight</b>	6.35 kgs kg
<b>Input Voltage</b>	3-phase 200-230V
<b>Output Voltage</b>	DC 270-311V
<b>Manufacturer</b>	Mitsubishi Electric
<b>Output Capacity</b>	7.5 kW
<b>Compatible CNC Series</b>	MELDAS 50, 500, 600
<b>Input Voltage</b>	3-Phase 200-230 V AC
<b>Weight</b>	6.35 kg

## Description

The Mitsubishi MDS-A-CR-75 is a power supply unit designed to provide DC currents to Mitsubishi MDS Servo drives and Spindle drives in CNC machine tools. It is mounted adjacent to the MDS Spindle drive unit, as specified in the MDS manual, to ensure proper drive capacity integration. This unit is part of the MDS-A Series, which corresponds to the MELDAS M500 Series NC, developed to seamlessly connect the servo and spindle drive sections. The MDS-A Series is known for its compact and lightweight design, achieved by integrating converters into a single unit and utilizing high-density mounted electronic parts like the Intelligent Power Module (IGBT-IPM). This integration significantly reduces the drive system's volume, installation area, and weight. The standardization of dimensions facilitates easy installation in cabinets, and the design aligns with the NC unit for an integrated appearance. The MDS-A Series also emphasizes low heat generation by incorporating IPM and employing power supply regeneration in the servo drive. High-speed processing is enabled by a high-speed CPU on the control PCB and a 100,000 pulse/rotation sub-micron detector, allowing faster and more precise interpolation. The stable position loop control method (SHG control) enhances response, reduces machine vibration during acceleration/deceleration, and improves cutting performance and precision during position control. Additionally, the high-speed orientation method allows for smooth operations and minimal orientation times during spindle drive. The MDS-A-CR-75 is discontinued by the manufacturer but remains supported for repair services. For more information, refer to Mitsubishi Electric's legacy products page.