Mitsubishi □□ □□□ □□□ Series Service Manual

MR-J3-10A1S042

1. Description

The MR-J3-10A1S042 from Mitsubishi is a specialized AC servo amplifier designed for precision applications. With a rated output of 0.1 kW and powered by a single-phase 200 VAC supply, the unit efficiently manages low-current operations.

2. Specifications

Specification	Value
Manufacturer	**Mitsubishi**
Product	**Line MELSERVO MR-J3**
Part	**Number MR-J3-10A1S042**
Type	**AC servo amplifier**
Rated	**Output 0.1 kW**
Rated	**Voltage 1-phase 200 VAC**
Rated	**Current 0.2 A**
Main	**Circuit Power Input Single-phase AC 200 VAC**
Allowable	**Voltage Fluctuation ±10%**
Control	**Circuit Power Input Single-phase AC 200 VAC**
Power	**Consumption 50 W**
Communication	**Interface RS-422**
Control	**Method Sine wave PWM control**
Dynamic	**Brake Built-in dynamic brake**
Protection	**Features Overcurrent protection, undervoltage protection, overheating protection**

3. Product Information

The MR-J3-10A1S042 from Mitsubishi is a specialized AC servo amplifier designed for precision applications. With a rated output of 0.1 kW and powered by a single-phase 200 VAC supply, the unit efficiently manages low-current operations.

Technical specifications for MR-J3-10A1S042

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Product Line MELSERVO MR-J3

www.AutoDCSTech.com

Part Number MR-J3-10A1S042

Type AC servo amplifier

Rated Output 0.1 kW

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Main Circuit Power Input Single-phase AC 200 VAC

Allowable Voltage Fluctuation ±10%

Control Circuit Power Input Single-phase AC 200 VAC

Power Consumption 50 W

Communication Interface RS-422

Control Method Sine wave PWM control

Dynamic Brake Built-in dynamic brake

Protection Features Overcurrent protection, undervoltage protection, overheating protection

Description

The Mitsubishi MR-J3-10A1S042 is an AC servo amplifier that operates on a single-phase power supply of 200 VAC. This component has a rated output of 0.1 kW, ensuring effective driving of connected servo motors. It is specifically rated at 0.2 A and is dependable for low-power applications.

The main power input to this amplifier is accomplished via a single-phase AC source, which is also utilized for the control circuit, ensuring consistent and reliable operation. Notably, the amplifier can accommodate voltage fluctuations of ±10%, maintaining performance integrity under varying supply conditions.

In terms of communication, the MR-J3-10A1S042 is equipped with an RS-422 interface, enabling efficient data communication with other devices in an automation system. The control method employed is sine wave PWM control, which enhances the precision of output signals.

For added functionality, this amplifier comes with a built-in dynamic brake, providing essential stopping power in dynamic scenarios. Safety is also prioritized, as this unit includes multiple protection features, such as overcurrent, undervoltage, and overheating protection, ensuring that the amplifier operates reliably in various environments. With a power consumption of only 50 W, the MR-J3-10A1S042 is optimized for efficiency, making it suitable for a range of automated applications.