

Mitsubishi Series Service Manual

MR-J3-700T-ED

1. Description

The MR-J3-700T-ED from Mitsubishi is an AC servo amplifier designed for efficiency and precision. It operates primarily within a voltage class of 200V and has a capacity of 7kW, meeting various industrial applications.

2. Specifications

Specification	Value
Manufacturer	Mitsubishi
Product	Line MELSERVO MR-J3
Part	Number MR-J3-700T-ED
Type	AC Servo Amplifier
Command	Interface CC-Link / RS-422
Voltage	Class 200V
Capacity	7kW
Output	Rated Voltage Three-phase AC200V
Rated	Current 37A
Main	Circuit Power Input Voltage and Frequency Three-phase AC200-230V/50, 60Hz
Allowable	Voltage Fluctuation Within $\pm 5\%$
Control	Circuit Power Input Voltage and Frequency Single-phase AC200-230V/50, 60Hz
Power	Consumption 45W
Control	Method Sine wave PWM control/current control method
Dynamic	Brake Built-in
Environmental	Conditions Ambient Temperature 0 to 55°C (no freezing)

3. Product Information

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Technical specifications for MR-J3-700T-ED

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- Environmental Conditions Ambient Temperature 0 to 55°C (no freezing)

Description

Mitsubishi's MR-J3-700T-ED is recognized as an AC servo amplifier catering to various automation needs. Designed for a voltage class of 200V, this model has a substantial capacity of 7kW. For dynamic operations, it provides an output rated voltage of three-phase AC200V and a rated current of 37A.

This unit requires a three-phase power supply input of AC200 to 230V, functioning efficiently at either 50 or 60 Hz. It is built to handle voltage variations with an acceptable fluctuation margin of $\pm 5\%$. Additionally, its control circuit demands a single-phase input voltage within the same range. This ensures reliable operations across different environments.

In terms of consumption, the MR-J3-700T-ED showcases a power consumption rating of 45W. The system employs a sine wave PWM control/current control method for precise performance. Moreover, this amplifier features a built-in dynamic brake for enhanced safety and efficiency. Operating conditions allow the amplifier to function within an ambient temperature of 0 to 55°C, ensuring no freezing conditions are present during use.