

Cautions Concerning Use

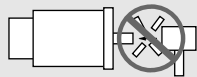
To ensure safe use

- To ensure the safe and proper use of the product, we ask that you read the instruction manual prior to its use.
- These products are not designed or manufactured for use in machinery and systems where people's safety is at stake.
- When considering the product for use in such special applications as equipment or systems employed in passenger transportation, medicine, aerospace, nuclear power generation, or underwater relays, please contact our sales representative.
- These products have been manufactured to the most rigorous quality standards. However, we ask that you employ safety devices when using the product in equipment in which any failure on its part can be expected to cause a serious accident or loss.

Cautions concerning use

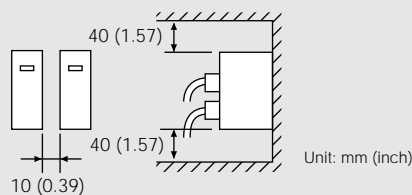
Transport and installation of motor

- Protect the motor from impact during handling. When installing pulleys and couplings, do not hammer on the shaft. Impact can damage the encoder. In the case of motor with key, install pulley or coupling with screw of shaft-end. Use a pulley extractor when taking off the pulley.



Installation

- Avoid installation in an environment in which oil mist, dust, etc. are in the air. When using in such an environment, enclose the servo-amp in an airtight panel. Protect the motor by furnishing a cover for it or taking similar measures.
- Mount the amp vertically on a wall.
- When installing multiple amps inside an airtight panel, leave at least 10 millimeters (0.39 inch) between amps. Leave at least 40 millimeters (1.57 inch) of space above and below the amp. When installing multiple amps, leave 100 millimeters (3.94 inch) of space or install a fan to ensure that heat is not trapped inside the panel.



- While installing a single motor, the motor can be installed horizontally or vertically. When installing vertical (shaft-up), take measures on the machine side to ensure that oil from the gear box does not get into the motor.
- If the servomotor has been running for some time, do not touch it immediately after the power has been shutoff. It is possible that the motor will be very hot, and touching it could burn skin.
- The optional regeneration unit becomes hot (temperature rise of 100°C or more) with frequent use. Do not install within flammable objects or objects subject to thermal deformation. Take care to ensure that electric wires do not come into contact with the main unit.

Wiring

- When a power-supply is applied to the amp's output terminal (U, V, W), the amp will be damaged. Before switching the power on, perform thorough wiring and sequence checks to ensure that there are no wiring errors, etc.
- When a power-supply is applied to the motor's input terminal (U, V, W), the motor will be burned out. Connect the motor to the amp's output terminal (U, V, W).
- Match the phase of the motor input terminal (U, V, W) to the output terminal (U, V, W) before connecting. If they are not the same, motor control cannot be performed.
- In the case of position and speed control mode, connect the stroke end signal (LSP, LSN) to the common terminal (SG). If it is not connected, the motor will not rotate.

Factory settings

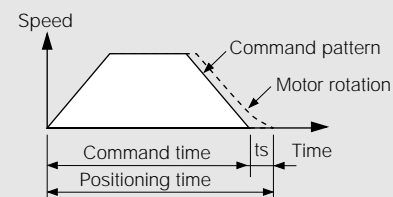
- All possible motor and amp combinations are predetermined. Confirm the model of the motor and amp to be used before installation.
- For the MR-J2S-A models, select parameter mode No.0 for the control mode to set position, speed and torque. For the MR-J2S-B models, these are selected by a controller.
- When using the optional regeneration units, please change parameter No.0 (MR-J2S-A models) or parameter No.2 (MR-J2S-B models).

Operation

- When a magnetic contactor (MC) is installed on the amp's primary side, do not perform frequent starts and stops with the MC. Doing so could cause the amp to fail.
- When a trouble occurs, the amp's safety features are activated, halting output, and the dynamic brake instantly stops the motor. If free run is required, contact Mitsubishi about solutions involving servo-amps where the dynamic brake is not activated.
- When using a motor with an electromagnetic brake, do not apply the brake when the servo is on. Doing so could cause an amp overload or shorten brake life. Apply the brake when the servo is off.

Cautions concerning model selection

- Select a motor with a rated torque above the continuously effective load torque.
- Design the operation pattern so that positioning can be completed, taking into account the setting time (ts).



- Use the unit with the load's inertia moment set below the recommended load inertia moment ratio of the motor being used. If it is too large, desired performance may not be attainable.