General-Purpose AC Servo Series

MELSERVO-J2M Series Instructions and Cautions for Safe Use

1. INTRODUCTION

1.1 Introduction to the manuals

If this is the first time for you to use the MELSERVO-J2M Series, the optionally available MR-J2M-P8A MELSERVO-J2M General-purpose Interface Manual (IB-010-00001001) and MELSERVO-J2M Series Instructions and Cautions for Safe Use are required. Please read them all carefully to use the MELSERVO-J2M Series.

1.2 Contents of the packaging

After unpacking, check the rating plate to confirm that the each unit you received are as you ordered.

- Base unit (MR-J2M-BU)
- Interface unit (MR-J2M-IFU)
- Drive unit (MR-J2M-DU)

2. General instruction

2.1 General principle

The following instructions should also be fully noted. Incorrect handling may cause a fault, injury, electric shock, etc.

1. Transportation and installation

- Do not subject the servo motor to more than the permissible load. Otherwise, the shaft may break.
- Do not connect AC power directly to the servo motor. Otherwise, a fault may occur.
- When the equipment has been stored for an extended period of time, contact your local sales office.
- When transporting the products, make sure that the equipment is not deformed and that the connection points are not damaged.

2. Wiring

- Do not attempt to wire the units and servo motors until they have been installed. Otherwise, you may get an electric shock.

3. Test run adjustment

- Before operation, check the parameter settings. Improper settings may cause some machine operations to be impossible.
- The parameter settings must not be changed excessively. Operation will be unstable.

4. Maintenance, inspection and parts replacement

- Do not attempt to disassemble the main body, etc. (e.g., the regenerative resistor, servo motor, etc.) their temperatures may be high and you may get burnt or a parts may damaged.

5. Disposal of waste

Please dispose a servo amplifier, battery (primary battery) and other options according to your local laws and regulations.

6. Battery transportation

- The revision (Edition A) of the Dangerous Goods Rule of the International Air Transport Association (IATA) went into effect on January 1, 2003 and was enforced immediately. In this rule, “provisions of the lithium and lithium ion batteries” were revised to tighten the restrictions on the air transportation of batteries. However, since the battery for this servo amplifier is not dangerous goods (Class9), air transportation of 24 or less batteries is outside the range of the restrictions. Air transportation of more than 24 batteries requires packing compliant with the Packing Standard 8008. When a customer is necessary for battery safety tests, contact our branch or representative. For more information, contact your local sales office.

7. SOUTH KOREA COMPLIANCE

This product complies with the Radio Wave Law (KC mark). Please follow the following to use the product properly.

- Before operation, check the parameter settings. Improper settings may cause some machine operations to be impossible.
- The parameter settings must not be changed excessively. Operation will be unstable.
- Do not attempt to disassemble the main body, etc. (e.g., the regenerative resistor, servo motor, etc.) their temperatures may be high and you may get burnt or a parts may damaged.

- Provide all necessary emergency systems to ensure that operations can be stopped and power switched off immediately.
- Erroneous operation due to a failure in wiring or repair should be fully compatible to do the work.
- Before repairing, make sure that the run signal of the interface unit is off to prevent an accident. It is safer to make an alarm in an alarm is reset with the run signal on.
- Do not use a relay if possible. Use a pulse I/O (IB, DO) for the servo amplifier. Use the one specified in the MRJ2M-P8A MELSERVO-J2M General-purpose Interface Manual (IB-010-00001001).
- For such reasons as service life and mechanical structure (e.g., a ball screw and the servo motor are coupled via a belt), the electromagnetic brake may not hold the motor shaft. It is recommended to add a slip-on mechanical brake to the shaft of the servo motor. Otherwise, a parts may break off and break a unichain.

- Do not climb or stand on servo equipment. Do not put heavy objects on equipment.

- Then, check that the cable between U and V-W is wires to the correct phase terminals (U, V, W) directly. Do not let a magnetic contactor, etc. intervene.

- Connect the wires to the correct phase terminals (U, V, W) of the drive unit and servo motor. Otherwise, the servo motor does not operate properly.

- Do not subject the servo motor to more than the permissible load. Otherwise, the shaft may break.

- Do not attempt to disassemble the main body, etc. (e.g., the regenerative resistor, servo motor, etc.) their temperatures may be high and you may get burnt or a parts may damaged.

- When the equipment has been stored for an extended period of time, contact your local sales office.

- Note that the CAUTION level may lead to a serious consequence according to conditions. Please follow the instructions of both levels because they are important to personal safety.

- What must be done and what must not be done are indicated by the following diagrammatic symbols.

- Indicates what must not be done. For example, “No fire” is indicated by .
- Indicates what must not be done. For example, grounding is indicated by .

- When using the equipment, make sure that the equipment is not deformed and that the connection points are not damaged.

- Do not attempt to disassemble the main body, etc. (e.g., the regenerative resistor, servo motor, etc.) their temperatures may be high and you may get burnt or a parts may damaged.

- Any person who is involved in wiring and inspections should be fully competent to do the work.

- Do not attempt to disassemble the main body, etc. (e.g., the regenerative resistor, servo motor, etc.) their temperatures may be high and you may get burnt or a parts may damaged.
2. COMPLIANCE WITH CE MARKING

2.1 What is a CE marking?

The CE marking is mandatory and must be affixed to specific products placed on the European Union (EU) market. A product or component that carries the CE marking is in conformity with the applicable EU regulations (Directives). Compliance is declared by the manufacturer in the form of a Declaration of Conformity (DoC).

2.2 For compliance

See the DoC and the CE marking as an appearance inspection of every unit before installation. In addition, have a final performance inspection on the entire machine/system, and keep the inspection record.

2.3 Environment

Open MELSERVO-J2M is at class Pollution degree 2 set forth in EN664-1. For this purpose, MELSERVO-J2M is a control box which is protected against dust, water, oil, dirt, and these. The EMC directive and the Low voltage directive apply to the servo units alone. This servo is designed to comply with the EMC directive guidelines on MELSERVO-J2M, refer to the EMC Installation Guidelines (IBNA67310).

2.4 Power supply

(a) Operate MELSERVO-J2M in meet the requirements of the overvoltage category II set forth in EN664-1 for this purpose a: regulated industrial; transients conforming to the EN Standard should be used in the power input section.

(b) When supplying interface power from external, use a 5VDC power supply which has been insulation-nominal in 35Ω.

2.5 Grounding

(a) To prevent an electric shock, the protective-earth/PE terminal (yellow) of the base unit must be connected to the protective earth (PE) of the control box.

(b) Do not connect two ground cables to the same protective earth (PE) terminal. Always connect cables to the terminals one to one.

(c) If an earth leakage circuit breaker is used, always earth the protective earth (PE) terminal of the base unit to prevent an electric shock.

2.6 Peripheral device options

(a) Use the suitable screw terminal blocks and magnetic contactor modules which are EN50160 compliant standard products given in the MELSERVO-J2M Instruction Manual.

(b) Use the EMC filter for noise reduction.

(c) Use the EMC filter for noise reduction.

(d) Use the EMC filter for noise reduction.

(e) Use the EMC filter for noise reduction.

(f) Use the EMC filter for noise reduction.

(g) Use the EMC filter for noise reduction.

(h) Use the EMC filter for noise reduction.

(i) Use the EMC filter for noise reduction.

(j) Use the EMC filter for noise reduction.

(k) Use the EMC filter for noise reduction.

(l) Use the EMC filter for noise reduction.

(m) Use the EMC filter for noise reduction.

(n) Use the EMC filter for noise reduction.

(o) Use the EMC filter for noise reduction.

(p) Use the EMC filter for noise reduction.

(q) Use the EMC filter for noise reduction.

(r) Use the EMC filter for noise reduction.

(s) Use the EMC filter for noise reduction.

(t) Use the EMC filter for noise reduction.

(u) Use the EMC filter for noise reduction.

(v) Use the EMC filter for noise reduction.

(w) Use the EMC filter for noise reduction.

(x) Use the EMC filter for noise reduction.

(y) Use the EMC filter for noise reduction.

(z) Use the EMC filter for noise reduction.

(aa) Use the EMC filter for noise reduction.

(bb) Use the EMC filter for noise reduction.

(cc) Use the EMC filter for noise reduction.

(dd) Use the EMC filter for noise reduction.

(oo) Use the EMC filter for noise reduction.

(pp) Use the EMC filter for noise reduction.

(qq) Use the EMC filter for noise reduction.

(rr) Use the EMC filter for noise reduction.

(ss) Use the EMC filter for noise reduction.

(tt) Use the EMC filter for noise reduction.

 uu) Use the EMC filter for noise reduction.

 vv) Use the EMC filter for noise reduction.

 ww) Use the EMC filter for noise reduction.

 xx) Use the EMC filter for noise reduction.

 yy) Use the EMC filter for noise reduction.

 zz) Use the EMC filter for noise reduction.

 aaaa) Use the EMC filter for noise reduction.

 bbbb) Use the EMC filter for noise reduction.

 cccc) Use the EMC filter for noise reduction.

 dddd) Use the EMC filter for noise reduction.

 oo) Use the EMC filter for noise reduction.

 pp) Use the EMC filter for noise reduction.

 qq) Use the EMC filter for noise reduction.

 rr) Use the EMC filter for noise reduction.

 ss) Use the EMC filter for noise reduction.

 tt) Use the EMC filter for noise reduction.

 uu) Use the EMC filter for noise reduction.

 vv) Use the EMC filter for noise reduction.

 ww) Use the EMC filter for noise reduction.

 xx) Use the EMC filter for noise reduction.

 yy) Use the EMC filter for noise reduction.

 zz) Use the EMC filter for noise reduction.

 aaaa) Use the EMC filter for noise reduction.

 bbbb) Use the EMC filter for noise reduction.

 cccc) Use the EMC filter for noise reduction.

 dddd) Use the EMC filter for noise reduction.

2.7 About wiring protection

(a) The M500 control unit is not to be used as a low voltage public network which supplies domestic positions.

(b) The M500 control unit is not to be used as a low voltage public network which supplies domestic positions.

(c) The M500 control unit is not to be used as a low voltage public network which supplies domestic positions.

(d) The M500 control unit is not to be used as a low voltage public network which supplies domestic positions.

(e) The M500 control unit is not to be used as a low voltage public network which supplies domestic positions.

(f) The M500 control unit is not to be used as a low voltage public network which supplies domestic positions.

(g) The M500 control unit is not to be used as a low voltage public network which supplies domestic positions.

(h) The M500 control unit is not to be used as a low voltage public network which supplies domestic positions.

(i) The M500 control unit is not to be used as a low voltage public network which supplies domestic positions.

(j) The M500 control unit is not to be used as a low voltage public network which supplies domestic positions.

(k) The M500 control unit is not to be used as a low voltage public network which supplies domestic positions.

(l) The M500 control unit is not to be used as a low voltage public network which supplies domestic positions.

(m) The M500 control unit is not to be used as a low voltage public network which supplies domestic positions.

(n) The M500 control unit is not to be used as a low voltage public network which supplies domestic positions.

(o) The M500 control unit is not to be used as a low voltage public network which supplies domestic positions.

(p) The M500 control unit is not to be used as a low voltage public network which supplies domestic positions.

(q) The M500 control unit is not to be used as a low voltage public network which supplies domestic positions.

(r) The M500 control unit is not to be used as a low voltage public network which supplies domestic positions.

(s) The M500 control unit is not to be used as a low voltage public network which supplies domestic positions.

(t) The M500 control unit is not to be used as a low voltage public network which supplies domestic positions.

(u) The M500 control unit is not to be used as a low voltage public network which supplies domestic positions.

(v) The M500 control unit is not to be used as a low voltage public network which supplies domestic positions.