Mitsubishi General-Purpose AC Servo

No. 15-08E

Sales and Service

Release of MR-J4 Series General-Purpose AC Servo Amplifier with a Special Coating Specification

Thank you for your continued patronage of the Mitsubishi general-purpose AC servo and FA products. We will release MR-J4-_A/B-EB/KS, custom models with a specially-coated MR-J4 series board.

1. Target Models

- MR-J4-_A/B-EB (MR-J4-_A/B with a special coating specification)
- MR-J4-_A/B-KS (MR-J4-_A/B-RJ with a special coating specification)
- MR-J4W2/3-_B-EB (MR-J4W2/3-_B with a special coating specification)

2. Special Coating Specification

Using the MR-J4 series in a corrosive atmosphere may cause its corrosion with time, resulting in a malfunction. For the printed circuit board of the MR-J4-_A/B-EB/KS models, a urethane coating agent is applied to some parts capable of being coated technically (except LEDs, connectors, terminal blocks, etc.) to improve the resistance to corrosive gases. The target models are suitable specifically for applications susceptible to corrosive gases, including tire manufacturing and water treatment. Although the special coating-specification products have the improved resistance to corrosive gases, proper operations in environments mentioned above are not guaranteed. Therefore, the products require a periodic check for any abnormality.

3. Standard for Corrosive Gases

In IEC 60721-3-3, corrosive gases refer to sea salt, sulfur dioxide, hydrogen sulfide, chlorine, hydrogen chloride, hydrogen fluoride, ammonia, ozone, and nitrogen oxides shown in the environmental parameter column of the table below.

The table also shows the corrosive gas concentrations defined in IEC 60721-3-3, Class 3C2.

Environmental parameter Unit Mean value Maximum value a) Sea salt None Salt mist b) Sulfur dioxide cm³/m³ 0.11 0.37 cm³/m³ c) Hydrogen sulfide 0.071 0.36 d) Chlorine cm³/m³ 0.034 0.1 e) Hydrogen chloride cm³/m³ 0.066 0.33 f) Hydrogen fluoride cm³/m³ 0.012 0.036 cm³/m³ g) Ammonia 1.4 4.2 h) Ozone cm³/m³ 0.025 0.05 cm³/m³ 0.26 0.52 i) Nitrogen oxides

Table 1 Corrosive gas concentrations defined in IEC 60721-3-3 Class 3C2

The special coating-specification products have the improved corrosion resistance in environments with corrosive gas concentrations conforming to IEC 60721-3-3, Class 3C2. We tested typical target models and confirmed that their corrosive gas resistance was improved, compared with the standard models.

4. Release Schedule

We will start accepting orders in April 2015. For details, contact your local sales office.

Date of issue	March 2015	Title	AC Servo Amplifier with a Special Coating	Mitsubishi Electric Corp., Nagoya Works 5-1-14 Yada-minami, Higashi-ku, Nagoya 461-8670 Tel.: +81 (52) 721-2111 Main line
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