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Report of the compliance of AC servo motors for industrial robots with rules for China Energy Label (2025 edition)

■ Date of issue

March 2026

■ Applicable models

MELFA F series, MELFA FR series, MELFA CR series, RV-TFH/TH series

Thank you for your continued support of Mitsubishi Electric industrial robot "MELFA". This technical news describes the compliance of the AC servo motors installed in industrial robots with rules for China Energy Label.

1 Outline

The Chinese national standard titled "Minimum allowable values of energy efficiency and energy efficiency grades for permanent magnet synchronous motors (GB 30253-2024)" was issued on September 29, 2024. In addition, Implementation Rules for Energy Efficiency Labeling of Permanent Magnet Synchronous Motors (CEL 038-2020) has been revised. Its 2025 edition was issued on September 26, 2025, and shall become effective on January 1, 2026.

2 List of affected products

The following shows the affected robot series (target axis).

No.	Robot series (Target axis)
1	RH-6FH(J1) , 12FH(J1/J2) , 20FH(J1/J2) RH-6FRH(J1) , 12FRH(J1/J2) , 20FRH(J1/J2)
2	RH-3FHR(J1) , RH-3FRHR(J1)
3	RH-1FHR(J1) , RH-1FRHR(J1)
4	RH-10CRH(J1/J2) , RH-20CRH(J1/J2)
5	RV-8CRL(J1/J2) , 12CRL(J1/J2/J3)
6	RV-7F/7FM/7FL/7FLM(J1/J2) , 7FR/7FRL(J1/J2)
7	RV-13F/13FL/20F/7FLL(J1/J2/J3), RV-13FR/13FRL/20FR/20FRL/7FRLL (J1/J2/J3)
8	RV-100TFH/150TFH(J1/J2/J3), RV-100TFHL/150TFHL(J1/J2/J3/J4), RV-100/150TH(J1/J2/J3)

3 Details of changes

The China Energy Label on the maintenance-purpose AC servo motors, the rating plate and its indications, and the label attachment method (from string attachment to tape application) will be changed.

Item	Current standard	New standard
<p>China Energy Label on maintenance-purpose AC servo motors</p>		 <div data-bbox="801 872 1260 986" style="border: 1px solid blue; padding: 5px;"> <p>The year indicated at the end will be changed in accordance with the 2025 edition of the Implementation Rules.</p> </div>
<p>Rating plate of AC servo motors</p>		 <div data-bbox="708 1230 1325 1328" style="border: 1px solid blue; padding: 5px;"> <p>This indication corresponds to China Energy Label. The description will be changed in accordance with the 2025 edition of the Implementation Rules.</p> </div>

- * Rating plates in the table above are examples. The rating plate size, mark position/size, description, and label attachment method differ depending on the model.
- * Depending on the stock status, the products with both the former and new plates/labels may be distributed in the market around the same time.

4 Regulatory exclusions

The AC servo motors installed in industrial robots fall under either (a) or (b) below, and therefore are not subject to the Implementation Rules.

Note that the display of the China Energy Label is exempt if either of the following conditions is met.

- (a) According to Section 1.2 of the "Implementation Rules for Energy Efficiency Labeling of Permanent Magnet Synchronous Motors", the following case is excluded from the scope of the Implementation Rules:
When the motor is integrated into machinery such as fans, pumps, or compressors and cannot be tested independently.

"Implementation Rules for Energy Efficiency Labeling of Permanent Magnet Synchronous Motors" (in Chinese) can be viewed at the website below.

https://www.ndrc.gov.cn/xxgk/zcfb/ghxwj/202509/t20250926_1400696.html

- (b) According to Items (7) and (8) under Article 11 of the "Measures for the Administration of Energy Efficiency Labels" (the higher-level regulation of the "Implementation Rules for Energy Efficiency Labeling of Permanent Magnet Synchronous Motors"), products falling under the following categories are exempt from displaying the China Energy Label:

- Products required by end users for maintenance purposes (i.e., for maintenance use)
- Products required for factory production lines or for supporting production lines (i.e., for factory equipment use)

"Measures for the Administration of Energy Efficiency Labels" (in Chinese) can be viewed at the website below.

<https://www.ndrc.gov.cn/xxgk/zcfb/fzggwl/201603/W020190905495017011772.pdf>

When motors alone are exported to China, documentation stating that the product is exempt from displaying the China Energy Label based on the above reasons may be required for customs clearance. Such documentation should be prepared by the importer (or exporter).

If you have any questions, please contact the customs.

5 Schedule

These changes for AC servo motors are expected to be made sequentially from the December 2025 production.