

Sales and Service

AC Servo Motor Compliance with Rules for China Energy Label

Thank you for your continued patronage of the Mitsubishi Electric AC servo system.
AC servo motors will comply with rules for China Energy Label.
We ask for your understanding in this matter.

1. Outline

Chinese authorities have issued "Implementation Rules for Energy Efficiency Labeling of Permanent Magnet Synchronous Motors" on April 29, 2020.

The China Energy Labels may need to be attached on permanent magnet synchronous motors, as well as induction motors, to clear Chinese customs from July 1, 2020. Details of the rule and Mitsubishi Electric's actions are described below.

2. Implementation Rules for Energy Efficiency Labeling of Permanent Magnet Synchronous Motors

(1) Details

This rule demands application of China Energy Labels on permanent magnet synchronous motors sold in China. For application of the labels, the motor efficiency must satisfy the reference value specified in standard GB 30253-2013.

Although this rule was implemented on July 1, 2020, motors manufactured or imported to China before July 1, 2020 can be sold without the labels until July 2021.

(2) Affected motors

The rule applies to inverter-driven permanent magnet synchronous motors having the following specifications.

- Rated speed: 500 to 3000 r/min
- Rated output: 0.55 to 90 kW
- Rated voltage: 1000 V or less

(except for a motor with a brake or a geared motor)

- * "Inverter-driven" is an expression defining the subjects of the above-mentioned rule in a broad sense and includes servo motors that are driven in combination with the Mitsubishi Electric servo amplifiers.

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(3) Inapplicable products

The China Energy Labels do not need to be attached on the following products.

(a) Motors mentioned in Section 1.2 in "Implementation Rules for Energy Efficiency Labeling of Permanent Magnet Synchronous Motors"

- Motors that cannot be tested separately since they are embedded with other devices such as fans, pumps, and compressors ^{*1}

*1. Exporters (or equipment manufacturers) should judge whether the motors fall under this definition.

"Implementation Rules for Energy Efficiency Labeling of Permanent Magnet Synchronous Motors" can be checked on the following website (Chinese only):

<https://www.energylabelrecord.com/ggtz/display.htm?contentId=e89328b9f25a408091cd3e065d242ca5>

(b) Products mentioned in Article 11 (7) and (8) in "Measures for the Administration of Energy Efficiency Labels" (a superior rule of "Implementation Rules for Energy Efficiency Labeling of Permanent Magnet Synchronous Motors")

- Products necessary for maintenance by end users (maintenance purposes)
- Products necessary for factory production lines or for completing the production lines (factory equipment purposes)

"Measures for the Administration of Energy Efficiency Labels" can be checked on the following website (Chinese only, in PDF format):

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

To export motors as single units, Chinese customs may demand documents describing that the China Energy Labels do not need to be attached on the motors for the reasons above. The documents should be prepared by importers/exporters.

3. Mitsubishi Electric's action

Mitsubishi Electric AC servo motors will be applied for China Energy Label registration. After approval of registration, the China Energy Labels will be attached on the motors having specifications described in Section 2 (2). The indication corresponding to the China Energy Label will be added on the rating plate and packaging label. For details on the rating plate and packaging label, refer to the Sales and Service No. 21-04E.

Label format example:

Label format examples are provided in Appendix 1 on page 10 in the "Implementation Rules for Energy Efficiency Labeling of Permanent Magnet Synchronous Motors". The examples can be checked on the following website (Chinese only):

<https://www.energylabelrecord.com/userfiles/2/files/cms/article/2020/04/%E6%B0%B8%E7%A3%81%E5%90%8C%E6%AD%A5%E7%94%B5%E5%8A%A8%E6%9C%BA%E8%83%BD%E6%BA%90%E6%95%88%E7%8E%87%E6%A0%87%E8%AF%86%E5%AE%9E%E6%96%BD%E8%A7%84%E5%88%99.pdf>

4. Schedule

This change will be made sequentially from the June 2021 production. (The schedule may be moved up.)