Amendments to the Legal Inspection Requirements for Low-voltage three-phase induction motors

By the Bureau of Standards, Metrology and Inspection (BSMI), Ministry of Economic Affairs (MOEA)

Introduction:

The BSMI proposes to adopt the updated version of CNS 14400 "Low-voltage three-phase squirrel-cage high-efficiency induction motors (for general purpose)" as the new inspection standard. The conformity assessment procedures remain unchanged.

Date of implementation: 1 July 2025

Scope of covered products:

Description of Goods	Inspection Standards	C.C.C. Code (the first 6 digits are the same as HS Code) (For reference)	Conformity Assessment Procedures
Low-voltage three-phase induction motors. (inspection scope: only those with a rated output power less than 75kW and without additional device attached. Those used in household appliances and explosion-proof motors are excluded).	1. Low-voltage three-phase squirrel-cage high-efficiency induction motors (for general purpose): CNS 14400 (2023) and Section 5 "Marking of presence" of CNS 15663 (2013); 2. The other Low-voltage three-phase induction motors (class A insulation): CNS 1056 (2011) and Section 5 "Marking of presence" of CNS 15663 (2013).	8501.51.90.00.7 8501.52.90.00.6	RPC Scheme (Modules II+Ⅲ)

The conformity assessment schemes for the commodities are as follows:

Registration of Product Certification (RPC) Scheme (Module II + III)

Under this procedure, domestic manufacturers or importers must have their products type-tested by BSMI designated testing laboratories in advance (Module II) before applying for registration of their products. Manufacturers or importers will also be required to ensure by declaration that all products made at their manufacturing facilities or imported are in conformity with the prototypes submitted for type test at Module II stage, and the declaration procedure is called Module III (conformity-to-type declaration). The conformity-to-type declaration shall be drawn up by the manufacturer or the authorized local representative, declaring that the mass-produced products comply with the prototype as described in the type-test report.

Products will be allowed to use the Commodity Inspection Mark with the letter 'R' and the identification number given by the BSMI, after they are certified and registered with the BSMI. These products can then clear customs directly without any further inspection if not being sampled by RPC border check procedure. The application fee and annual fee for RPC are both NT$5,000 (about US$170) for each certification, and the RPC certificates are valid for three years. If there are any serial products, an extra NT$3,000 (about US$102) is charged for each application in each certificate.

The fees for type-testing vary by products and depend on the fee schedule of the testing laboratories.

*Further information about the schemes is also available on the BSMI web site at https://www.bsmi.gov.tw/wSite/lp?ctNode=9768&CtUnit=4132&BaseDSD=7&mp=2

Locations to apply for Type Testing:
The BSMI designated testing laboratories.

Locations to apply for Registration of Product Certification:
The BSMI or its branch offices.

Time required for Registration of Product Certification:
Fourteen working days. (This period does not include the time for corrective actions by the applicant due to deficiencies in the documents or samples; another seven working days may be required if additional tests are required.)

Conformity assessment procedure: No change.

Related requirements:

1. For low-voltage three-phase squirrel-cage high-efficiency induction motors (for general use) with a rated output power of 750W but less than 75kW: Section 5.2 of CNS 14400 (2023) has been amended as follows: when high-efficiency motors at rated output are tested according to the method specified in Section 10, their efficiency shall meet the IE3 energy efficiency standards for low-voltage three-phase squirrel-cage induction motors as announced by the energy authority on 16 April 2024 in the Appendix 1 of "Amendment to Requirements on Energy Efficiency Standard, Efficiency Labeling, and Inspection for Low-Voltage Three-Phase Squirrel-Cage Induction Motors (including those installed in one part of specific equipment)".
2. For low-voltage three-phase squirrel-cage high-efficiency induction motors (for general use) with a rated output power of less than 750W: Section 5.2 of CNS 14400 (2023) has been amended as follows: when high-efficiency motors at rated output are tested according to the method specified in Section 10, their efficiency shall have an actual efficiency value that is above 95% of the labeled value.
3. The "Amendment to Requirements on Energy Efficiency Standard, Efficiency Labeling, and Inspection for Low-Voltage Three-Phase Squirrel-Cage Induction Motors (including those installed in one part of specific equipment)" referred to in item 1 of Related Requirements is announced by the energy authority. If there are any updates to the Amendment in the future, the BSMI will issue an interpretive order to publish the date of application of the new Amendment, which will serve as the basis for the amendment of the inspection standards.
4. The revised inspection standards (including item 1, item 2 and item 3 of the Related Requirements) will come into force from the date of announcement and the old version of inspection standards will be invalid beginning on 1 July 2025.
5. For products newly added to the legal inspection scope, they (both imported and domestically manufactured) will be subject to inspection beginning on 1 July 2025. The BSMI will accept applications for Registration of Product Certification starting from the date of announcement.
6. The inspection standards for other low-voltage three-phase induction motors (class A insulation) that are listed above remain unchanged.

7. Applications for RPC will be processed in accordance with the followings upon the date of adoption:
   (1) For products that have been certified: Applicants of the certificate shall provide the type-test report and technical documents that conform to the revised inspection standards and apply to the BSMI on or prior to 30 June 2025. The validity period of the certificate after renewal will remain unchanged; if the certificate is not renewed within the time limit, it will be abolished in accordance with Subparagraph 9, Article 42 of the the Commodity Inspection Act.
   (2) For extension of validity period of certificates: Applications for extending the validity period of RPC certificates based on the old version of inspection standards will be accepted under the circumstances stated in the "Regulations Governing Registration of Product Certification", the validity period of the extended certificate will end on 30 June 2025. For applications submitted on or after 1 July 2025, a type-test report and technical documents based on the new versions of the inspection standards shall be submitted.
   (3) For new applicants: Applicants who apply for certificate(s) based on the old version of inspection standards before 30 June 2025, will have their certificate(s) valid until 30 June 2025. Applicants who apply for certificate(s) from 1 July 2025 onwards should submit the required type-test reports, technical documents as well as documents indicating the location of the "Marking of Presence," samples of the "Marking of Presence"(see Tables 1 and 2), and the "Declaration of the Presence Condition of the Restricted Substances Marking" in accordance with the revised inspection standards. The certificate will be valid for three years from the date of issuance.
8. For Sections 5 to 10 of CNS 14400 (2023) that are the same as the test requirements of CNS 14400 (2012), the designated laboratories recognized by the BSMI may reference the measurement values of the items in the original type test report as data for the type test report of the revised inspection standards, thereby exempting them from retesting.
9. The certificate holders of the products shall clearly label "the presence condition of the restricted substances" on the body, packages, stickers, or user manuals of the products in accordance with the limit stipulated in Section 5 "Marking of presence" of CNS 15663. Those who use website as a means to announce "the presence condition of the restricted substances" shall also clearly label the website address on the body, packages, stickers or user manuals of the products. In that case, the requirements of Section 5.3 of CNS 15663 regarding the position of labeling are not applicable.
10. Requirements for the Commodity Inspection Mark of the products listed in the above table:
    (1) The Commodity Inspection Mark shall be printed by the certificate holders. The identification number of the Commodity Inspection Mark consists of "A Letter (R)," "Designated Code (5 digits)" and "the presence conditions of the restricted substance" (e.g., RoHS or RoHS(XX,XX)).
    (2) The identification number shall be placed below or right next to the graphic symbol and "the presence conditions of the restricted substance" shall be indicated in the second row. Where the size of connectors for wiring or cord sets is too small to label information about RoHS or RoHS (XX) below or to the right of the Commodity Inspection Mark, it can be labeled near the Commodity Inspection Mark.
    (3) The size of the Mark can be applied proportionally on a prominent location of the products. The Mark shall use materials that are not easily altered, and the content shall be in a clearly identifiable and indelible form affixed permanently to the product.
    (4) The examples of the Commodity Inspection Mark are listed below:

(5) “RoHS” indicates “the content of restricted substance(s), other than exemptions stated in CNS 15663, does not exceed the reference percentage value of presence condition.

“RoHS(XX,XX)” indicates the content of restricted substance(s) (element XX, element XX, …), other than exemptions stated in CNS 15663, exceeds the reference percentage value of presence condition.

Restricted substances: Pb, Cd, Hg, Cr^{+6}, PBB, and PBDE.

Examples:

- RoHS (Pb) indicates that the percentage content of Pb in certain parts of the commodity exceeds the reference percentage value specified in Annex A to CNS 15663.
- RoHS (Cd, Cr^{+6}, PBB) indicates that the percentage content of Cd, Cr^{+6}, and PBB in certain parts of the commodity exceeds the respective reference percentage value specified in Annex A to CNS 15663.

14. The C.C.C. Code listed in the table is used for reference only. The products listed in the table shall still complete the inspection procedures before entering into the market even though their C.C.C. Code is determined differently by the Customs Administration, Ministry of Finance, or International Trade Administration, Ministry of Economic Affairs.
15. The inspection standards of the products listed in the table shall be the version published in this announcement. If any updated version is available, the BSMI shall publish the implementation date of the updated version in further announcement.

Table 1. Example of markings for the presence conditions of the restricted substances exceeds the reference percentage value of presence conditions

Equipment name: Low-voltage three-phase induction motors , Model：XXX						
Unit	Restricted substances and its chemical symbols					
	Lead (Pb)	Mercury (Hg)	Cadmium (Cd)	Hexavalent Chromium (Cr^{+6})	Polybrominated Biphenyls (PBB)	Polybrominated Diphenyl Ethers (PBDE)
Motor frame	Exceeding 0.1 wt %	○	○	○	○	○
stator core	○	○	○	○	○	○
Coil	○	Exceeding 0.1 wt %	○	○	○	○
Rotor core	○	○	○	○	○	○
Other Accessories	○	○	Exceeding 0.01 wt %	○	○	Exceeding 0.1 wt %
Note 1: “Exceeding 0.1 wt %” and “exceeding 0.01 wt %” indicate that the percentage content of the restricted substance exceeds the reference percentage value of presence condition.						
Note 2: “○” indicates that the percentage content of the restricted substance does not exceed the percentage of reference value of presence.						
Note 3: The “−” indicates that the restricted substance corresponds to the exemption.						

Table 2. Example of markings for the content of the restricted substances other than exemption do not exceed the reference percentage value of presence condition

Equipment name: Low-voltage three-phase induction motors , Model：YYY						
Unit	Restricted substances and its chemical symbols					
	Lead (Pb)	Mercury (Hg)	Cadmium (Cd)	Hexavalent chromium (Cr^{+6})	Polybrominated biphenyls (PBB)	Polybrominated diphenyl ethers (PBDE)
Motor frame	○	○	○	○	○	○
stator core	○	○	○	○	○	○
Coil	○	○	○	○	○	○
Rotor core	○	○	○	○	○	○
Other Accessories	○	○	○	○	○	○
Note 1: “○” indicates that the percentage content of the restricted substance does not exceed the percentage of reference value of presence.						
Note 2: The “−” indicates that the restricted substance corresponds to the exemption.						

Note *The 1st “name and model” row can be omitted if the position of “the markings for the presence conditions” shows clearly to specify the corresponding commodity.

*Multiple models could be shown together in the same field if “the markings for the presence conditions” can be applied to contemporarily.