

# Amendment to Legal Inspection Requirements for Electric Storage Tank Water Heaters and Air Conditioners with Hermetic Type Compressor

**By the Bureau of Standards, Metrology and Inspection, Ministry of Economic Affairs**

**Introduction:**

To ensure the safety of products in use on the markets, the Bureau of Standards, Metrology and Inspection (BSMI) adopts the latest version of safety and electromagnetic compatibility (EMC) inspection standards for electric storage tank water heaters and air conditioners with hermetic type compressor.

The conformity assessment procedures for products subject to this measure remain the same, i.e. Registration of Products Certification (RPC) or Type-approved Batch Inspection (TABI).

**Date of implementation:**

1 July 2020

| Description of Goods  | Inspection Standards  | C.C.C. Code (the first 6 digits are the same as HS Code) (for references)   | Conformity Assessment Procedures                           |
|---|---|---|--|
| Electric Storage tank water heaters (inspection scope: Does not include solar water heaters, rated voltage not exceeding single-phase 250V AC)  | 1. CNS 60335-1 (2014-11) & CNS 60335-2-21 (2015-09)<br>2. CNS 13783-1 (2013-10)<br>3. CNS 11010(2013-12) Section 8.11 “Capacity of inner tank” & 8.14 “Standardized standby loss of every 24 hours, $E_{st,24}$ ” and the measured value of $E_{st,24}$ must meet the requirements of Minimum Energy Performance Standard (MEPS).<br>4. CNS 15663 (2013-07) Section 5 “Marking of Presence” | 8516.10.00.00.9B  | RPC Scheme (Modules II+IV, II+V, or II+VII) or TABI Scheme |
| Air conditioners with hermetic type compressor (Inspection scope: those single phase not exceeding 250V or three phases not exceeding 600V, and cooling capacity not exceeding 71 kW) | 1. CNS 60335-1 (2014-11) & CNS 60335-2-40 (2015-08)<br>2. CNS 13783-1 (2013-10) or CNS 13438 (2006-06)<br>3. CNS 3615 (2013-12) Sections 5.7, 5.8, 5.9 and 5.10. The heating performance of Section 5.10 will not be implemented temporarily)<br>4. CNS 15663 (2013-07) Section 5 “Marking of Presence”   | 8415.10.10.10.7<br>8415.10.10.20.5<br>8415.10.90.10.0<br>8415.10.90.20.8<br>8415.90.10.00.2<br>8415.81.00.00.5A<br>8415.82.00.00.4A | RPC Scheme (Modules II+IV, II+V, or II+VII) or TABI Scheme |

**Remarks:**

The CNS inspection standards can be accessed at CNS online service website: [www.cnsonline.com.tw](http://www.cnsonline.com.tw). You can preview the content of these standards for free. If you want to download and print, please contact our service counter of BSMI Information Center.

Tel: +886-2-23414772 or +886-2-23431994

Fax: +886-2-8192-6746

E-mail: [cnsonline@hibox.hinet.net](mailto:cnsonline@hibox.hinet.net)

[infocenter@bsmi.gov.tw](mailto:infocenter@bsmi.gov.tw)

**The two kinds of conformity assessment procedures are as follows:**

**1. Registration of Product Certification (RPC) Scheme (Modules II + IV or II + V or II + VII)**

For product subject to Modules II+IV, II+V, or II+VII procedures, not only the products shall be type-tested in advance (Module II) by the BSMI or BSMI-recognized testing laboratories, but the quality management systems of the production premises must be in conformity with Module IV (Full Quality Management System), Module V (Production Quality Management System) or Module VII (Factory Inspection).

For Module IV and Module V, a registration certificate in accordance with the CNS 12681 (ISO 9001) series of standards is required to be obtained from the BSMI, or certification bodies recognized by the BSMI. As for Module VII, a factory inspection report issued by the BSMI or BSMI-recognized factory inspection bodies is needed in the same way.

In addition, a declaration of conformity-to-type is also required to ensure that the mass-produced commodities are in conformity with that shown in the type-test report for all the above three IV, V, VII modules.

After being certified and registered by the BSMI, products will be allowed to use the Commodity Inspection Mark with the letter 'R' and the identification number given by the BSMI. These products can clear customs directly without any further inspection if not being sampled by RPC border check procedures. The application fee and annual fee for RPC are both NT\$5,000 (about US\$163) for each certification, and the RPC certification is valid for 3 years. If there are any serial products, an extra NT\$3,000 (about US\$98) of application fee will be charged for every application in each certification. The fees for type testing vary by products and depend on the fee policies of the testing laboratories.

**2. Type-approved Batch Inspection (TABI) Scheme**

Under this procedure, manufacturers or importers shall have their products type-tested by the BSMI or the designated testing laboratories recognized by the BSMI, and file an application for Type Approval to the BSMI or its branches.

After manufacturers or importers obtain a type approval certificate, they are required to file an application for batch inspection to the BSMI each time before their products are released from the production premises or arrive at the port of entry. The BSMI will then review the application and the related documents while additional samples may be required for further testing if it is deemed necessary.

After the products pass the inspection, they will be allowed to use the Commodity Inspection Mark with the letter 'T' and the identification number given by the BSMI. The application fee for a Type Approval is NT\$3,500(about US\$114) and a Type Approval certificate is valid for 3 years. The fees for type testing vary by products and depend on the fee policies of the testing laboratories.

\*Further information on the two schemes can also be found on the BSMI web site:

<http://www.bsmi.gov.tw/wSite/ct?xItem=8673&ctNode=811&mp=2>

**Locations to Apply for Registration of Product Certification:**

The BSMI, its branches or BSMI-recognized certification bodies (only for air conditioners with hermetic compressor ).

**Time Required for Registration of Product Certification:**

14 working days. (This period does not include the time for corrective actions by the applicant due to deficiencies in the documents or samples. Extra 7 working days may be required for additional tests.)

**Related Requirements:**

1. Those built in with a USB connection port with the main input voltage of 5V direct current (DC) but not attached with the power adapter, those powered by the car power supply and equipped with a car cigar lighter power supply, those use only three-phase voltage supply (air conditioner excepted) or those powered only by the dry cell batteries of the commodities listed above are not in the mandatory inspection scope.
2. The revised inspection standards of the commodities listed above will come into force on the date of announcement and the current inspection standards will become invalid from 1 July 2020. The import and domestic production inspections of the additive range from the listed products compared with the former announcement (new inspection products) will be carried out on the 1 July 2020. The inspection of the commodity listed in the former announcement but not in the scope listed above shall be abolished from the date of the announcement. The applicable inspection schemes, conformity assessment modules of RPC and duration of certificates for the commodities above will remain unchanged.
3. Processing of applications:
  - (1) Replacement:
    - The type approval certificate or verification registration certificate obtained according to the inspection standards of the former announcement are allowed to be used until the valid expiration date. The series of type can be added according to the original inspection regulations within the valid period of the certificate under the circumstances that the main type of the commodity does not alter.
    - The type approval certificate or verification registration certificate obtained according to the inspection standards of the former announcement expires before 30 June 2020 can be extended according to the original inspection regulations. The extension certificate is valid for 3 years. However, from 1 July 2020 apply for extension shall provide the revised type-test report, technical documents and designated materials to apply for certificate(s).
  - (2) New application or Extension:

Before 30 June 2020, the certificate of the listed product recognized and verified according to the original or revised inspection standards is valid for 3 years and can be used until its expiration date. Applicants who file their applications from the date of 1 July 2020 shall provide the revised type-test report, technical documents, designated materials, location documents of the marking of presence, sample of the marking of presence (see Table 1 and Table 2), and the “Declaration of the Presence Condition of the Restricted Substances Marking” to apply for certificate(s).
4. The certificate holders of the commodities shall follow the content stipulated in Section 5 “Marking of presence” of CNS 15663 and clearly mark “the presence condition of the restricted substances” on the body, packages, stickers, or the instruction books of the commodities. Those who utilize website as a means to announce “the presence condition of the restricted substances” of the commodities shall also clearly mark the website address on the body, packages, stickers, or the instruction books of the commodities. The requirements of Section 5.3 of CNS 15663 are not applicable to the positions of the markings.
5. The Commodity Inspection Mark:

- (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 or T),” “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.
- (3) The size of the Mark can be applied proportionally on a prominent location of the commodities. 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 commodity.

(4) For RPC scheme, the examples of the Commodity Inspection Mark are listed below:



(5) For TABI scheme, the examples of the Commodity Inspection Mark are listed below:



(6) “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: indicates 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<sup>+6</sup>, PBB): indicates that the percentage content of Cd, Cr<sup>+6</sup>, and PBB in certain parts of the commodity exceeds the respective reference percentage value specified in Annex A to CNS 15663.
6. The C.C.C. Code listed in the table is used for reference only. The commodity listed in the table shall still complete the inspection procedures before entering into the market even though the C.C.C. Code is identified differently by the Customs Administration, Ministry of Finance or Bureau of Foreign Trade, Ministry of Economic Affairs
  7. The listed regulated commodities subject to border control measures are identified by import regulation code, C02.
  8. 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

9. To harmonize the regional differences in the testing standards, “The power cord should at least comply with CNS 15767-1 Plugs and socket-outlets for household and similar purposes – Part 1: General requirements or the related national standards requirements to power cord sets” is added to the Section 25.7 of CNS 60335-1. In addition, the product tested according to the inspection standard of CNS 60335-1 is not applicable with the class 0 electrical structure.
10. Commodities with combined features or multifunctional products shall comply with the respective inspection standards and conformity assessment procedures of RPC scheme.

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

| Equipment name: Electric storage water tank heater, Model : XXX(*)   |  |                       |                        |   |                                      |   |
|--|--|-----------------------|------------------------|---|--------------------------------------|---|
| Unit   | Restricted substances and its chemical symbols |                       |                        |   |                                      |   |
|  | Lead<br>(Pb)                                   | Mercury<br>(Hg)       | Cadmium<br>(Cd)        | Hexavalent<br>Chromium<br>(Cr <sup>+6</sup> ) | Polybrominated<br>Biphenyls<br>(PBB) | Polybrominated<br>Diphenyl Ethers<br>(PBDE) |
| Circuit board  | Exceeding<br>0.1 wt %                          | ○                     | ○                      | ○   | ○                                    | ○   |
| Heater   | ○  | ○                     | ○                      | ○   | ○                                    | ○   |
| Power switch   | —  | Exceeding<br>0.1 wt % | ○                      | ○   | ○                                    | ○   |
| Power cord   | ○  | ○                     | ○                      | ○   | ○                                    | ○   |
| Shell  | ○  | ○                     | Exceeding<br>0.01 wt % | ○   | ○                                    | Exceeding<br>0.1 wt %                       |
| <p><b>Note 1:</b> “Exceeding 0.1 wt %” and “exceeding 0.01 wt %” indicate that the percentage content of the restricted substance exceeds the reference percentage value.</p> <p><b>Note 2:</b> “○” indicates that the percentage content of the restricted substance does not exceed the reference percentage value.</p> <p><b>Note 3:</b> The “—” indicates that the restricted substance is exempted.</p> |  |                       |                        |   |                                      |   |

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: Electric storage water tank heater, Model : XXX(*)   |  |                 |                 |   |                                      |   |
|--|--|-----------------|-----------------|---|--------------------------------------|---|
| Unit   | Restricted substances and its chemical symbols |                 |                 |   |                                      |   |
|  | Lead<br>(Pb)                                   | Mercury<br>(Hg) | Cadmium<br>(Cd) | Hexavalent<br>chromium<br>(Cr <sup>+6</sup> ) | Polybrominated<br>biphenyls<br>(PBB) | Polybrominated<br>diphenyl ethers<br>(PBDE) |
| Electric board   | ○  | ○               | ○               | ○   | ○                                    | ○   |
| heater   | ○  | ○               | ○               | ○   | ○                                    | ○   |
| Power switch   | -  | ○               | ○               | ○   | ○                                    | ○   |
| Power cable  | ○  | ○               | ○               | ○   | ○                                    | ○   |
| Shell  | ○  | ○               | ○               | ○   | ○                                    | ○   |
| <p><b>Note 1:</b> “○” indicates that the percentage content of restricted substance does not exceed the reference percentage value.</p> <p><b>Note 2:</b> The “-” indicates that the restricted substance is exempted.</p> |  |                 |                 |   |                                      |   |

(\*) The “name and model” can be omitted if the position of the “markings for the presence conditions” clearly identifies the corresponding commodity. Multiple types could be shown together if the “markings for the presence conditions” are applicable.