

# Proposal for amendment to the legal inspection regulation for electrical products

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

## Introduction:

In order to encourage industries to reduce the use of restricted chemical substances in electrical products and to control the restricted chemical substances at each stage of the supply chain and life cycle of electrical products, also to promote the awareness of consumers on effective utilization of resources and reduction of environmental burden, the BSMI proposes that manufacturers or importers follow the requirements stipulated in Section 5 "Marking of presence" of CNS 15663(2013) and clearly mark "the presence condition of the restricted substances" (i.e. Marking of presence) on the body, packages, stickers, or the instruction books of 40 items of electrical products.

## Proposed date of implementation:

1 January 2018.

Description of Goods	Inspection Standards	C.C.C. Code (the first 6 digits are the same as HS Code)(Reference)
Air conditioners with hermetic type compressor (Inspection scope: those having single phases not exceeding 250V or three phases not exceeding 600V, and cooling capacity not exceeding 71 kW)	1. CNS 3765(2005), IEC 60335-2-40(2005), CNS 3615(2013) ("Heating Performance" in Section 5.7 & 5.8 & 5.9 & 5.10 is excluded); 2. CNS 13783-1(2004) or CNS 13438(2006); 3. CNS 15663(2013) Section 5 "Marking of Presence."	8415.10.10.10.7 8415.10.10.20.5 8415.10.90.10.0 8415.10.90.20.8 8415.90.10.00.2 8415.81.00.00.5A 8415.82.00.00.4A
Single-phase AC motors (inspection scope exclusive of those with attached devices, used as household appliances, or explosion-proof motors)	1. CNS 1057(2001) or CNS 3618(1992); 2. CNS 15663(2013) Section 5 "Marking of Presence."	8501.40.90.00.1
Low voltage three-phase induction motors (inspection scope: only the rated output power under 74.6kw(100HP) and exclusive of those with attached devices, used as household appliances, or explosion-proof motors)	1. Low-voltage three-phase squirrel-cage induction motors(for general use): CNS 14400(2012) and CNS 15663(2013) Section 5 "Marking of Presence" or 2. Other low-voltage three-phase induction motors (for class-A insulation): CNS 1056(2011) and CNS 15663(2013) Section 5 "Marking of Presence."	8501.51.90.00.7 8501.52.90.00.6

Electric storage tank water heaters (inspection scope: only single-phase not exceeding AC 300V)	CNS 3765(2005), IEC 60335-2-21(2004), CNS 13783-1(2004), CNS 11010(2013) Section 8.11 & 8.14, and the value of $E_{st,24}$ must meet the requirements of Minimum Energy Performance Standard (MEPS) of Electric Storage Water Heaters, <b>CNS 15663(2013) Section 5 “Marking of Presence.”</b>	8516.10.00.00.9B
Electric bells (inspection scope: only those not exceeding AC 300V)	CNS 8799(1990), <b>CNS 15663(2013) Section 5 “Marking of Presence.”</b>	8531.80.10.00.3
No fuse breakers (inspection scope: with leakage protection function, only those rated voltage not exceeding 600V, rated current not exceeding 800A, and rupture capacity not exceeding 220V/50kA, 380V/30kA, 440V/25kA, or 600V/20kA)	1. CNS 14816-2(2004) or IEC 60898-1(2003); 2. <b>CNS 15663(2013) Section 5 “Marking of Presence.”</b>	8536.20.41.00.4 8536.20.49.00.6
Leakage circuit breakers (inspection scope: only those rated voltage not exceeding 600V, rated current not exceeding 225A. For those with no fuse switch function, rupture capacity not exceeding 220V/50kA, 380V/30kA, 440V/25kA, or 600V/20kA)	1. CNS 5422(2006) or IEC 61008-1(2002) or IEC 61009-1(2003); 2. <b>CNS 15663(2013) Section 5 “Marking of Presence.”</b>	8536.20.90.00.4
Household switch for fixed wiring (inspection scope: only not exceeding 300V)	1. CNS 695(1987) or IEC 60669-1(2000); 2. <b>CNS 15663(2013) Section 5 “Marking of Presence.”</b>	8536.50.90.00.7A
Knife switch (inspection scope: only not exceeding 300V)	1. CNS 1488(1993) or CNS 696(1984); 2. <b>CNS 15663(2013) Section 5 “Marking of Presence.”</b>	8536.50.90.00.7B
Plugs and socket-outlets for appliances (inspection scope: only not exceeding 300V)	1. CNS 6797(1991) or IEC 60320-1(2001) or IEC 60320-1(2001) + CNS 6797 “Poles”; 2. <b>CNS 15663(2013) Section 5 “Marking of Presence.”</b>	8536.69.90.00.6B
Self-ballasted LED lamps (inspection scope: only voltage range not exceeding 300V but over 50V, single-phase)	CNS 15436(2012), CNS 15630(2012), CNS 14115(2009), <b>CNS 15663(2013) Section 5 “Marking of Presence.”</b>	8539.10.00.00.2 8539.49.20.00.3
Fluorescent lamps, hot cathode (inspection scope: only Compact fluorescent lamps)	CNS 14576(2007), <b>CNS 15663(2013) Section 5 “Marking of Presence.”</b>	8539.31.00.00.7C

Polyvinyl chloride(PVC) insulated power cables (inspection scope: only those without connectors and rated voltage not exceeding 1000V but over 80V)	1. (1)CNS 3301(1989) or (2)CNS 6556(1984) or (3)IEC 60227-1(199) + IEC 60227-3(1997) or IEC 60227-4(1997) or IEC 60227-5(2003) or IEC 60227-6(2001) or IEC 60227-7(2003); 2. CNS 15663(2013) Section 5 “Marking of Presence.”	8544.49.90.00-1A
Polyvinyl chloride(PVC) insulated wires (inspection scope: only those without connectors and rated voltage not exceeding 1000V but over 80V)	1. (1)CNS 679(1998) or (2)IEC 60227-1(1998) + IEC 60227-3(1997) or IEC 60227-4(1997) or IEC 60227-5(2003) or IEC 60227-6(2001) or IEC 60227-7(2003); 2. CNS 15663(2013) Section 5 “Marking of Presence.”	8544.49.90.00-1B
Rubber insulated wires (inspection scope: only those without connectors and rated voltage not exceeding 1000V but over 80V)	1. (1)CNS 675(2004) or (2)IEC 60245-1(2003) + IEC 60245-4(2004); 2. CNS 15663(2013) Section 5 “Marking of Presence.”	8544.49.90.00-1C
Rubber flexible cords (inspection scope: only those without connectors and rated voltage not exceeding 1000V but over 80V)	1. (1)CNS 546(2004) or (2)IEC 60245-1(2003) + IEC 60245-4(2004); 2. CNS 15663(2013) Section 5 “Marking of Presence.”	8544.49.90.00-1D
Polyvinyl chloride(PVC) flexible cords (inspection scope: only those without connectors and rated voltage not exceeding 1000V but over 80V)	1. (1)CNS 3199(1994) or (2)IEC 60227-1(1998) + IEC 60227-3(1997) or IEC 60227-4(1997) or IEC 60227-5(2003) or IEC 60227-6(2001) or IEC 60227-7(2003); 2. CNS 15663(2013) Section 5 “Marking of Presence.”	8544.49.90.00-1E
Rubber insulated lead wires (inspection scope: only those without connectors and rated voltage not exceeding 1000V but over 80V)	1. (1)CNS 5747(2004), (2)IEC 60245-1(2003) + IEC 60245-4(2004); 2. CNS 15663(2013) Section 5 “Marking of Presence.”	8544.49.90.00-1F

Polyvinyl chloride(PVC) insulated wires for electric apparatus (inspection scope: only those without connectors and rated voltage not exceeding 1000V but over 80V)	1. (1)CNS 6070(1986) or (2)IEC 60227-1(1998) + IEC 60227-3(1997) or IEC 60227-4(1997) or IEC 60227-5(2003) or IEC 60227-6(2001) or IEC 60227-7(2003); 2. CNS 15663(2013) Section 5 “Marking of Presence.”	8544.49.90.00-1G
Grade Heat-resistant PVC insulated wires (inspection scope: only those without connectors and rated voltage not exceeding 1000V but over 80V)	1. (1)CNS 8379(1995) or (2)IEC 60227-1(1998) + IEC 60227-3(1997) or IEC 60227-4(1997) or IEC 60227-5(2003) or IEC 60227-6(2001) or IEC 60227-7(2003); 2. CNS 15663(2013) Section 5 “Marking of Presence.”	8544.49.90.00-1H
Polyvinyl chloride(PVC) insulated wires for outdoor use (inspection scope: only those without connectors and rated voltage not exceeding 1000V but over 80V)	1. (1)CNS 8559(1987) or (2)IEC 60227-1(1998) + IEC 60227-3(1997) or IEC 60227-4(1997) or IEC 60227-5(2003) or IEC 60227-6(2001) or IEC 60227-7(2003); 2. CNS 15663(2013) Section 5 “Marking of Presence.”	8544.49.90.00-1I
Polyvinyl chloride(PVC) insulated wires (inspection scope: only those without connectors and rated voltage not exceeding 1000V but over 80V)	1. (1)CNS 10314(1983) or (2)IEC 60227-1(1998) + IEC 60227-3(1997) or IEC 60227-4(1997) or IEC 60227-5(2003) or IEC 60227-6(2001) or IEC 60227-7(2003); 2. CNS 15663(2013) Section 5 “Marking of Presence.”	8544.49.90.00-1J
Polyvinyl chloride(PVC) insulated service wires (inspection scope: only those without connectors and rated voltage not exceeding 1000V but over 80V)	1. (1)CNS 7781(1987) or (2)IEC 60227-1(1998) + IEC 60227-3(1997) or IEC 60227-4(1997) or IEC 60227-5(2003) or IEC 60227-6(2001) or IEC 60227-7(2003); 2. CNS 15663(2013) Section 5 “Marking of Presence.”	8544.49.90.00-1K

Rubber insulated portable flexible cables (inspection scope: only those without connectors and rated voltage not exceeding 1000V but over 80V)	1. (1)CNS 10741(2004) or (2)CNS 10599(2004) or (3)IEC 60245-1(2003) + IEC 60245-4(2004); 2. CNS 15663(2013) Section 5 “Marking of Presence.”	8544.49.90.00-1L
Electric lamps for general indoor lighting purposes (inspection scope: only including chandelier and other ceiling or wall lighting fittings, exclusive of those used for public places or on streets)	1. CNS 14335(1999); 2. IEC 60598-2-1(1979) or IEC 60598-2-2(1979) or IEC 60598-2-4(1997) or IEC 60598-2-6(1994) or IEC 60598-2-20(1998) or IEC 60598-2-23(1996); 3. CNS 14115(2004); 4. CNS 15663(2013) Section 5 “Marking of Presence.”	9405.10.00.00.1 9405.40.90.00.6B
Electric table, desk, bedside, or floor-standing lamps for general indoor lighting use (inspection scope: only not exceeding AC 300V)	1. CNS 14335(1999); 2. IEC 60598-2-4(1997) or IEC 60598-2-6(1994); 3. CNS 14115(2004); 4. CNS 15663(2013) Section 5 “Marking of Presence.”	<u>9405.20.00.00.9</u> 9405.40.90.00.6E
Lighting sets used for Christmas trees (inspection scope: lighting chains not exceeding AC 300V)	CNS 14335(1999), IEC 60598-2-20(1998), CNS 15663(2013) Section 5 “Marking of Presence.”	9405.30.00.00.7 9405.40.90.00.6F
Buddhistic lights for table	1. CNS 14335(1999); 2. IEC 60598-2-1(1987) or IEC 60598-2-2(1997) or IEC 60598-2-4(1997) or IEC 60598-2-6(1996) or IEC 60598-2-23(2001); 3. CNS 14115(2004); 4. CNS 15663(2013) Section 5 “Marking of Presence.”	9405.40.90.00.6C
Aquarium lighting fixture	CNS 14335(1999), IEC 60598-2-11(2005), CNS 14115(2004), CNS 15663(2013) Section 5 “Marking of Presence.”	9405.40.90.00.6D
Handheld electric drills (inspection scope: only those use AC power, under 30kg, and not belong to the machinery, equipment ,or tools specified by the Occupational Safety and Health Act)	1. (1)IEC 60745-1(2002) + IEC 60745-2-1(2003) or (2)CNS 3264(2001); 2. CNS 13783-1(2004); 3. CNS 15663(2013) Section 5 “Marking of Presence.”	8467.21.00.00.5A
Other handheld electric drills (inspection scope: only those use AC power, under 30kg, and not belong to the machinery, equipment ,or tools specified by the Occupational Safety and Health Act)	CNS 13783-1(2004), CNS 15663(2013) Section 5 “Marking of Presence.”	8467.21.00.00.5B

Electric impact and/or hammer drills (inspection scope: only those use AC power, under 30kg, and not belong to the machinery, equipment ,or tools specified by the Occupational Safety and Health Act)	1. (1)IEC 60745-1(2002) + IEC 60745-2-1(2003) or (2)CNS 3264(2001); 2. CNS 13783-1(2004); 3. CNS 15663(2013) Section 5 “Marking of Presence.”	8467.21.00.00.5C
Handheld electric circular saws (inspection scope: only those use AC power, under 30kg, and not belong to the machinery, equipment ,or tools specified by the Occupational Safety and Health Act)	CNS 9811(2001), CNS 9812(1995), CNS 13783-1(2004), CNS 15663(2013) Section 5 “Marking of Presence.”	8467.22.00.00.4A
Handheld electric saws (inspection scope: only those use AC power, under 30kg, and not belong to the machinery, equipment ,or tools specified by the Occupational Safety and Health Act)	CNS 13783-1(2004), CNS 15663(2013) Section 5 “Marking of Presence.”	8467.22.00.00.4B
Handheld grinders (inspection scope: only those use AC power, under 30kg, and not belong to the machinery, equipment ,or tools specified by the Occupational Safety and Health Act)	CNS 3265(2001), CNS 10609(1995), CNS 13783-1(2004), CNS 15663(2013) Section 5 “Marking of Presence.”	8467.29.10.00.5A
Handheld disc grinders (inspection scope: only those use AC power, under 30kg, and not belong to the machinery, equipment ,or tools specified by the Occupational Safety and Health Act)	CNS 3266(2001), CNS 10610(1995), CNS 13783-1(2004), CNS 15663(2013) Section 5 “Marking of Presence.”	8467.29.10.00.5B
Handheld electric die-grinder (inspection scope: only those use AC power, under 30kg, and not belong to the machinery, equipment ,or tools specified by the Occupational Safety and Health Act)	IEC 60745-1(2002), IEC 60745-2-3(1995), CNS 13783-1(2004), CNS 15663(2013) Section 5 “Marking of Presence.”	8467.29.10.00.5C
Handheld electric scissors (inspection scope: only those use AC power, under 30kg, and not belong to the machinery, equipment ,or tools specified by the Occupational Safety and Health Act)	CNS 13783-1(2004), CNS 15663(2013) Section 5 “Marking of Presence.”	8467.29.20.00.3
Handheld electric/impact wrenches (inspection scope: only those use AC power, under 30kg, and not belong to the machinery, equipment ,or tools specified by the Occupational Safety and Health Act)	CNS 13783-1(2004), CNS 15663(2013) Section 5 “Marking of Presence.”	8467.29.30.00.1
Other handheld electric tools (inspection scope: only those use AC power, under 30kg, and not belong to the machinery, equipment ,or tools specified by the Occupational Safety and Health Act)	CNS 13783-1(2004), CNS 15663(2013) Section 5 “Marking of Presence.”	8467.29.90.00.8

**Related requirements:**

1. The inspection requirements of these products have been amended and will come into force from the date of announcement. The original inspection requirements (without Section 5 “Marking of Presence” of CNS 15663) will be valid till 31 December 2017. The conformity assessment procedures for these products will remain unchanged, i.e. Registration of Product Certification (RPC) or Type-approved Batch Inspection (TABI).
2. 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. In that case, the requirements of Section 5.3 of CNS 15663 are not applicable to the positions of the markings.
3. Processing of certificates:
  - (1) Replacement:

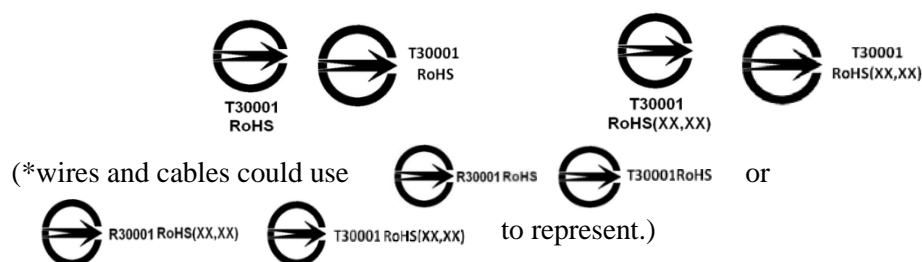
Before 31 December 2017, certificate holders shall apply to the BSMI or its branches for replacement of certificates by preparing documents illustrating the location of “the marking of presence,” samples of the marking of presence (see Table 1 and Table 2), and the “Declaration of the Presence Condition of the Restricted Substances Marking.” The expiry date of the newly issued certificate will be the same as that of the original certificate. Otherwise, certificate(s) will be rescinded.
  - (2) New application or extension:

From the date of publication of the regulation, applicants shall apply for certificate(s) by preparing documents illustrating the location 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.” If the application is made in accordance with the original inspection standards (without Section 5 “Marking of presence” of CNS 15663), the expiry date of the certificate will be valid till 31 December 2017.
4. 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 Roman Letter (R or T)”, “Designated Code (5 digits)” and “the presence condition of the restricted substances” (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 condition of the restricted substances” shall be indicated in the second row. (\*wires, cables and flexible cords could be represented in one line.)
  - (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, examples of the Commodity Inspection Mark are listed below:





(5) For TABI scheme, 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: Pb, Cd, Hg, Cr<sup>+6</sup>, 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 of CNS 15663.
- RoHS(Cd, Cr<sup>+6</sup>, PBB): indicates that 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 of CNS 15663.

5. The C.C.C. Codes listed in the table are used for reference only. Products listed in the table shall complete the inspection procedure before being placed on the market, even though their C.C.C. Codes are identified differently by the Customs Administration, Ministry of Finance, or the Bureau of Foreign Trade, Ministry of Economic Affairs.
6. The inspection standards of the products listed in the table shall be the version published in this announcement. If updated versions are available, the BSMI shall publish the implementation date of the updated versions in another announcement
7. Commodities with combined functions or multifunction-products shall comply with the respective inspection standards and the conformity assessment procedures of RPC scheme.



Table 1. Example of markings for the presence condition of the restricted substances exceeding the reference percentage value

Equipment name: Air Conditioner, Type : AIRNO1(*)						
Unit	Restricted substances and its chemical symbols					
	Lead (Pb)	Mercury (Hg)	Cadmium (Cd)	Hexavalent Chromium (Cr <sup>+6</sup> )	Polybrominated Biphenyls (PBB)	Polybrominated Diphenyl Ethers (PBDE)
Plastic Frame for indoor equipment	○	○	○	○	○	○
Wire Insulation Material	○	○	○	○	○	○
Solder (Circuit Board N1)	—	○	Exceeding 0.01 wt %	○	○	○
Compressor Shell	○	○	○	○	○	○
Remote Control Shell	○	○	○	Exceeding 0.1 wt %	○	○
<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. <b>Note 2:</b> “○” indicates that the percentage content of the restricted substance does not exceed the reference percentage value . <b>Note 3:</b> The “—” indicates that the restricted substance is exempted.						

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

Table 2. Example of markings for the content of restricted substances other than exemptions not exceeding the reference percentage value

Equipment name: Air Conditioner Type : AIRNO1(*)						
Unit	Restricted substances and its chemical symbols					
	Lead (Pb)	Mercury (Hg)	Cadmium (Cd)	Hexavalent chromium (Cr <sup>+6</sup> )	Polybrominated biphenyls (PBB)	Polybrominated diphenyl ethers (PBDE)
Plastic Frame for indoor equipment	○	○	○	○	○	○
Wire Insulation Material	○	○	○	○	○	○
Solder (Circuit Board N1)	—	○	○	○	○	○
Compressor Shell	○	○	○	○	○	○
Remote Control Shell	○	○	○	○	○	○
<b>Note 1:</b> “○” indicates that the percentage content of the restricted substance does not exceed the reference percentage value. <b>Note 2:</b> The “—” indicates that the restricted substance is exempted.						

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