



HARMONIZED SYSTEM
COMMITTEE

NC0702E1
(+ Annex)

-
31st Session
-

O. Eng.

Brussels, 28 April 2003.

STUDY OF THE CLASSIFICATION OF JUNCTION BOXES
IN THE HARMONIZED SYSTEM

(Item VIII.16 on Agenda)

Reference documents :

NC0561E1 (HSC/29)
NC0568B1 (HSC/29)
NC0586E1 (HSC/29)

NC0590E2, Annex IJ/11 (HSC/29 – Report)
NC0629E1 (HSC/30)
NC0655E2, Annex H/11 (HSC/30 – Report)

I. BACKGROUND

1. On 31 January 2002, the **European Community** sent a note to the Secretariat pointing out that the **EC** cannot apply a certain part of the Explanatory Note to heading 85.36, since the **Court of Justice of the European Communities** had stated that the particular part was contrary to the actual wording of the heading (Doc. NC0561E1 (HSC/29)). Due to lack of time, the Committee agreed to postpone discussions on the note to its 30th Session.
2. On 16 July, the Secretariat received a note from the **Canadian** Administration indicating that the ruling provided by the **EC Court of Justice** possibly contradicts a ruling made on the same Explanatory Note by the **Canadian International Trade Tribunal**. The note was reproduced in Doc. NC0629E1.
3. When the Committee discussed the question at its 30th Session, it was agreed that a further study should be made by the Secretariat on the basis of representative samples or pictures of the three types of junction boxes, i.e., junction boxes fitted with electrical connections, junction boxes not fitted with electrical connections nor with any provision for electrical connections, and junction boxes not fitted with electrical connections but having provision for electrical connections. It was also requested by the Committee that the study apply to junction boxes of heading 85.35 as well as those of heading 85.36.
4. The Opinion of the **EC Court of Justice** may be viewed on the Internet at the link <http://europa.eu.int/cj/index.htm> by selecting "Case-law" on the menu under "Proceedings",

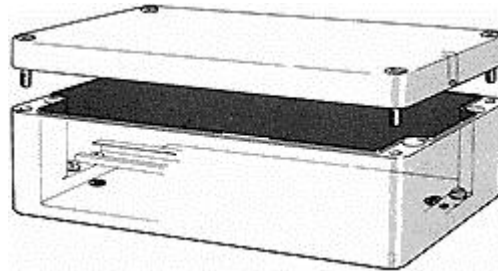
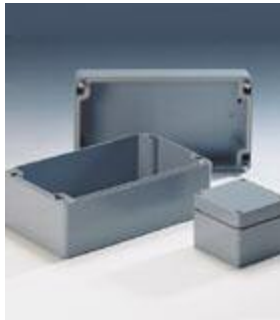
Note : Shaded parts will be removed when documents are placed on the WCO documentation database available to the public.

File No. 2916

selecting “Case-law of the Court of Justice and the Court of First Instance” on the menu under “Search Forms”, and then entering the case number, C-280/97, in the appropriate box. The Opinion of the Canadian International Trade Tribunal may be viewed on the Internet at http://www.citt-tcce.gc.ca/appeals/decision/ap99012_e.asp (English text) or at http://www.citt-tcce.gc.ca/appeals/decision/ap99012_f.asp (French text). Copies, in French and English, will also be available during the Meeting.

II. SECRETARIAT COMMENTS

5. In order to understand the background for the proposal to amend the Explanatory Note to heading 85.36, the Secretariat requested samples or pictures and descriptive information on the types of electrical junction boxes that had been considered by the EC Court of Justice and the Canadian International Trade Tribunal. Furthermore, in addition to the junction boxes identified by the Secretariat in paragraphs 20 and 21 of Doc. NC0561E1, additional pictures and descriptions of junction boxes have been obtained from catalogues and other documents located during searches on the Internet. Complete copies of the information that was received from the administrations and that was downloaded from the Internet sites (i.e., catalogues and information on products) will be available at the Meeting.
6. The following pictures and descriptions illustrate the two junction boxes that were the basis for the judicial opinions and other junction boxes that are considered as representative of other kinds of articles used to house electrical terminals, connections or wires.
- (a) Images representative of the article (the drawing on the right appears to indicate how a mounting rail for electrical connectors would be attached to the pre-threaded screw holes on each side of the junction box) and a description of the article considered by EC Court of Justice :



The article in question is a rectangular container (approximately 21.7 cm long, 8 cm high and 11.7 cm wide) with a lid of coated die-cast aluminium (aluminium/silicon alloy with aluminium content predominant by weight). In the lid, in which a plastic insulation has been inset, there are four steel connecting bolts. The article is intended to receive electrical terminals (series terminals) of various types and dimensions and, in addition to holes for screw connections, it also has holes for fastening. In addition, it has four threaded holes designed for earthing bolts of copper-plated steel. Those bolts are packed loose in the product. There are no other connecting devices.

- (b) Image and description of the junction box manufactured by **Rittal Systems** and considered by **Canadian International Trade Tribunal** :



Rectangular container for protection of junction box used to house and protect components which are needed to make electrical connections. The container, described as a "junction box", is formed from cold rolled steel that has a powder paint finish for surface protection and is available in various sizes (e.g., 8 cm high x 12 cm wide x 5 cm deep). The junction box includes side installation rails with installation holes for facilitating the mounting of C-rails, U-rails and mounting panels, holes in the rear wall for wall-mounting the box, grounding connectors on the cover and the housing, a cover with a foamed-on gasket for a tight seal, and openings in the sides of box for interconnections.

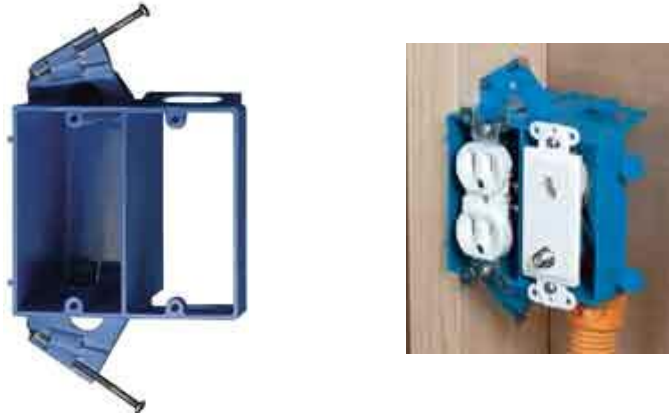
- (c) Image of a product with provisions for electrical connections (reproduced from paragraph 20 of Doc. NC0561E1) :



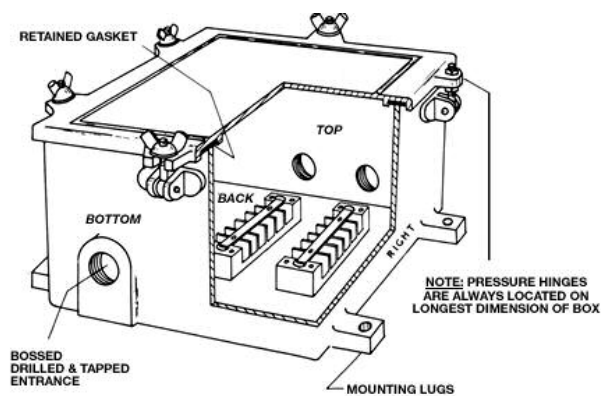
- (d) Images of two articles without provision for electrical connections (from paragraph 21 of Doc. NC0561E1) together with a third image to demonstrate use of such articles which were described in paragraph 21 as "Boxes having protuberances to connect one or more (plastic or metal) tubes (conduit), but having no electrical connectors or provisions" and as boxes "also sometimes referred to as "junction boxes" which "are fixed into or onto the wall or the ceiling, serve as a container in which two or more leads are connected to each other" :



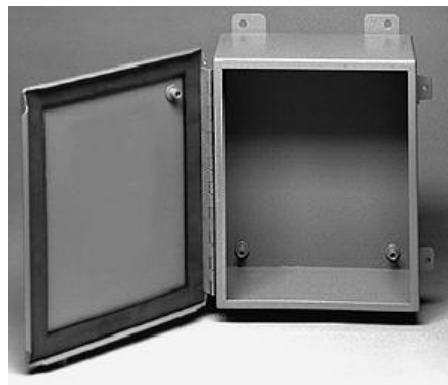
- (e) Images of articles, similar to those in item “(d)” above, but with provision for attaching an electrical switch or receptacle to the box in order to stabilise the electrical device inside the article (installation of switch and receptacle also shown) :



- (f) Drawing of a junction box in which the electrical connectors are assembled :



- (g) Image of an industrial enclosure or “junction box” manufactured by **Hammond Manufacturing, Series 1414 PH JIC** enclosures, which is a series designed for use as enclosures or housings for instruments, electric or pneumatic controls, and as electrical junction boxes or terminal wiring enclosures for electrical connectors :



7. For purposes of this document, the Secretariat incorporates by reference the Note from the **EC** which was previously reproduced in paragraphs 2 through 11 of Doc. NC0561E1, and the Note from **Canada** which was previously reproduced in paragraphs 3 through 9 of Doc. NC0629E1.
8. The **EC** has proposed to amend the Explanatory Note to heading 85.36 in order to align the Explanatory Note with an interpretation of the legal text applied by the **EC Court of Justice** when ruling on the classification of a certain junction box. **Canada** has proposed an alternative amendment in order to retain the principle of the existing Explanatory Note in accordance with an interpretation of the legal text applied by the **Canadian International Trade Tribunal** when ruling on the classification of a certain junction box. The interpretations of the legal text appear to be different.
9. The question for the Committee is whether the existing text of the Explanatory Note adequately describes the difference between those “junction boxes” that are electrical apparatus of heading 85.36 and those “junction boxes” that do not have an electrical function (are merely protective enclosures) and are excluded from classification in heading 85.36. Based on the images and descriptions of the junction boxes in paragraphs 6 (a) and 6 (b), above, there does not appear to be a significant functional difference between the two enclosures.
10. In both cases, the junction boxes of paragraphs 6 (a) and 6 (b), as presented, do not contain any electrical connector. However, both boxes have the means for mounting or securing distinct electrical connectors or rails for mounting distinct electrical connectors to the boxes. The Secretariat points out that both boxes have installation “holes” in the interior of the box for this purpose. Both boxes also have grounding points (threaded fasteners for attaching a ground wire). Whether or not these grounding points are electrical connectors within the meaning of heading 85.36 will be discussed later.
11. The Committee will have to determine whether a junction box, designed with such installation holes or similar means for attaching distinct electrical connectors or switches, is an electrical article when presented without the electrical components.
12. The following texts of the Nomenclature and the Explanatory Notes are in issue :

Heading 85.36 : Electrical apparatus for switching or protecting electrical circuits, or for making connections to or in electrical circuits (for example, switches, relays, fuses, surge suppressors, plugs, sockets, lamp-holders, junction boxes), for a voltage not exceeding 1,000 volts.

Explanatory Note to heading 85.36, part (III), item (C) :

(III) APPARATUS FOR MAKING CONNECTIONS TO OR IN ELECTRICAL CIRCUITS

This apparatus is used to connect together the various parts of an electrical circuit. It includes :

- (C) **Junction boxes.** These consist of boxes fitted internally with terminals or other devices for connecting together electrical wires. Junction boxes not fitted with means of electrical connection, but used solely as protective cover or to hold an insulating compound over a joint made independently, are not covered here, but are classified according to their constituent material.

13. The Secretariat was asked to make a study on three types of junction boxes :
- (i) junction boxes fitted with electrical connections,
 - (ii) junction boxes not fitted with electrical connections nor with any provision for electrical connections, and
 - (iii) junction boxes not fitted with electrical connections but having provision for electrical connections.

No additional information was received from administrations on these types or categories of junction boxes.

14. Based on the Secretariat's review, the article in paragraph 6 (c) appears to represent the type of junction box described in (i), above, and the articles in paragraph 6 (d) would appear to represent the type of junction box described in (ii), above. It would also appear that the article in paragraph 6 (c), if presented without the actual metal contacts in the moulded forms for the contacts, could be considered an article of the type described in (iii), above. The drawing of the article in paragraph 6 (f), if presented in that condition, would appear to represent the type of junction box described in (i), above. However, with respect to the articles in paragraphs 6 (a), (b), (e) and (g), the categorisation will depend on what the Committee considers to constitute a junction box "having provision for electrical connections".
15. The question for the Committee, therefore, is whether the junction boxes of paragraphs 6 (a) and 6 (b), as well as those of paragraphs 6 (e) and 6 (g), are junction boxes of the type in (ii) or (iii), above. In all cases, these appear to have a means for attaching distinct electrical components. For example, the apparatus considered by the **Canadian International Trade Tribunal** has, along each side, a flange with multiple holes. The flanges allow different types of bars to be attached for the purpose of holding distinct electrical apparatus. Similarly, the apparatus in paragraph 6 (e) has mounting holes for the purpose of attaching distinct electrical receptacles or switches. In neither case does the "junction box" participate in making, breaking or protecting (from electrical power surges) electrical circuits. The apparatus considered by the **EC Court of Justice** has two threaded holes to which a distinct electrical apparatus can be attached (similar to the box in paragraph 6 (e), above) or to which a mounting bar can be attached for purposes of holding a distinct electrical apparatus (similar to the type of bar shown in the drawing at paragraph 6 (a), above. In all cases the junction boxes do protect the electrical circuits from external damage or the user from inadvertent contact with exposed electrical circuits.
16. If the Committee considers these types of mounting brackets or holes as constituting a "provision for electrical connections", then all of those junction boxes would be the type of boxes described in (iii), above. If so, then the compromise proposal by **Canada** would have the effect of modifying the decision taken by its tribunal and the junction boxes in paragraphs 6 (b) and 6 (e) would necessarily be classifiable in the same provision as the junction box in paragraph 6 (a).
17. However, the Secretariat would suggest that there is a functional difference between junction boxes with such mounting flanges or threaded holes and a junction box of the type depicted in paragraph 6 (c) when presented without the metal contacts. In the latter case, the junction box would appear to be formed with the actual holder for the electrical connection.

18. Keeping in mind previous comments and analysis in paragraphs 17 to 19 and paragraphs 23 to 26 of Doc. NC0561E1, the Secretariat adds the following comments :
- (a) the images and description of the junction box in paragraph 6 (a) appear to demonstrate that the junction box is very similar in function and design to the junction box in paragraph 6 (b); it appears that the descriptive phrase “intended to receive electrical terminals (series terminals) of various types and dimensions” merely indicates that the junction box has two screw holes for mounting a distinct electrical connector inside the box;
 - (b) the screw holes in the junction box described in paragraph 6 (a) and the flanged mounting holes in the junction box described in paragraph 6 (b) would not appear to constitute “provisions for electrical connections” because they constitute a means by which the distinct electrical connectors can be stabilised in the protective junction box; in this regard, these mounting holes appear to be quite similar to the mounting holes in the boxes depicted in paragraph 6 (e);
 - (c) insertion of the expression “not fitted with means of electrical connections or provisions therefor” into the Explanatory Note to heading 85.36 could, without a clear definition or description, introduce additional confusion as to the classification of junction boxes; the different analyses given by the two judicial bodies are evidence of this; and
 - (d) the Committee is reminded that any amendment to the Explanatory Notes should not have the effect of expanding or narrowing the scope of the legal text; therefore, it may be incumbent on the Committee to take up the actual classification of the junction boxes in paragraphs 6 (a) and 6 (b), as well as 6 (e), based on the Committee’s expertise and knowledge of the Nomenclature and the rules of construction.
19. The alternative proposals for amending the Explanatory Notes are reproduced in the Annex to this Document. Square brackets have been placed around the phrase “or provisions therefore,” in the Secretariat’s proposal in order to indicate that this phrase should be deleted unless there is a clear understanding of what constitutes “such provisions”.
20. Finally, the Secretariat believes that it is important to comment on whether junction boxes with grounding connections are “electrical apparatus” within the meaning of heading 85.36. The heading text describes apparatus which appear to be apparatus which function within the electrical circuit either as a switch or a circuit protector, or as an apparatus for making connections to or in electrical circuits. A bolt or screw for securing a grounding wire does not appear to be within a circuit nor does it appear to be for making connections to or in an electrical connection.
21. The Secretariat would suggest that the presence of a grounding screw or bolt in a junction box does not constitute an electrical apparatus for use in, or for connecting to a circuit. As such, a junction box with a grounding device would not be an electrical apparatus for purposes of heading 85.36.
22. The Committee is invited to examine the sample and literature submitted by the **EC**, the literature submitted by **Canada**, and the additional information on different products that has been obtained from various websites of manufacturers of junction boxes.

III. CONCLUSION

23. Keeping in mind the comments by the EC and the Canadian Administration in Doc. NC0561E1 and Doc. NC0629E1, respectively, and in light of the additional information in paragraph 6, above, and the additional comments of the Secretariat in this document, the Committee is invited to examine the following :
- (a) whether or not the junction box of paragraph 6 (a) and the junction box of paragraph 6 (b) are substantially similar and, therefore, classifiable under the same provision of the Nomenclature;
 - (b) whether a classification decision on the two junction boxes should be taken by the Committee;
 - (c) in light of its decisions on the two preceding questions, whether the Explanatory Note to heading 85.36 should be amended (see possible options in the Annex to this document); and
 - (d) if so, whether any of the alternatives set out in the Annex would be appropriate.

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