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**NATIONAL STANDARD OF THE
PEOPLE'S REPUBLIC OF CHINA**

GB/T 11918.5-2020

Plugs, socket-outlets and couplers for industrial purposes - Part 5: Dimensional compatibility and interchangeability requirements for plugs, socket-outlets, ship connectors and ship inlets for low-voltage shore connection systems(LVSC)

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Foreword

This document is in accordance with the provisions of GB/T 1:1-2020 Standardization Guidelines Part 1: Structure and Drafting Rules of Standardization Documents

Drafting:

This document is part 5 of GB/T 11918 "Industrial Plugs, Sockets and Couplers": GB/T 11918 has released the following

section:

---Part 1: General requirements;

---Part 2: Dimensional compatibility and interchangeability requirements for electrical accessories with pins and sockets;

---Part 4: Sockets and connectors with or without interlocking switches;

---Part 5: Dimensions of plugs, sockets, marine connectors and marine input sockets for low-voltage shore connection systems (LVSC systems)

Compatibility and interchangeability requirements:

This document uses the redrafting method to modify and adopt IEC 60309-5:2017

"Industrial plugs, sockets and couplers Part 5: Low voltage shore

Dimensional compatibility and interchangeability requirements for plugs, sockets, marine connectors and marine input sockets for electrical connection systems (LVSC systems):

The technical differences between this document and IEC 60309-5:2017 and the reasons are as follows:

--- In the scope of Chapter 1, "This section applies to three-phase accessories with one grounding contact and four control contacts" is revised to "this document

Suitable for three-phase three-wire-to-earth insulation systems with a grounding contact and several control or communication contacts for three-phase electrical accessories";

--- In the scope of Chapter 1, "The maximum rated current of these accessories is 350A, and the maximum rated working voltage does not exceed 690V:

50/60Hz: "Is revised to "This document is applicable to the rated current of 63A, 125A, 250A, 350A, and the rated working voltage does not exceed

Electrical accessories with a frequency of 50Hz/60Hz over 1000V";

--- In the scope of Chapter 1, "This section applies to ambient temperature usually in the range of -25 degrees C to 40 degrees C" is revised to "This document is suitable for

For ambient temperature -25 degrees C to 55 degrees C";

---Regarding normative reference documents, this document has made adjustments with technical differences to adapt to my country's technical conditions and adjustments:

The situation is collectively reflected in Chapter 2 "Normative Reference Documents", and the specific adjustments are as follows:

* Replace IEC 60309-1:2012 with GB/T 11918:1-2014 which is modified to adopt international standards;

* Added reference to GB/T 4208;

* Because IEC /IEEE80005-3 has not been released, this document adopts the current IEC /PAS80005-3:2014;

--- Deleted "During the period, the ship generator is allowed to shut down" in the definition of 3:503;

--- In 7:1, the words "low voltage shore power" should be marked on the product nameplate;

--- In 7:5, "S, S-represent communication contacts" are added, and the layout of the contacts is added (see Figure 502, Figure 503, Figure 504,

Figure 505);

--- Increased 7:7;

---Increase 12:1, 12:2;

---According to the actual structure of the product, the socket and the matching plug with a rated current not exceeding 125A should be able to withstand at least

Expected short-circuit current of 10kA or greater (see 29:1), and 5:501 is modified;

---According to the actual application scenarios of the product, Chapter 31 environmental adaptability requirements have been added;

---250A has been added to Appendix A standard loose-leaf 5-I, standard loose-leaf 5-II, standard loose-leaf 5-III and standard loose-leaf 5-IV

size;

---According to the actual application of plugs, sockets, marine connectors and marine input sockets for low-voltage shore connection systems in my country, increase

The type and size of 63A and 125A products have been added (see Appendix A Standard Sheet 5-VII, Standard Sheet 5-VIII, Standard Sheet 5-IX

And standard loose-leaf 5-X);

---Added the socket, the locking mechanism of the marine input socket and the dimensions of Figure A:5, Figure A:6; added the 63A, 125A socket and the marine input

The expanded size of the spiral groove into the socket is shown in Figure A:11:

This document has made the following editorial changes:

--- 3:501 term name adjusted to "electrical accessories";

---Refer to GB/T 11918:1-2014, add a note in 4:1;

--- Amend the title of Chapter 12 to "Electrical Interlocking and Locking Device";

---Include the standard loose leaf in Appendix A:

This document was proposed by China Electrical Equipment Industry Association:

This document is under the jurisdiction of the National Electrical Accessories Standardization Technical Committee (SAC/TC67):

Drafting organizations of this document: China National Electrical Equipment Research