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**Railway applications -- Electrical connector for rolling stock
(English Translation)**

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Foreword

This standard was drafted in accordance with the rules given in GB/T 1.1-2009.

Please note that some of this document may be patentable. The issuing agencies of this document do not bear the responsibility of identifying these patents.

This standard proposed by the National Railway Administration.

This standard by the National Traction Electrical Equipment and Systems Standardization Technical Committee (SAC/TC278) centralized.

1 Scope

This standard specifies the locomotive vehicle electrical connector environmental conditions, installation location classification, technical requirements, test methods, inspection rules, package Loading, transportation and storage.

This standard applies to the rated voltage not higher than 1000V, a single contact current rating is not greater than 600A and the operating frequency is not greater than 3MHz single-core or multi-core electrical connectors, and operating frequency of not more than 100MHz communications connector. Other specifications of the locomotive Electric connector, can refer to this standard.

This standard does not apply to the following types of electrical connectors.

--- Breaking capacity of the electrical connector.

Note 1: For safety, the locomotive vehicle electrical connector is not energized (eg plugged in, unplugged) nor operated by means of operating procedures or interlocking.

--- Automatic coupler electrical connector.

Note 2: The mechanical structure attached to the automatic coupler electrical connector is more complicated and is not within the scope of this standard.

--- Workshop jumper.

Note 3: Workshop jumpers are assembled from electrical connectors and cables. The scope of this standard covers only electrical connectors and can not cover shop jumpers.

Electrical connectors within the electronics, such as printed circuit boards, chassis and panel electrical connectors.

--- By spring pressure contact connectors to implement the electrical connector.

2 Normative references

The following documents for the application of this document is essential. For dated references, only the dated version applies to this article Pieces. For undated references, the latest edition (including all amendments) applies to this document.

GB/T 2423.1-2008 Environmental testing for electric and electronic products Part 2. Test methods Test A. Low temperature (IEC 60068-2-1:2007, IDT) GB/T 2423.2-2008 Environmental testing for electric and electronic products Part 2. Test methods Test B. High temperature (IEC 60068-2-2:2007, IDT) GB/T 2423.4-2008 Environmental testing for electric and electronic products Part 2. Test methods Test Db. Alternating hot and humid (12h 12h cycle) (IEC 60068-2-30:2005, IDT) GB/T 2423.17-2008 Environmental testing for electric and electronic products Part 2. Test methods Test Ka. Salt spray (IEC 60068-2-11:1981, IDT) GB/T 2423.22-2012 Environmental testing Part 2. Test methods Test N. Temperature changes (IEC 60068-2-4:2009, IDT) GB/T 2828.1-2012 Sampling procedures for inspection - Part 1 - Batch-by-lot inspection by acceptance quality limit (AQL) Plan (ISO 2859-1:1999, IDT) GB/T 4208-2008 enclosure protection (IP code) (IEC 60529:2001, IDT) GB/T 4210 Electrotechnical terminology electromechanical components for electronic equipment (GB/T 4210-2015, IEC 60050-581:2008, IDT) GB/T 4776 electrical safety terminology GB/T 5095.2-1997 Electromechanical components for electronic equipment - Basic test procedures and measurement methods - Part 2. General inspection, electrical Continuity and contact resistance test, insulation test and voltage stress test (idtIEC 60512-2.1985) GB/T 5095.3-1997 Electromechanical components for electronic equipment Basic test procedures and measurement methods Part 3. Current carrying capacity test Test (idtIEC 60512-3.1976)