

ICS 43.120
CCS T 35



中华人民共和国国家标准
NATIONAL STANDARD OF THE PEOPLE'S REPUBLIC OF CHINA

GB/T 37133-2025
Replaces GB/T 37133-2018

High Voltage Connection System for Electric Vehicle
电动汽车用高压连接系统

(English Translation)

Issued on 2025-02-28

Implemented on 2025-02-28

Jointly Issued by
State Administration for Market Regulation of the People's Republic of China &
Standardization Administration of the People's Republic of China

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High Voltage Connection System for Electric Vehicle

1 SCOPE

This document specifies the requirements, test methods and inspection rules of high voltage connection system for electric vehicles.

This document is applicable to the EV connection system of voltage class B electric circuits specified in GB 18384-2020, while this document may be used as a reference for the part contained in connection system and intended for conducting the voltage class A electric circuits.

This document is not applicable to the connection set for conductive charging of electric vehicles.

This document is not applicable to the coupler for battery swap.

2 NORMATIVE REFERENCES

The following referenced documents are indispensable for the application of this document. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

GB/T 2423.8	Environmental testing for electric and electronic products--Part 2: Test methods--Test Ed: Free fall
GB/T 2423.17	Environmental testing—Part 2: Test methods—Test Ka: Salt mist
GB/T 3956	Conductors of insulated cables
GB/T 5095.2	Electromechanical components for electronic equipment--Basic testing procedures and measuring methods--Part 2: General examination, electrical continuity and contact resistance tests, insulation tests and voltage stress tests
GB/T 5095.3	Electromechanical components for electronic equipment--Basic testing procedures and measuring methods--Part 3: Current-carrying capacity tests
GB/T 5095.5	Electromechanical components for electronic equipment--Basic testing procedures and measuring methods--Part 5: Impact tests (free components), static load tests (fixed components), durability tests and overload tests
GB/T 5095.9-1997	Electromechanical components for electronic equipment--Basic testing procedures and measuring methods--Part 9: Miscellaneous tests
GB/T 5069.11-2017	Fire hazard testing for electric and electronic products—Part 11: Glowing/hot-wire based test methods—Glow-wire flammability test method for end-products (GWEPT)
GB/T 5585.1	Copper or aluminum and its alloy bus bars for electrical purposes—Part 1: Copper and copper alloy bus bars
GB/T 5585.2	Copper or aluminum and its alloy bus bars for electrical purposes—Part 2: Aluminum and aluminum alloy bus bars
GB/T 7762-2014	Rubber, vulcanized or thermoplastic—Resistance to ozone cracking—Static strain testing
GB/T 11918.1-2014	Plugs, socket-outlets and couplers for industrial purposes—Part 1: General requirements
GB/T 16422.2	Plastics—Methods of exposure to laboratory light sources—Part 2: Xenon-arc lamps
GB/T 16935.1-2023	Insulation coordination for equipment within low-voltage supply systems—Part 1: Principles, requirements and tests



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