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

GB/T 38775.8-2023

**Electric Vehicle Wireless Power Transfer**  
**—Part 8: Specific Requirements of Commercial Vehicle**  
**电动汽车无线充电系统**  
**第 8 部分：商用车应用特殊要求**

*(English Translation)*

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# **Electric Vehicle Wireless Power Transfer**

## **—Part 8: Specific Requirements of Commercial Vehicle**

### **1 SCOPE**

This document specifies the specific requirements for electric vehicle wireless power transfer system used for commercial vehicles.

This document is applicable to the stationary magnetic field wireless power transfer (MF-WPT) systems for electric commercial vehicles with a power class exceeding 22 kW, for which the power supply has a maximum rated voltage of 1,500V (DC) and of which the maximum rated output voltage is 1,500V (DC), while for other rated output voltages this document may be used as a reference.

### **2 NORMATIVE REFERENCES**

The following normative documents contain provisions which, through normative reference in this text, constitute essential provision of this document. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendment) applies.

- GB/T 19596 Terminology of electric vehicles
- GB/T 38775.1-2020 Electric vehicle wireless power transfer—Part 1: General requirements
- GB/T 38775.3-2020 Electric vehicle wireless power transfer—Part 3: Specific requirements
- GB/T 38775.4-2020 Electric vehicle wireless power transfer—Part 4: Limits and test methods of electromagnetic environment
- GB/T 38775.5-2021 Electric vehicle wireless power transfer—Part 5: Electromagnetic compatibility requirements and test methods
- GB/T 38775.6-2021 Electric vehicle wireless power transfer—Part 6: Interoperability requirements and testing—Ground side

### **3 TERMS AND DEFINITIONS**

For the purpose of this document, the terms and definitions given in GB/T 19596, GB/T 38775.1-2020 and GB/T 38775.3-2020, as well as the following apply.

#### **3.1 commercial vehicle**

A motor vehicle, on account of its design and technical characteristics, intended for transporting persons and goods

Note: The commercial vehicle can tow a trailer. Passenger cars are excluded.

[Source: GB/T 3730.1-2001, 2.2.2, modified]

#### **3.2 ground clearance**

The minimum vertical distance between the ground surface and the lower surface of the on-board supply device

#### **3.3 system efficiency**

The ratio of the on-board supply device power output to the off-board supply device power output

#### **3.4 alignment tolerance area**

The area in which the MF-WPT system can fulfill the interoperability requirements in X-axis and Y-axis directions to perform the wireless power transfer when the secondary device ground clearance is determined

[Source: GB/T 38775.6-2021, 3.10]



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