

ICS 43.020
CCS T 40



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

GB/T 18487.4-2025

**Electric Vehicle Conductive Charging and
Discharging System—Part 4: Discharging
Requirements for Electric Vehicle**
电动汽车传导充电系统
第 4 部分：车辆对外放电要求

(English Translation)

Issued on 2025-04-25

Implemented on 2025-11-01

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

CONTENTS

Foreword	I
Introduction	II
1 Scope	1
2 Normative References	1
3 Terms and Definitions	2
4 Classification	3
5 General Requirements	6
6 Communications	10
7 Requirements for Conductive Connection Assembly	10
8 Special Requirements for Electrical Load	10
9 Other Safety Requirements for Discharging Vehicle	12
10 Environmental Requirements	13
11 Markings and Instructions	13
Annex A (Normative) AC V2L Discharging Control Pilot Circuit and Its Control Principle	14
Annex B (Normative) AC V2V Discharging Control Pilot Circuit and Its Control Principle	29
Annex C (Normative) DC V2L Discharging Control Pilot Circuit and Its Control Principle	36
Annex D (Informative) DC V2L Communication Protocol	43
Bibliography	49

Electric Vehicle Conductive Charging and Discharging System

—Part 4: Discharging Requirements for Electric Vehicle

1 SCOPE

This document specifies the classification, general requirements, communications, requirements for connection assembly and electrical load, safety requirements for discharging vehicle, environmental requirements, and markings and instructions, with respect to the electric vehicle conductive discharging system.

This document is applicable to the electric vehicles that can discharge through the vehicle coupler, where the rated output voltage for AC discharging shall not exceed 250V for single-phase or 440V for three-phase, and the output voltage for DC discharging shall not exceed 1, 000V.

This document is applicable to electric vehicles of Category M₁ only.

This document is not applicable to discharging through the discharge couplers inside the vehicle, e.g., cigarette lighters, USB ports, and socket-outlets conforming to GB/T 1002, etc.

This document is not applicable to the power supplies intended for special electrical equipment such as medical equipment.

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 2423.7-2018	Environmental testing- Part 2: Test methods—Test Ec: Rough handling shocks, primarily for equipment—type specimens
GB/T 2900.33	Electrotechnical terminology--Power electronics
GB/T 16895.3	Low-voltage electrical installations—Part 5-54: Selection and erection of electrical equipment—Earthing arrangements and protective conductors
GB/T 16935.1-2023	Insulation coordination for equipment within low-voltage supply systems—Part 1: Principles, requirements and tests
GB/T 17045	Protection against electric shock—Common aspects for installations and equipment
GB 18384-2020	Electric vehicles safety requirements
GB/T 18487.1-2023	Electric vehicle conductive charging system—Part 1: General requirements
GB/T 19596	Terminology of electric vehicles
GB/T 20234.1-2023	Connection set for conductive charging of electric vehicles—Part 1: General requirements
GB/T 20234.2-2015	Connection set for conductive charging of electric vehicles—Part 2: AC charging coupler
GB/T 20234.3-2023	Connection set for conductive charging of electric vehicles—Part 3: DC charging coupler
GB/T 38661-2020	Technical specifications of battery management system for electric vehicles
GB 50052-2009	Code for Design Electric Power Supply Systems

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