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

GB/T 25890.2-2026

Replacing GB/T 25890.2-2010

**Railway applications - Fixed installations - DC switchgear - Part
2: DC circuit breakers**

轨道交通 地面装置 直流开关设备 第2部分：直流断路器
(English Translation)

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Foreword

This document complies with the provisions of GB/T 1.1-2020 "Standardization Work Guidelines Part 1: Structure and Drafting Rules of Standardization Documents".

Drafting.

This document is Part 2 of GB/T 25890 "DC Switchgear for Ground Installations in Rail Transit". GB/T 25890 has been issued.

The following parts were laid out.

---Part 1: General Provisions;

---Part 2: DC Circuit Breakers;

---Part 3: Indoor DC disconnect switches, load switches and grounding switches;

---Part 4: Outdoor DC disconnect switches, load switches and grounding switches;

---Part 5: DC Switchgear Assemblies;

---Part 7-1.Application Guidelines for Dedicated Measurement, Control, and Protection Devices for DC Traction Power Supply Systems;

---Part 7-2.Dedicated Measurement, Control, and Protection Devices for DC Traction Power Supply Systems. Isolated Current Transmitters and Other Current Measurements equipment;

---Part 7-3.Dedicated Measurement, Control, and Protection Devices for DC Traction Power Supply Systems. Isolated Voltage Transmitters and Other Voltage Measurement Devices equipment.

This document replaces GB/T 25890.2-2010 "DC Switchgear for Ground Installations in Rail Transit - Part 2: DC Disconnectors" Compared with GB/T 25890.2-2010, the main technical changes in the "Apparatus" are as follows, except for structural adjustments and editorial modifications.

- a) Requirements for Class C circuit breakers and limits on cutoff current have been added (see 5.2);
- b) The full breaking time requirement for Class V circuit breakers has been changed [see 5.2b), 2010 version 5.2b)];
- c) Added classification codes for Class C circuit breakers (see Table 2);
- d) The rated short-circuit breaking and making capacity of Class C circuit breakers has been increased (see 5.3.4.1);
- e) Enhanced performance of Class C circuit breakers (see Table 3);
- f) The small current time constant in the circuit breaker performance has been changed (see Table 3, Table 2 in the 2010 edition);
- g) The test sequence for Class C circuit breakers has been increased (see Table 4);
- h) Requirements for circuit breaker structural verification and performance have been added (see 6.1);
- i) Increased the critical current (see 6.18);
- j) The general requirements for power frequency withstand voltage testing have been modified (see 8.2.3.3.1, 2010 version 8.3.3.3.1);
- k) Added test requirements and methods for Class C circuit breakers (see 8.2.8);
- l) The test current and setting values of H, V, or S class circuit breakers have been changed

(see 8.2.8.8.1, 8.3.8.7.3 in the 2010 version);

m) Added requirements for inspection classification, factory inspection, and type inspection (see 9.1~9.3);

n) The inspection items have been changed (see 9.4, 8.2 in the 2010 edition);

o) An AC short-circuit test method has been added (see Appendix B).

This document is modified to adopt IEC 61992-2:2014 "DC switchgear for ground installations on rail transit - Part 2: DC circuit breakers".

Compared with IEC 61992-2:2014, this document has undergone the following structural adjustments.

---Table 1 corresponds to Table 6 of IEC 61992-2:2014;

---Table 2 corresponds to Table 1 of IEC 61992-2:2014;

---Table 3 corresponds to Table 2 of IEC 61992-2:2014;

---Table 4 corresponds to Table 3 of IEC 61992-2:2014;

---The test requirements and methods for electrical and mechanical durability in section 6.12 are incorporated into sections 8.2.6 and 8.2.7;

---Table 6 corresponds to Table 7 of IEC 61992-2:2014;

---Incorporate the clauses of IEC 61992-2:2014 8.3.8.9 into the corresponding clauses of 8.2.8.1 to 8.2.8.8;

---The performance requirements for circuit breaker closing and short-circuit breaking in IEC 61992-2:2014, section 8.3.8.7.3, are incorporated into section 8.2.8.7.2.

In 8.2.8.8.1;

---Table 7 corresponds to Table 4 of IEC 61992-2:2014;

---Adjust paragraph B.3 of IEC 61992-2:2014 to subclauses B.3.1 to B.3.3.

The technical differences between this document and IEC 61992-2:2014, and the reasons therefor, are as follows.

---Some descriptive clauses have been changed to requirements (see 5.2, 8.2.2, 8.2.8.4) to adapt to my country's technical conditions and increase operability;

---IEC 60850:2000 (see 5.3.2) has been replaced with the normatively referenced GB/T 1402-2025 to adapt to my country's technical requirements.

Add components to increase operability;

---The voltage-related content for circuit breakers has been revised to requirements [see 5.3.2a) and 5.3.2f)] for ease of use;