Chinastandards.org

DL

INDUSTRY STANDARD OF THE

PEOPLE'S REPUBLIC OF CHINA

DL/T 2145.4-2025

Field Testing Guidelines for Online Monitoring Devices for Power Equipment - Part 4: UHF Partial Discharge Online Monitoring Devices for Gas-Insulated Metal-Enclosed Switchgear

变电设备在线监测装置现场测试导则 第4部分：气体绝缘金属封闭开关设备特高频局部放电在线监测装置

(English Translation)

Issued by: National Energy Administration

Preview: page 1 of 4 shown, 15 in the full document. Complete English PDF, instant download:
https://chinastandards.org/standards/dl-t-2145-4-2025

Chinastandards.org

Table of Contents

[Preview only]
1 Scope
1.2 Normative references
3 Terms and definitions
3.1 General requirements
3.2 Rock
3.3 Cement and mineral admixtures
3.4 Aggregate of high-performance self-compacting concrete
3.5 Chemical admixtures
4 Interface flange 5052 H112 GB/T 3880
4.1 General
4.2 Rated voltage (Ur)
4.3 Rated insulation level
4.4 Rated frequency (fr)
4.5 Rated normal current (Ir) and temperature rise
4.6 Rated short-time withstand current (Ik)
4.7 Rated peak withstand current (Ip)
4.8 Rated duration of short circuit (tk)
5 Fixed tray 5754 H112 GB/T 3191
5.1 Designation of materials used for main parts and components
5.2 Seal ring material requirements
5.3 Earthing of circuit-breakers
5.4 Auxiliary and control equipment
5.5 Power operation
5.6 Stored energy operation
5.7 Independent manual operation
5.8 Operation of releases
5.9 Low- and high-pressure interlocking devices
6 Cooling tube 1050A GB/T 6893
6.1 Requirements for arrangement of tube bundle cooling element
6.2 Design pressure of tube bundle
6.3 Design of tube bundle structure

Preview: page 2 of 4 shown, 15 in the full document. Complete English PDF, instant download:
https://chinastandards.org/standards/dl-t-2145-4-2025

6.4 Measurement of the resistance of the main circuit
6.5 Temperature-rise tests
6.6 Short-time withstand current and peak withstand current tests
6.7 Verification of the degree of protection
6.8 Tightness tests
6.9 Electromagnetic compatibility (EMC) tests
7 Tube plate and connecting plate 5A05 and 6063 T6 GB/T 6892
7.2 Dielectric test on the main circuit
7.3 Tests on auxiliary and control circuits
7.6 Design and visual checks
7.7 Mechanical operating and mechanical characteristic tests
7.8 Gas humidity measurement
8 Inspection and acceptance
9 Marking, packaging, storage and transport

1 Foreword

DL/T 2145.4-2025 was issued by National Energy Administration on 18 December 2025.

It is one of 5 parts of the DL/T 2145 series.

The DL/T prefix marks a recommended standard. It is not law in itself: it becomes binding when a contract names it, when a regulation or a mandatory standard refers to it, or when a producer declares conformity with it.

2 Scope Preview

DL/T 2145.4-2025 carries no ICS number and no Chinese Standard Classification code.

This catalogue holds 4,757 other DL/T standards.

Of the 2,309 DL/T standards that do carry an ICS number, 1,146 (50%) fall under ICS 27, in the field of energy and heat transfer engineering.

3 About this standard

Sector: Electricity & Power

Issued by: National Energy Administration

English translation: about 15 pages (approximate)

Preview: page 3 of 4 shown, 15 in the full document. Complete English PDF, instant download:
https://chinastandards.org/standards/dl-t-2145-4-2025

Chinastandards.org

4 Related standards

Other parts of this standard:

DL/T 2145.1-2020 - Field testing guide for on-line monitoring device of transformation equipment - Part 1: On-line monitoring device of gases dissolved in transformer oil

DL/T 2145.2-2020 - Field testing guide for on-line monitoring device of transformation equipment - Part 2: On-line insulation monitoring device of capacitive equipment and metal-oxide arrester

DL/T 2145.3-2025 - Part 3: Ultrasonic Partial Discharge Online Monitoring Devices

DL/T 2145.5-2025 - Part 5: Infrared Imaging Online Monitoring Devices

5 Classification and status

Prefix DL/T: recommended standard.

Preview: page 4 of 4 shown, 15 in the full document. Complete English PDF, instant download:
https://chinastandards.org/standards/dl-t-2145-4-2025