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

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**General specification for data center cold-plate liquid cooling
cabinet**

(English Translation)

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Foreword

This document conforms to GB/T 1.1-2020 "Standardization Work Guidelines Part 1: Structure and Drafting Rules of Standardization Documents".

Drafting is scheduled.

Please note that some content in this document may involve patents. The issuing organization of this document assumes no responsibility for identifying patents.

This document was proposed and is under the jurisdiction of the National Information Technology Standardization Technical Committee (SAC/TC 28).

1 Scope

This document provides a classification of data center cold-plate liquid-cooled server racks and specifies technical requirements, quality assessment procedures, marking, packaging, and transportation.

The document describes the corresponding test methods for storage, acceptance,

operation and maintenance.

This document applies to the design, manufacture, deployment, and operation and maintenance of cold plate liquid-cooled cabinets for data centers.

2 Normative references

The contents of the following documents, through normative references within the text, constitute essential provisions of this document. Dated citations are listed below.

For references to documents, only the version corresponding to that date applies to this document; for undated references, the latest version (including all amendments) applies.

This document.

GB/T 191 Packaging and Storage Graphic Symbols GB/T 1184 Geometric Tolerances - No Tolerance Values Specified GB/T 1804 General Tolerances - Tolerances for Linear and Angular Dimensions Where No Tolerance is Specified GB/T 2423.1 Environmental testing of electrical and electronic products - Part 2: Test methods - Test A. Low temperature GB/T 2423.2 Environmental testing of electrical and electronic products - Part 2: Test methods - Test B. High temperature GB/T 2423.3 Environmental testing - Part 2: Test methods - Test Cab. Constant damp heat test GB/T 2423.22 Environmental testing - Part 2: Test methods - Test N. Temperature change GB/T 2828.1 Sampling Procedures for Inspection by Attributes - Part 1: Sampling Schemes Retrieved by Acceptable Quality Limit (AQL) for Lot-by-Lot Inspection GB/T 4706.1 Safety of household and similar electrical appliances - Part 1: General requirements GB/T 5095.2 Basic test procedures and measurement methods for electromechanical components for electronic equipment - Part 2: General inspection, electrical continuity Contact resistance testing, insulation testing, and voltage stress testing GB/T 5750.12 Standard Examination Methods for Drinking Water - Part 12: Microbiological Indicators GB/T 5861 Test Methods for Hydraulic Quick-Connect Couplings GB/T 6682 Specifications and test methods for water used in analytical laboratories GB/T 6908 Analytical Methods for Boiler Water and Cooling Water - Determination of Conductivity GB/T 11918.1 Industrial plugs, fixed or mobile sockets and appliance input sockets - Part 1: General requirements GB/T 15893.1 Determination of turbidity in industrial circulating cooling water - Scattered light method GB/T 17465.1 Couplers for household and similar appliances - Part 1: General requirements GB 17625.1 Electromagnetic compatibility limits - Part 1: Harmonic current emission limits (input current per phase of equipment ≤ 16 A) GB/T 17625.2 Electromagnetic compatibility limits for equipment with a rated current ≤ 16 A per phase and unconditional connection to a common low-voltage power supply.

GB/T 17625.7 Electromagnetic compatibility limits for equipment with a rated current ≤ 75 A and conditional access in a public low-voltage power supply system.

Limitations on voltage changes, voltage fluctuations, and flicker generated in the process GB/T 17625.8 Electromagnetic Compatibility Limits Part 8: Input current per phase greater

than 16 A and less than or equal to 75 A connected to Harmonic current limits generated by equipment in public low-voltage systems GB/T 18455 Packaging Recycling Mark