NATIONAL STANDARD OF THE PEOPLE'S REPUBLIC OF CHINA

GB/T 45323-2025

Coding rules for the identification of urban heating systems

城镇供热系统标识编码规则

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1 Scope

GB/T 45323-2025 sets the coding rules for identifying the components of an urban district heating system. A Chinese city heating network has tens of thousands of identifiable objects, sources, mains, branches, chambers, valves, pumps, heat exchange stations, substations, building entries and meters, and it is operated through a SCADA system, a GIS, a billing system and a maintenance system that were built at different times by different vendors. Without a single identifier per object those systems cannot be joined, and the standard exists to supply one. The document sets the structure of the code, the classification of the objects it applies to, the segments that identify the network, the facility, the equipment type and the instance, the rules for allocating and retiring a code, the rules for extension, and the presentation of the code, together with worked examples. For a heating utility, a system integrator or a municipal authority in China, this is the basis on which the systems are made to talk to each other.

This document specifies the identification, combined identification, functional identification, product identification and implementation of identification coding for urban heating systems. This document applies to the identification codes of the following components of urban heating systems.

a) There is no heat source for heating produced by electricity;

b) Hot water pipe network and steam pipe network;

c) Heating network head station, heating power station, pressure isolation station, relay pump station;

d) Hot water users and steam users.

2 Normative references

This document has no normative references.

3 Terms and definitions

The following terms and definitions apply to this document.

3.1 identification To distinguish a physical object from other physical objects, a unique mark is given to the physical object.

3.2 code A symbol that identifies a physical object by combining characters and numbers arranged according to certain rules.

3.3 notation The process of recording an identifier or code.

3.4 identification character name Special characters defined to identify encoding structures.

Note. It consists of capital letters and subscript numbers.

3.5 prefix Characters located before the logo to distinguish the logo type.

3.6 Coding index Sort by alphabetical order and used to retrieve files that identify object codes.

3.7 engineering subdivision code A code that further subdivides the engineering type code.