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

GB/T 34130.1-2017

Power-track systems -- Part 1: General requirements

电源母线系统 第1部分：通用要求

(English Translation)

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1 Scope

1.1

This Part of GB/T 34130 specifies general requirements and tests for powertrack (PT) systems.

This Part applies to powertrack (PT) systems with a rated voltage not exceeding 277 V a.c. single phase, or 480 V a.c. two or three phase 50 Hz or 60 Hz with a rated current not exceeding 63 A. These systems are used for distributing electricity in household, commercial, or industrial premises.

1.2

Powertrack systems, according to this Part, are intended for use under the following conditions:

- an ambient temperature in the range -5 °C~+40 °C, the average value over a 24 h period not exceeding 35 °C;

- a situation not subject to a source of heat likely to raise temperatures above the limits specified above;
- an altitude not exceeding 2000 m above sea level;
- an atmosphere not subject to excessive pollution by smoke, chemical fumes, prolonged periods of high humidity or other abnormal conditions.

In locations where special conditions prevail, as in ships, vehicles and the like and in hazardous locations, for instance, where explosions are liable to occur, special constructions may be necessary.

This Part does not apply to:

- cable trunking systems and cable ducting systems covered by GB/T 19215;
- busbar trunking systems covered by GB 7251.2;
- electrical supply track systems for luminaires covered by GB/T 13961.

2 Normative references

The following documents are indispensable for the application of this document.

For the dated references, only the editions with the dates indicated are applicable to this document. For the undated references, the latest edition (including all the amendments) are applicable to this document.

GB/T 156 Standard voltage (GB/T 156-2007, IEC 60038:2002, MOD)

GB/T 2099.1 Plugs and socket-outlets for household and similar purposes -

Part 1: General requirements (GB/T 2099.1-2008, IEC 60884-1:2006, MOD)

GB/T 2423.18-2012 Environmental testing - Part 2: Test methods - Test Kb:

Salt mist, cyclic (sodium chloride solution) (IEC 60068-2-52:1996, IDT)

GB/T 2423.55 Environmental testing for electric and electronic products -

Part 2: Test methods - Test Eh: hammer tests (GB/T 2423.55-2006, IEC

60068-2-75:1997, IDT)

GB/T 4207-2012 Method for the determination of the proof and the comparative tracking indices of solid insulating materials (IEC 60112:2009,

IDT)

GB/T 4208-2008 Degrees of protection provided by enclosure (IP code) (IEC

60529:2001, IDT)

GB/T 5169.11-2006 Fire hazard testing for electric and electronic products -

Part 11: Glowing/hot-wire based test methods - Glow-wire flammability test method for end-products (IEC 60695-2-11:2000, IDT)

GB/T 5169.14 Fire hazard testing for electric and electronic products - Part

14: Test flames - 1 kW nominal pre-mixed flame - Apparatus confirmatory test arrangement and guidance (GB/T 5169.14-2007, IEC 60695-11-2:2003, IDT)

GB/T 5169.21 Fire hazard testing for electric and electronic products - Part

21: Abnormal heat - Ball pressure test (GB/T 5169.21-2006, IEC 60695-10-2:2003, IDT)

GB/T 5465 (all parts) Graphical symbols for use on electrical equipment [IEC 60417 (all parts)]

GB/T 9364.1 Miniature fuses - Part 1: Definitions for miniature fuses and general requirement for miniature fuse-links (GB/T 9364.1-2015, IEC 60127-1:2006, MOD)

GB/T 9797 Metallic coatings - Electroplated coatings of nickel plus chromium and of copper plus nickel plus chromium (GB/T 9797-2005, ISO 1456:2003, IDT)

GB/T 9799 Metallic and other inorganic coatings - Electroplated coatings of zinc with supplementary treatments on iron or steel (GB/T 9799-2011, ISO 2081:2008, IDT)

GB/T 12599 Metallic coatings - Electroplated coatings of tin - Specification and test methods (GB/T 12599-2002, ISO 2093:1986, MOD)

GB/T 13140.1-2008 Connecting devices for low-voltage circuits for household and similar purposes - Part I: General requirements (IEC 60998-1:2002, IDT)

GB/T 13140.4-2008 Connecting devices for low voltage circuits for household and similar purposes - Part 2: Particular requirements for connecting devices as separate entities with insulation piercing clamping units (IEC 60998-2-3:2002, IDT)

GB/T 13539.1 Low-voltage fuses - Part 1: General requirements (GB/T 13539.1-2008, IEC 60269-1:2006, IDT)