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

GB 13140.5-2008

Replacing GB 13140.5-1998

**Connecting devices for low-voltage circuits for household and
similar purposes -- Part 2: Particular requirements for twist-on
connecting devices**

家用和类似用途低压电路用的连接器件 第2部分：扭接式连接器件的特殊要求
(English Translation)

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Foreword

GB 13140 all the technical content of this section is mandatory.

GB 13140 "Connecting devices for low voltage circuits for household and similar purposes with" divided into two parts.

Part 1. General requirements (GB 13140.1) Part 2. Particular requirements (GB 13140.2 ~ 13140.5)

- Special requirements as an independent unit with screw-type clamping units for connecting devices
- As a standalone unit with screwless-type clamping units - Particular requirements for connecting devices
- As a standalone unit with insulation piercing connection device type clamping units - Particular requirements
- Particular requirements for twist-on connecting devices this section GB 13140 Part 2 "Particular requirements for twist-on connecting devices" section, number GB 13140.5.

This part of the standard should be used in conjunction with the GB 13140.1.

This section identical with IEC 60998-2-4:2004 "Connecting devices for low voltage circuits for household and similar purposes with Part 2. twist-on Particular requirements for connecting devices. " this Part replaces GB 13140.5-1998 "Part 2 Connecting devices for low voltage circuits for household and similar purposes use. twist-on connector Special requirements "of the device. The main changes in this part of GB 13140.5-1998 follows.

- 1) In the second chapter in the reference standard delete references standard GB 17464-1998.
- 2) increased 101 Table title.
- 3) In Chapter 7 categories, to "GB 13140.1-2008 addition to the chapter 7.5, the rest does not apply."
- 4) In the ninth chapter, read "GB 13140.1-2008 second paragraph of the chapter with the following alternative."
- 5) In Chapter 13, the voltage value is calculated to " $U_t = 4U_i + 1000$ (V)".
- 6) table 102, table 103, table 104 adding headings.
- Heading 7) Chapter 17 to "clearances and creepage distances." Content changes accordingly.
- 8) Chapter 20 of the additions.
- 9) Legend numbers are subject to change, for example. original 104 to 101.
- 10) increase in Appendix AA.
- 11) increased by reference.
- 12) In this section where there is no chapter GB 13140.1, and bar. Numbered starting from 101.

This section is informative Appendix Appendix AA.

This part is proposed by the China Electrical Equipment Industrial Association.

This part of the National Electric annex Standardization Technical Committee (SAC/TC67) centralized.

This section drafted by. China Electric Apparatus Research Institute, Zhejiang Yuehua Telecommunication Co., Ltd., Nanhai Exit Inspection and Quarantine, Guangzhou CVC Detection Limited.

1 Scope

GB 13140.1-2008 The chapter replaced by the following.

GB 13140 This part is suitable for connecting a hard and/or soft copper wire two or more untreated twist-on connecting devices (abbreviated as TOCD, the same below), then the wire should meet the requirements of GB 3956-1997, conductor cross-section from 0.5mm² ~ 16mm² (including 16mm²), the cross-sectional area and no more than 35mm².

TOCD in this section applies to household and similar purposes, the voltage does not exceed 1000V (a.c.) And 1500V (d.c.) Low pressure Circuit.

This section TOCD designed primarily operated by hand, but some TOCD, for example, connecting a large cable cross-sectional area of TOCD, can be Require the use of special tools.

NOTE: In the UK, TOCD of two joints or some unequipped flexible cables, including 1.25mm² can cross cord cable must comply with the appropriate BS6500; in American Wire and Cable does not currently comply with IEC 60228.1)

1) This note gives only foreign-related information.

2 Normative references

The following documents contain provisions which, through reference in this Part of GB 13140, constitute provisions of this part. For dated reference documents Member, all subsequent amendments (not including errata content) or revisions do not apply to this section, however, encouraged to reach under this section Parties to research agreement to use the latest versions of these documents. For undated reference documents, the latest versions apply to this section.

GB 13140.1-2008 applicable.

3 Terms and Definitions

GB 13140.1-2008 make changes after this chapter the following apply.

increase.

3.101

Twist the wire ends in two or more terminals.

3.102

Minimum cross-section can be safely connected to a pair of wires of the same size and single line specified by the manufacturer with the largest cross-section range (in mm² or AWG representation). This does not prohibit the use of TOCD connecting two or more wires or connection cross-section outside the scope beyond the connection capacity wire.

3.103

TOCD into the line hole diameter maximum size (see Figure 101).

4 General requirements

GB 13140.1-2008 applicable.

GB 13140.5-2008/IEC 60998-2-4:2004

5 General description of the test

GB 13140.1-2008 this chapter to make changes after the following apply.

5.4

Replacement.

The new test specimen and the cluster approach required by the provisions of the table 101.

Each sample was tested in the order specified.

Table 101 new sample group and the number of test sequence

Number reg	Test sequence	Test new set of samples in each group	A 3 Mark Protection
against electric shock	B 3 ~ 48	14.102 and 14.103	Wire connection Torque and tensile testing
C 12 or 24	Anti-aging and moisture	Insulation resistance and electric strength	D 6
14.101 extent of the damage wire	E 6	14.101.1 reduce the number of wires after clamping	
F 3	14.2 mechanical strength (drum)	G 6	15.101 temperature

6 H, or 12 15.102.1 cyclical temperature tests

I 3 15.102.2 short-time withstand current test K 3 Heat Resistance to abnormal heat and flame If the number of 101 samples less than the specified number of tables, B and C items can be combined together to do, but should be tested in Chapter 13.

6 Key Features