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GB 38189-2019 / IEC 62151:2000

**Safety of equipment electrically connected to a
telecommunication network**

与通信网络电气连接的电子设备的安全

(IEC 62151:2000, IDT)

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Foreword

All technical content of this Standard is mandatory.

This Standard is drafted in accordance with the rules given in GB/T 1.1-2009.

This Standard, using translation method, is identical to IEC 62151:2000 "Safety of equipment electrically connected to a telecommunication network".

China's documents which have a consistent correspondence with the international documents normatively referenced in this Standard are as follows:

- GB/T 2900.73-2008 Electrotechnical terminology - Earthing and protection against electric shock (IEC 60050-195:1998, MOD)
- GB/T 11918 (all parts) Industrial plugs and sockets and couplers [IEC 60309 (all parts)]
- GB/T 16499-2017 Guide for the preparation of electrical and electronic safety publications and the use of basic safety publications and group safety publications (IEC Guide 104:2010, NEQ)

This Standard has made the following editorial changes:

- Incorporate the corrigendum of the previous standard into this Standard; the blank position on the outside of the corresponding clauses is indicated by the vertical double line (||);
- In IEC 62151:2000, the a.c. peak limit is 71 V and 70.7 V, which is unified to 71 V in this Standard;
- Editorially modify the I_{pp} label in figure A.3.

Attention is drawn to the possibility that some of the elements of this document may be the subject of patent rights. The issuing authority of this document shall not be held responsible for identifying any or all such patent rights.

This Standard was proposed by and shall be under the jurisdiction of Ministry of Industry and Information Technology of the PRC.

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Safety of equipment electrically connected to a telecommunication network

1 Scope

1.1 Equipment covered by this Standard

This Standard is applicable to equipment designed and intended to be connected directly to a TELECOMMUNICATION NETWORK, regardless of the source of power.

It is intended for the enhancement of product safety standards so as to cover hazards associated only with connection of equipment to a TELECOMMUNICATION NETWORK.

This Standard covers safety requirements and compliance criteria under three headings:

- a) protection of SERVICE PERSONNEL working on the TELECOMMUNICATION NETWORK and other USERS of the TELECOMMUNICATION NETWORK, from hazardous conditions on the TELECOMMUNICATION NETWORK resulting from the connection of the equipment;
- b) protection of equipment USERS and equipment SERVICE PERSONNEL from voltages on the TELECOMMUNICATION NETWORK;
- c) protection of the telecommunication wiring system from overheating.

It is assumed that adequate measures according to ITU-T Recommendation K.11 have been taken to reduce the likelihood that the overvoltages presented to the equipment exceed 1.5 kV peak. In installations where overvoltages presented to the equipment may exceed 1.5 kV peak, additional measures such as surge suppression may be necessary.

1.2 Additional requirements

Requirements additional to those specified in this Standard may be necessary for:

- equipment intended for operation in special environments, for example, extremes of temperature; excessive dust, moisture, or vibration; flammable gases; and corrosive or explosive atmospheres;

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