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

GB/T 15279-2002

Replacing GB/T 15279-1994

The specifications of automatic telephone set

自动电话机技术条件

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Foreword

GB/T 15279 is the basic standard for automatic telephone sets and also the criterion for the formulation of the standards for analog telephone sets with other functions. The modification of this Standard was made by reference to the relevant suggestions of ITU-T and some typical foreign standards for telephone sets. However, there is no international standard directly corresponding to the entirety of this Standard. This Standard is the revision of GB/T 15279-1994 "The Specifications of Automatic Telephone Set". It shall replace GB/T 15279-1994 from the implementation date. Compared with the 1994-edition, there are main changes in this Standard as follows: - The contents relating to granular carbon transmitter telephone set (4.2.4, 4.2.5,

5.5.3 of 1994-edition) have been deleted; - The technical indicators relating to speed pulse dialing (20 pulses/second) in pulse dialing method (Table 4 in 1994-edition) have been deleted; - The requirements and measuring methods for rotary dial (4.3.3,

5.11.10 in 1994-edition) have been deleted; - The recommended dimensions of telephone handset (

4.8 in 1994-edition) have been deleted; - Chapter

1 Scope

GB/T 15279-2002 is the Chinese national standard on the specifications of automatic telephone set, in the field of telecommunications and audio-video engineering. The /T suffix marks it as a recommended standard: it is not compulsory by itself, but it becomes binding as soon as a contract, a tender or a customer specification calls it up - which in practice is how most foreign buyers meet it. It was issued on 18 July 2002 by the General Administration of Quality Supervision, Inspection and Quarantine of the People's Republic of China, and has been in force since 1 December 2002. Classification: ICS 33.040, CCS M40. This page is published from the official record of the standard held by the Chinese standards administration: the identification, the dates, the classification and the issuing body are taken from there. The clause text, the tables and the numeric limits are in the document itself, which is delivered complete in English translation.

This Standard specifies the technical requirements, test methods, reliability test, marking and packing for fixed automatic telephone sets. This Standard applies to the pulse and dual-tone multi-frequency handset telephone sets that have access to analog interfaces of public network. Other multifunctional terminals that have handset function can also use this Standard as a reference. However, other functions not specified in this Standard must be tested according to the requirements and by reference to relevant standards.

2 Normative references

The articles contained in the following documents have become part of this Standard when they are quoted herein. For the dated documents so quoted, all the modifications (excluding corrections) or revisions made thereafter shall not be applicable to this Standard. For the undated documents so quoted, the latest editions shall be applicable to this Standard.

GB/T 2423.1 Environmental testing for electric and electronic products-Part

4.2 Call transfer characteristic

4.2.1 Loudness rating Connect the telephone set to analog telephone network test system. Its sending and receiving loudness ratings and side tone masking rating shall meet the requirements of Table 1.

4.2.3 Receiving frequency response Under the condition of 0km user line, the typical curve (the broken line shown in Figure 2) and range of permissible deviation (the solid line shown in Figure 2) of receiving frequency response are shown in Figure 2.

4.2.5 Nonlinear distortion

4.2.6 Maximum sound level in case of switching on and off of telephone set The maximum sound level in case of switching on and off of telephone set shall not be greater than 125dB(A).

4.2.7 Noise characteristic

4.2.8 The telephone set shall not have any singing phenomenon in normal use.

4.2.9 The DC resistance of the telephone set in off-hook state shall not be greater than 350Ω.

4.3.2 Characteristic of dual-tone multi-frequency signal

4.3.2.6 Power level of unwanted signal When the telephone set is dialing, the total power level of the unwanted frequency component in output signal shall at least be 20dB lower than the power level of the low frequency component in dual-tone multi-frequency signal.

4.4 Characteristic of telephone ringer

4.4.1 Ringing power sensitivity The ringing power sensitivity of the telephone set shall not be greater than 100mVA.

4.6 Characteristics of telephone cord and handset cord

4.6.1 If socket is used for the terminals of telephone cord and handset cord, the plug used shall meet the requirements of YD/T 577.

4.7 Key "R" The telephone sets provided with key "R" shall be marked with word "R" clearly. After key "R" has been pressed, the interruption time of talking circuit shall be between 90ms-130ms. The off resistance in case key "R" functions shall not be less than 100k Ω .

4.10 Environmental suitability of telephone set

4.11 Lightning resistance of telephone set The lightning resistance of telephone set shall meet the requirements of YD/T 993-1998. After going through the lightning resistance test specified in 5.20, the various functions shall remain normal.

4.12 Electromagnetic compatibility of telephone set The electromagnetic compatibility of telephone set shall meet the requirements of YD/T 968.

4.13 Functional requirements for telephone set

4.13.1 The functions specified in the operation instruction of telephone set shall be normal and meet the requirements of relevant specifications.

4.14 Reliability requirements for telephone set The mean time between failures (MTBF) of telephone set shall not be shorter than 5 000h.

5.1 Test conditions

5.1.1 Test under normal conditions Unless otherwise specified, all the tests shall be carried out under the following normal conditions.

5.1.2 Feed bridge circuit used for testing purposes The feed bridge circuit is shown in Figure

5. In this figure, E is $(48 \pm 1)V$, C is $(4 \pm 0.4)\mu F$, L is composed of two groups of symmetrical coils.

5.1.3 Artificial user line network The artificial user line network per kilometer used for testing purposes shall be fabricated according to Figure 6 to simulate $\phi = 0.5mm$ core wire paper insulated cable.