ICS 29.160.30
CCS k24

NATIONAL STANDARD OF THE PEOPLE'S REPUBLIC OF CHINA

GB/T 10241-2020

Replacing GB/T 10241-2007

General specification for electrical resolver

旋转变压器通用技术条件

Issued on: December 14, 2020 **Implemented on: July 1, 2021**

Issued by: State Administration for Market Regulation;
Standardization Administration of China

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Foreword

This standard was drafted in accordance with the rules given in GB/T 1:1-2009: This standard replaces GB/T 10241-2007 "General Technical Conditions for Resolvers": Compared with GB/T 10241-2007, the main technical The technical changes are as follows:

--- Added XDX, XT, XFD, XBD, XUD, XFS, XBS, XBW, XFW, XFDW, XBDW, XFSW and XBSW Technical requirements and test methods of type resolver (see 4:3);

---The direction of rotation has been increased from the end of the shaft extension (see 4:5, 5:3 in the:2007 edition);

---The voltage vector diagram specification is the voltage vector diagram (see 4:6, 5:5 in the:2007 edition);

--- The reference electrical zero position is deleted (see 5:7 in the:2007 edition);

---The terminal is divided into two parts: marking and strength (see 5:8 and 5:32, 5:10 and 6:7 of the:2007 edition);

---Added the technical requirements and test methods for the coaxiality of the installation mating surface (see 5:6);

---Added the technical requirements and test methods for the verticality of the installation mating end face (see 5:7);

---The function error expression has been deleted, and the function error direct reading voltage test method has been added (see 5:21, 5:21 and the:2007 edition 6:18);

---The linear error expression has been deleted, and the linear error direct reading voltage test method has been added (see 5:22, the:2007 edition of 5:22 and 6:19);

---The electrical error proportional voltage gradient method test method was deleted, and the electrical error angle indicator method and spin simulator method test were added Method (see 5:23, 6:20 in:2007 edition);

--- Change electromagnetic interference to electromagnetic compatibility (see 5:31, 5:31 and 6:28 of the:2007 edition);

---Added vibration split-mounted stator and rotor fixing methods (see 5:34, 6:29 in:2007 edition);

---Added shock-mounted split stator and rotor fixing methods (see 5:35, 6:30 in:2007 edition);

1 Scope

GB/T 10241-2020 is the Chinese national standard on general specification for electrical resolver, in the field of electrical 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 14 December 2020 by the State Administration for Market Regulation; Standardization Administration of China, and has been in force since 1 July 2021. Classification: ICS 29.160.30, CCS k24. 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 terms and definitions, classification and basic parameters, technical requirements and test methods, inspection rules, and delivery criteria for resolvers: Equipment and user service: This standard applies to the design, manufacture, inspection and acceptance of resolvers:

2 Normative references

The following documents are indispensable for the application of this document: For dated reference documents, only the dated version applies to this article Pieces: For undated references, the latest version (including all amendments) applies to this document:

GB/T 2423:16-2008 Environmental testing of electric and electronic products Part 2: Test method Test J and guideline: Mould

GB/T 2828:1-2012 Sampling inspection procedure by attributes Part 1: Batch inspection sampling searched by acceptance quality limit (AQL) plan GB/T 2900:

26 Electrician terminology control motor

GB/T 7345-2008 Basic technical requirements for control motors

GB/T 7346-2015 Control motor basic shape structure type

GB/T 18211-2017 General safety requirements for micromotors

JB/T 8162 Control Motor Packaging Technical Conditions

3 Terms and definitions

The following terms and definitions defined in GB/T 2900:26 apply to this document: 3:

1 Harmonic distortion The Fourier difference between the excitation power supply voltage waveform and the output voltage waveform:

4 Classification and basic parameters

1 Classification Refer to Appendix A for the classification of resolvers: 4:

2 Model naming Refer to Appendix A for the model name of resolver, which is specified by the product-specific technical conditions: 4:

3 Basic appearance structure and installation type The basic shape structure and installation type of the resolver should meet the requirements of GB/T 7346-2015 or product-specific technical conditions: Type; 28, 36 and 45 frame sizes use K3; 55 and 70 frame sizes use K4; 70 and above frame sizes use K6 or K7; 55 and