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

GB/T 2423.19-2013

**Environmental testing - Part 2: Test methods - Test Kc: Sulphur
dioxide test for contacts and connections**

环境试验 第2部分：试验方法 试验Kc：接触点和连接件的二氧化硫试验
(English Translation)

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Foreword

This section GB/T 2423 Part 19, part of the GB/T 2423 standard, see informative Annex NA.

This section according to GB/T 1.1-2009 given rules drafted.

This section uses the translation method identical with IEC 60068-2-42:2003 "Environmental testing - Part 2-42. Tests - Test Kc. contacts and the connecting member of the sulfur dioxide test. " this part of IEC 60068-2-42:2003 compared to the main editorial changes made the following.

--- Change the name of this section. sulfur dioxide contact points and connections.

"Environmental testing - Part 2. Tests - Test Kc test";

--- Increase the informative appendix NA.

This part of the National Electrical and Electronic Products Environmental conditions and environmental tests for Standardization Technical Committee (SAC/TC8) and focal points.

This section drafted by. China Electric Apparatus Research Institute Co., Ltd. Southern Jiangsu Wuxi Test Equipment Co., Ltd., Shanghai Measurement and Testing Technology Institute of surgery.

1 Scope and purpose

The test.

--- In order to evaluate the atmospheric sulfur dioxide pollution accelerated test method provides a point of contact and corrosion of the connecting member;

--- Particularly suitable for comparison test;

--- Not as a routine corrosion tests. That is, it may not be possible to predict the point of contact and connections in industrial atmospheric corrosion behavior.

Note: In view of the information obtained from accelerated corrosion tests are limited, pay special attention to this test guide GB/T 2424.11 is given. And with reference to GB/T 2424.10.

The purpose of this test is.

a) to determine the effects of exposure to the performance of a gas containing sulfur dioxide precious metal or precious metal plating of contacts and connections, excluding Some elements of silver and silver alloy composition.

b) examine the validity and robustness of solderless connector. In all tests, the connector is exposed to test gas and sulfur dioxide Caused by contact resistance variation can be used as the main performance criteria.

2 Normative references

The following documents for the application of this document is essential. For dated references, only the dated version suitable for use herein Member. For undated references, the latest edition (including any amendments) applies to this document.

IEC 60512-2-1:2002 Connectors for electronic equipment - Tests and measurements - Part 2-1. Electrical continuity and contact resistance tests again Test 2a. Contact resistance - Millivolt level method (Connectorsforelectronicequipment-Testsandmeasurements-Part 2-1.

Electricalcontinuityandcontactresistancetests-Test2a.
Contactresistance-Milivoltlevelmethod)

3.1 Overview

Test equipment including climate system, test box, gas transmission systems, and gas concentration measurement apparatus, see Appendix A.

3.2 Test Chamber

Annex chamber and materials used should not absorb or react with sulfur dioxide, it does not affect the effect of corrosion test gas. air

Mixed gas and sulfur dioxide gas by pipeline sufficiently large diameter out of the chamber, the total flow through the gas chamber enables gas tank Replace the body 3 to 5 times per hour. Exhaust gas tank is not allowed into the lab.

The specific design of the chamber (including means of generating test gas) must meet the following conditions.

- a) the conditions of the test chamber space where the test sample should be within the specified range;
- b) should not be directly subjected to the test sample into the impact of air;
- c) the average relative rate test gas sample shall be 20m/h ~ 60m/h (about 6mm/s ~ 17mm/s) or slowly Stirring gas, so that the relative rate of all the tested samples of approximately the same gas;
- d) the test chamber is not allowed condensation phenomena;
- e) Avoid direct sunlight test chamber, the test chamber and any one of the exposed surface illuminance (from daylight or incandescent or fluorescent