Chinastandards.org

ICS 17.020

JJF

NATIONAL METROLOGY TECHNICAL SPECIFICATION OF THE PEOPLE'S REPUBLIC OF CHINA

JJF 1764-2019

Program of Pattern Evaluation of Hydrogen Sulfide Gas Detectors for Mining

矿用硫化氢气体检测仪型式评价大纲

(English Translation)

Implemented on: December 27, 2019

Issued by: State Administration for Market Regulation

Preview: page 1 of 4 shown, 26 in the full document. Complete English PDF, instant download:
https://chinastandards.org/standards/jjf-1764-2019

Chinastandards.org

Table of Contents

Introduction (II)
1 Scope (1)
2 References (1)
3 Overview (1)
4 Legal management requirements (2)
4.1 Unit of measurement (2)
4.2 Marks and logos (2)
5 Measurement requirements (2)
5.1 Indication error (2)
5.2 Repeatability (2)
5.3 Response time (2)
5.4 Drift (2)
5.5 Signal transmission error (2)
6 General technical requirements (2)
6.1 Appearance and structure (2)
6.2 Power-on inspection (2)
6.3 Function check (3)
6.4 Adaptability of power supply voltage (3)
6.5 Insulation resistance (3)
6.6 Dielectric strength (3)
6.7 Climate and environment adaptability (3)
6.8 Work stability (3)
6.9 Adaptability to mechanical environment (3)
6.10 Shell protection performance (4)
7 Type evaluation items (4)
8 Provide the number of prototypes and how to use them (5)
8.1 Number of prototypes provided (5)
8.2 How to use the prototype (5)
9 Test methods and conditions of test items, data processing and qualification criteria (5)
9.1 Measurement requirements (5)
9.2 General technical requirements (9)
10 Table of measuring instruments and equipment used in the test items (14)

Preview: page 2 of 4 shown, 26 in the full document. Complete English PDF, instant download:
https://chinastandards.org/standards/jjf-1764-2019

Chinastandards.org

11 Original records of type evaluation (15)

Appendix A Original Record Format of Type Evaluation of Mine Hydrogen Sulfide Detector (16)

Appendix B Technical Requirements of Simulation Circuit (33)

11 Original records of type evaluation (15)

Appendix A Original Record Format of Type Evaluation of Mine Hydrogen Sulfide Detector (16)

Appendix B Technical Requirements of Simulation Circuit (33)

Introduction

This type evaluation outline is based on JJF 1015 "General Specification for Type Evaluation of Measuring Instruments" and JJF 1016 "Measuring Instruments" the "Guidelines for Compiling the Type Evaluation Outline" are compiled as basic specifications.

The measurement performance of this type evaluation outline refers to JJG1161-2019 "Mine Hydrogen Sulfide Gas Detector" and MT1084-2008 "Hydrogen Sulfide Detection Alarm for Coal Mine".

This type evaluation outline is released for the first time.

Mine hydrogen sulfide gas detector Type evaluation outline

1 Scope

This type of evaluation outline is applicable to the detection of hydrogen sulfide gas used in mines with the classification code of measuring instruments of 46381000 Type evaluation of the tester.

2 Reference documents this specification refers to the following documents.

JJG1161-2019 Mine hydrogen sulfide gas detector GB/T 2423.1-2008 Environmental testing for electrical and electronic products Part 1 Test methods Test A.

Low temperature

GB/T 2423.2-2008 Environmental testing for electrical and electronic products Part 2 Test method Test B.

high temperature

GB/T 2423.4-2008 Environmental testing for electrical and electronic products Part 4 Test methods Test Db.

Damp heat (12h 12h cycle) GB/T 2423.7-2018 Environmental Test Part 2: Test Method Test

Preview: page 3 of 4 shown, 26 in the full document. Complete English PDF, instant download:
https://chinastandards.org/standards/jjf-1764-2019

Ec. Caused by Rough Operation the impact (mainly used for equipment type samples) GB/T 4208-2017 enclosure protection level (IP code) for dated reference documents, only the dated version applies to this outline; for those without date references the latest version (including all amendments) is applicable to this outline.

3 Overview

Mine hydrogen sulfide gas detector (hereinafter referred to as detector) is mainly composed of detection unit (gas chamber, sensitive components, etc.), the signal processing transmission unit, display unit, etc., convert the hydrogen sulfide gas concentration into an electrical signal through the sensitive element, Then through the signal processing transmission unit, the display unit finally displays the hydrogen sulfide concentration value.

The detector is divided into diffusion type and suction type according to the sampling method; it is divided into portable and fixed type according to the usage method. Fixed the detector has an electric signal output function.

According to the characteristics of the detector itself, the key components and materials should be clarified, as shown in Table 1.

Table 1 Key parts and materials table

No. Name Main Performance Index Remarks

1 Shell

The size, flame retardant and other indicators can be designed by the applicant unit according to the design Need to fill in Steel, engineering plastics, etc.

2 Sensitive components Indicators such as accuracy and response time can be determined by the applicant Design needs to be filled

3 Battery

Indicators such as capacity and number of sections can be applied by the applicant Fill in according to design needs Lithium manganate, nickel hydrogen, etc.

(For portable)

Preview: page 4 of 4 shown, 26 in the full document. Complete English PDF, instant download:
https://chinastandards.org/standards/jjf-1764-2019