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

GB/T 19518.2-2026

Replacing GB/T 19518.2-2017

**Explosive atmospheres - Electrical resistance traces heating -
Part 2: Application guide for design, installation and
maintenance**

爆炸性环境 电阻式伴热器 第2部分：设计、安装和维护应用导则

(English Translation)

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Table of Contents

Preface
Introduction
1 Scope
2 Normative References
3 Terms and Definitions
4 Usage conditions
4.1 General Rules
4.2 Corrosive Area
4.3 Process temperature accuracy
4.4 Installation Conditions
5 Insulation 2.
5.1 General Rules
5.2 Selection of Thermal Insulation Materials
5.3 Selection of Climate Protection Layer (Climate Protection Layer)
5.4 Optimal Heat Tracing Design Thickness for Economical Selection
5.5 Double-layer insulation
6 System Design
6.1 General Rules
6.2 Applications and Main Requirements of Heat Tracing Equipment
6.3 Training
6.4 Selection of Heat Tracing Equipment
6.5 Determination of the maximum temperature
6.6 Heating and Cooling Precautions
6.7 Design Information
6.8 Power Supply System
6.9 Grounding requirements
6.10 Equipment grounding fault protection
6.11 Start at minimum ambient temperature for 10 seconds
6.12 When the tracing heat is relatively long,
6.13 Manifold Analysis
6.14 Blind pipe control method
6.15 Chimney Effect

6.16 Safety Shower and Washbasin Design Requirements	
7 Control and monitoring	
7.1 General Rules	
7.2 Mechanical controller	
7.3 Electronic Controller	
7.4 Applicability of the Application	
7.5 Controller Location	
7.6 Sensor Position	
7.7 Alarm Precautions	
8 Install	
8.1 General Rules	
8.2 Preparations	
8.3 Installation of heat tracing circuit	
8.4 Installation of Control and Monitoring Devices	
8.5 Installation of the insulation system (see also Chapter 5)	
8.6 Wiring installation and coordination with branch circuits	
8.7 Debugging	
9 Maintenance	
9.1 General Rule	
9.2 Fault Location	
9.3 Troubleshooting	
10 Repair	
10.1 General Rule	
10.2 General methods for repairing heat tracing equipment	
10.3 Repair Techniques for Heat Tracing Equipment	
10.4 Grounding	
10.5 Experiment	
Appendix A (Informative) Method for Determining the Equivalent Thickness of Thermal Insulation Mortar	
Appendix B (Informative) Example 30 of Design Data Recording	
Appendix C (Informative) Precautions for Piping Heat Loss---Heat Loss Formulas and Calculation Examples	
Appendix D (Informative) Precautions for Heat Loss in Containers	
Appendix E (Informative) Heating and Cooling Precautions	
Appendix F (Informative) Installation Requirements Checklist	
Appendix G (Informative) Example 45 of Heat Tracer Commissioning Record	

Appendix H (Informative) Example 47 of Maintenance and Operation Log References

Foreword

This document complies with the provisions of GB/T 1.1-2020 "Standardization Work Guidelines Part 1: Structure and Drafting Rules of Standardization Documents".

Drafting.

This document is Part 2 of GB/T 19518 "Resistance Heat Tracing for Explosive Atmospheres". GB/T 19518 has published the following...

part.

---Part 1: General and Testing Requirements;

---Part 2: Design, Installation and Maintenance Application Guidelines this document replaces GB/T 19518.2-2017 "Resistance Heat Tracing for Explosive Atmospheres - Part 2: Design, Installation and Maintenance Guidelines" Compared with GB/T 19518.2-2017, the main technical changes in "South" are as follows, except for structural adjustments and editorial modifications.

---The heat loss design has been removed (see 6.3 in the 2017 edition);

---The system evaluation under equilibrium conditions has been removed (see 6.6.2 in the 2017 version);

---Added design requirements for safety showers and eyewash stations (see 6.16);

---The calculation of the theoretical temperature of the sheath has been removed (see 6.7.4~6.7.5 in the 2017 edition).

This document is modified to adopt IEC/IEEE 60079-30-2.2015 "Explosive Atmospheres - Part 30-2.Design and Safety of Resistance Heat Tracing Devices".

Installation and maintenance application guidelines.

This document has undergone the following structural adjustments compared to IEC/IEEE 60079-30-2.2015.

---Appendix A corresponds to Appendix H of IEC/IEEE 60079-30-2.2015;

---Appendix B corresponds to Appendix A of IEC/IEEE 60079-30-2.2015;

---Appendix C corresponds to Appendix E of IEC/IEEE 60079-30-2.2015;

---Appendix D corresponds to Appendix F of IEC/IEEE 60079-30-2.2015;

---Appendix E corresponds to Appendix G of IEC/IEEE 60079-30-2:2015;

---Appendix F corresponds to Appendix B of IEC/IEEE 60079-30-2:2015;

---Appendix G corresponds to Appendix C of IEC/IEEE 60079-30-2:2015;

---Appendix H corresponds to Appendix D of IEC/IEEE 60079-30-2:2015.

The technical differences between this document and IEC/IEEE 60079-30-2:2015, and the reasons therefor, are as follows.

---IEC 60050-426 (see Chapter 3) has been replaced with the normatively referenced GB/T 2900.35 to adapt to my country's technical conditions.

Increase operability;

---IEC 60079-0 (see Chapter 3) has been replaced with the normatively referenced GB/T 3836.1 to adapt to my country's technical conditions and add...

Operability;

---IEC 60079-15 (see 8.3.7.4) has been replaced with the normatively referenced GB/T 3836.3 to adapt to my country's technical conditions and increase...

Increase operability;

---IEC 60079-30-1 (see Chapters 3, 6, and 8) has been replaced with the normatively referenced GB/T 19518.1 to suit my needs.

Improve the country's technical conditions and increase operability;

---The content regarding the classification method of "section" locations has been deleted (see Chapter 1, 4.1), making it consistent with the classification method of explosion-hazardous locations in my country.

The following editorial changes have been made to this document.

---To harmonize with existing standards, the standard title has been changed to "Resistant Heat Tracing in Explosive Atmospheres - Part 2: Design and Installation" Application and Maintenance Guidelines;

---The note regarding the classification method of "segment" locations in the "Scope" chapter has been deleted;

--- Replace Celsius (°C) with Kelvin (K) in units such as heat transfer coefficient, thermal conductivity, and specific heat capacity;

---The international documents cited in the information have been replaced with our own documents.

Please note that some content in this document may involve patents. The issuing