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**Explosive atmospheres –
Part 30-2: Electrical resistance trace heating – Application guide for design,
installation and maintenance**

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Part 30-2: Electrical resistance trace heating – Application guide for design,
installation and maintenance**

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INTERNATIONAL ELECTROTECHNICAL COMMISSION

EXPLOSIVE ATMOSPHERES –**Part 30-2: Electrical resistance trace heating –
Application guide for design, installation and maintenance**

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International Standard IEC/IEEE 60079-30-2 has been prepared by IEC technical committee 31: Equipment for explosive atmospheres, in cooperation with the Petroleum & Chemical Industry Committee of the IEEE Industrial Applications Society under the IEC/IEEE Dual Logo Agreement.

NOTE A list of IEEE participants can be found at the following URL:
http://standards.ieee.org/downloads/60079/60079-30-2-2015/60079-30-2-2015_wg-participants.pdf.

This first edition of IEC/IEEE 60079-30-2 cancels and replaces the first edition of IEC 60079-30-2 published in 2007 and constitutes a technical revision.

This edition includes the following significant changes, apart from a general review and updating of the first edition of IEC 60079-30-2, harmonization with IEEE Std 515, with respect to the previous edition:

- the relocation of trace heater product design methodology and requirements to IEC/IEEE 60079-30-1;
- the relocation and/or duplication of information on installation, maintenance, and repair to the MTs under SC31J for their addition into IEC 60079-14, IEC 60079-17, and IEC 60079-19;
- the inclusion of more detailed information on safety showers and eyewash units;
- the introduction of Annexes from IEEE Std 515.

The significance of changes between IEC 60079-30-2, Edition 1.0 (2007) and IEC/IEEE 60079-30-2, Edition 1.0 (2014) is as listed below:

Changes	Clause	Type		
		Minor and editorial changes	Extension	Major technical changes
Addition of clarification for the exclusion of areas coverage classifications of EPLs Ga and Da	1	X		
Addition of requirements for the Division method of area classification that may be applied by some users	1			C1
Relocation of heat loss design requirements to IEC/IEEE 60079-30-1	6.3	X		
Addition of safety shower and eyewash station design requirements	6.16			C2
Addition of Annex for an example of a design data record	Annex A	X		
Addition of Annex for a checklist of installation requirements	Annex B	X		
Addition of Annex for an example of a trace heater commissioning record	Annex C	X		
Addition of Annex for an example of a maintenance schedule and log record	Annex D	X		
Addition of Annex for pipe heat loss considerations	Annex E	X		
Addition of Annex for vessel heat loss considerations	Annex F	X		
Addition of Annex for heat up and cool down considerations	Annex G	X		
Addition of Annex for a method to determine the equivalent thickness of insulating cements	Annex H	X		

NOTE The technical changes referred to include the significance of technical changes in the revised IEC Standard, but they do not form an exhaustive list of all modifications from the previous version.

Explanations:

A) Definitions

Minor and editorial changes

- clarification
- decrease of technical requirements
- minor technical change
- editorial corrections

These are changes which modify requirements in an editorial or a minor technical way. They include changes of the wording to clarify technical requirements without any technical change, or a reduction in level of existing requirement.

Extension addition of technical options

These are changes which add new or modify existing technical requirements, in a way that new options are given, but without increasing requirements for equipment that was fully compliant with the previous standard. Therefore, these will not have to be considered for products in conformity with the preceding edition.

Major technical changes addition of technical requirements
increase of technical requirements

These are changes to technical requirements (addition, increase of the level or removal) made in a way that a product in conformity with the preceding edition will not always be able to fulfil the requirements given in the later edition. These changes have to be considered for products in conformity with the preceding edition. For these changes additional information is provided in clause B) below.

NOTE These changes represent current technological knowledge. However, these changes should not normally have an influence on equipment already placed on the market.

B) Information about the background of ‘Major Technical Changes’

- C1 – The requirements for the Division method of area classification are applicable only for users of this standard intending qualification for these areas.
- C2 – The design requirements for safety showers and eyewash units have been included for harmonization and for added safety.

The text of this standard is based on the following IEC documents:

FDIS	Report on voting
31/1190/FDIS	31/1199/RVD

Full information on the voting for the approval of this standard can be found in the report on voting indicated in the above table.

International standards are drafted in accordance with the ISO/IEC Directives, Part 2.

This standard is intended to be used in conjunction with IEC/IEEE 60079-30-1:2014, *Explosive atmospheres – Part 30-1: Electrical resistance trace heating – General and testing requirements*.

A list of all parts of IEC 60079 series, under the general title *Explosive atmospheres*, can be found on the IEC website.

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- reconfirmed,
- withdrawn,
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