

# INTERNATIONAL STANDARD



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**Extra heavy-duty electrical rigid steel conduits**



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**Extra heavy-duty electrical rigid steel conduits**

INTERNATIONAL  
ELECTROTECHNICAL  
COMMISSION

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## INTERNATIONAL ELECTROTECHNICAL COMMISSION

## EXTRA HEAVY-DUTY ELECTRICAL RIGID STEEL CONDUITS

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International Standard IEC 60981 has been prepared by subcommittee 23A: Cable management systems, of IEC technical committee 23: Electrical accessories.

This third edition cancels and replaces the second edition published in 2004. This edition constitutes a technical revision.

This edition includes the following significant technical changes with respect to the second edition:

- a) addition of provisions for alternative coatings to zinc;
- b) addition of elasticity test for organic coatings;
- c) new Annex B on tests for evaluating alternative exterior coatings applied on extra heavy-duty electrical rigid steel (EHDERS) conduits.

The text of this International Standard is based on the following documents:

FDIS	Report on voting
23A/886/FDIS	23A/888/RVD

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

This document has been drafted in accordance with the ISO/IEC Directives, Part 2.

In this document, the following print types are used:

- requirements proper: in roman type;
- *test specifications: in italic type;*
- explanatory matter: in smaller roman type.

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## EXTRA HEAVY-DUTY ELECTRICAL RIGID STEEL CONDUITS

### 1 Scope

This document specifies requirements for extra heavy-duty electrical rigid steel (EHDERS) conduits, couplings, nipples and elbows for electrical installations, including communications and fibre optics. This document also specifies threads for these components.

It is not applicable to the conduits specified in IEC 60423.

### 2 Normative references

The following documents are referred to in the text in such a way that some or all of their content constitutes requirements of this document. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

IEC 60695-11-3, *Fire hazard testing – Part 11-3: Test flames – 500 W flames – Apparatus and confirmational test methods*

IEC 61950, *Cable management systems – Specifications for conduit fittings and accessories for cable installations for extra heavy duty electrical steel conduit*

ISO 527 (all parts), *Plastics – Determination of tensile properties*

ISO 4892-2, *Plastics – Methods of exposure to laboratory light sources – Part 2: Xenon-arc lamps*

ISO 9227, *Corrosion tests in artificial atmospheres – Salt spray tests*

ISO 13263, *Thermoplastics piping systems for non-pressure underground drainage and sewerage – Thermoplastics fittings – Test method for impact strength*

ISO 19095-3, *Plastics – Evaluation of the adhesion interface performance in plastic-metal assemblies – Part 3: Test methods*

### 3 Terms and definitions

For the purposes of this document, the following terms and definitions apply.

ISO and IEC maintain terminological databases for use in standardization at the following addresses:

- IEC Electropedia: available at <http://www.electropedia.org/>
- ISO Online browsing platform: available at <http://www.iso.org/obp>