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INTERNATIONAL STANDARD

NORME INTERNATIONALE

Measuring relays and protection equipment – Part 11: Voltage dips, short interruptions, variations and ripple on auxiliary power supply port

Relais de mesure et dispositifs de protection – Partie 11: Creux de tension, coupures brèves, variations et ondulation sur l'accès alimentation auxiliaire



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INTERNATIONAL ELECTROTECHNICAL COMMISSION

MEASURING RELAYS AND PROTECTION EQUIPMENT –

Part 11: Voltage dips, short interruptions, variations and ripple on auxiliary power supply port

FOREWORD

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International Standard IEC 60255-11 has been prepared by IEC technical committee 95: Measuring relays and protection equipment.

This second edition cancels and replaces the first edition published in 1979. This edition constitutes a technical revision. The main differences with respect to the previous edition concern:

- addition of voltage dips and interruptions test in a.c.;
- addition of gradual shut-down/start-up test;
- addition of reversal of d.c. power supply polarity test.

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

FDIS	Report on voting
95/239/FDIS	95/244/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.

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

A list of all parts of IEC 60255 series, published under the general title *Measuring relays and protection equipment*, can be found on the IEC website.

The committee has decided that the contents of this publication will remain unchanged until the maintenance result date indicated on the IEC web site under "http://webstore.iec.ch" in the data related to the specific publication. At this date, the publication will be

- reconfirmed,
- withdrawn,
- replaced by a revised edition, or
- amended.

MEASURING RELAYS AND PROTECTION EQUIPMENT –

Part 11: Voltage dips, short interruptions, variations and ripple on auxiliary power supply port

1 Scope and object

This part of the IEC 60255 series specifies the general requirements for a.c. and d.c. power supplies, for measuring relays and protection equipment for power system protection, including the control, monitoring and process interface equipment used with those systems. This part is based on:

- IEC 61000-4-11 for a.c. voltage dips, short interruptions and variations;
- IEC 61000-4-17 for voltage ripple;
- IEC 61000-4-29 for d.c. voltage dips, short interruptions and variations.

The objective of the tests is to confirm that the equipment under test will operate correctly when energised and subjected to dips, interruptions and alternating components (ripple).

The requirements specified in this standard are applicable to measuring relays and protection equipment in a new condition and all tests specified are type tests only.

The object of this standard is to state:

- definitions of terms used;
- test severity levels;
- test equipment;
- test set-up;
- test procedure;
- criteria for acceptance;
- test report.

2 Normative references

The following referenced documents are indispensable for the application 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 60255-6, *Electrical relays – Part 6: Measuring relays and protection equipment*

IEC 61000-4-11, *Electromagnetic compatibility (EMC) – Part 4-11: Testing and measurement techniques – Voltage dips, short interruptions and voltage variations immunity tests*

IEC 61000-4-17, *Electromagnetic compatibility (EMC) – Part 4-17: Testing and measurement techniques – Ripple on d.c. input power port immunity test*

IEC 61000-4-29, *Electromagnetic compatibility (EMC) – Part 4-29: Testing and measurement techniques – Voltage dips, short interruptions and voltage variations on d.c. input power port immunity tests*