Irish Standard
I.S. EN 60255-11:2010

Measuring relays and protection equipment -- Part 11: Voltage dips, short interruptions, variations and ripple on auxiliary power supply port (IEC 60255-11:2008 (EQV))

Incorporating amendments/corrigenda issued since publication:

This document replaces:	*This document is based on:* EN 60255-11:2010	*Published:* 22 January, 2010

This document was published under the authority of the NSAI and comes into effect on:

2 February, 2010

ICS number:
29.120.70

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I.S. EN 60255-11:2010

EUROPEAN STANDARD

NORME EUROPÉENNE

EUROPÄISCHE NORM

EN 60255-11

January 2010

ICS 29.120.70

English version

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

(IEC 60255-11:2008)

Relais de mesure et dispositifs de protection - Partie 11: Creux de tension, coupures brèves, variations et ondulation sur l'accès alimentation auxiliaire (CEI 60255-11:2008)

Messrelais und Schutzeinrichtungen - Teil 11: Spannungseinbrüche, Kurzzeitunterbrechungen, Spannungsschwankungen und Wechselanteil im Anschluss für die Hilfsstromversorgung (IEC 60255-11:2008)

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Up-to-date lists and bibliographical references concerning such national standards may be obtained on application to the Central Secretariat or to any CENELEC member.

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CENELEC members are the national electrotechnical committees of Austria, Belgium, Bulgaria, Croatia, Cyprus, the Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, the Netherlands, Norway, Poland, Portugal, Romania, Slovakia, Slovenia, Spain, Sweden, Switzerland and the United Kingdom.

CENELEC

European Committee for Electrotechnical Standardization
Comité Européen de Normalisation Electrotechnique
Europäisches Komitee für Elektrotechnische Normung

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Ref. No. EN 60255-11:2010 E

Foreword

The text of document 95/239/FDIS, future edition 2 of IEC 60255-11, prepared by IEC TC 95, Measuring relays and protection equipment, was submitted to the IEC-CENELEC parallel vote and was approved by CENELEC as EN 60255-11 on 2009-12-01.

The following dates were fixed:

– latest date by which the EN has to be implemented at national level by publication of an identical national standard or by endorsement	(dop)	2010-09-01
– latest date by which the national standards conflicting with the EN have to be withdrawn	(dow)	2012-12-01

Annex ZA has been added by CENELEC.

Endorsement notice

The text of the International Standard IEC 60255-11:2008 was approved by CENELEC as a European Standard without any modification.

In the official version, for Bibliography, the following note has to be added for the standard indicated:

IEC 61000-6-2	NOTE Harmonized as EN 61000-6-2.

Annex ZA
(normative)

Normative references to international publications with their corresponding European publications

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.

NOTE When an international publication has been modified by common modifications, indicated by (mod), the relevant EN/HD applies.

Publication	Year	Title	EN/HD	Year
IEC 60255-6	-	Electrical relays - Part 6: Measuring relays and protection equipment	EN 60255-6	-
IEC 61000-4-11	-	Electromagnetic compatibility (EMC) - Part 4-11: Testing and measurement techniques - Voltage dips, short interruptions and voltage variations immunity tests	EN 61000-4-11	-
IEC 61000-4-17	-	Electromagnetic compatibility (EMC) - Part 4-17: Testing and measurement techniques - Ripple on d.c. input power port immunity test	EN 61000-4-17	-
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	EN 61000-4-29	-

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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

1) The International Electrotechnical Commission (IEC) is a worldwide organization for standardization comprising all national electrotechnical committees (IEC National Committees). The object of IEC is to promote international co-operation on all questions concerning standardization in the electrical and electronic fields. To this end and in addition to other activities, IEC publishes International Standards, Technical Specifications, Technical Reports, Publicly Available Specifications (PAS) and Guides (hereafter referred to as "IEC Publication(s)"). Their preparation is entrusted to technical committees; any IEC National Committee interested in the subject dealt with may participate in this preparatory work. International, governmental and non-governmental organizations liaising with the IEC also participate in this preparation. IEC collaborates closely with the International Organization for Standardization (ISO) in accordance with conditions determined by agreement between the two organizations.
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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*