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Mätande reläer och skyddsutrustningar – Del 11: Provning av immunitet mot kortvariga spänningssänkningar, spänningsavbrott, spänningsvariationer och rippel i hjälpspänning

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

Som svensk standard gäller europastandarden EN 60255-11:2010. Den svenska standarden innehåller den officiella engelska språkversionen av EN 60255-11:2010.

Nationellt förord

Europastandarden EN 60255-11:2010

består av:

- **europastandardens ikraftsättningsdokument**, utarbetat inom CENELEC
- **IEC 60255-11, Second edition, 2008 - Measuring relays and protection equipment - Part 11: Voltage dips, short interruptions, variations and ripple on auxiliary power supply port**

utarbetad inom International Electrotechnical Commission, IEC.

Tidigare fastställd svensk standard SS-IEC 255-11, utgåva 1, 1983, gäller ej fr o m 2012-12-01.

Standarder underlättar utvecklingen och höjer elsäkerheten

Det finns många fördelar med att ha gemensamma tekniska regler för bl a säkerhet, prestanda, dokumentation, utförande och skötsel av elprodukter, elanläggningar och metoder. Genom att utforma sådana standarder blir säkerhetskraven tydliga och utvecklingskostnaderna rimliga samtidigt som marknadens acceptans för produkten eller tjänsten ökar.

Många standarder inom elområdet beskriver tekniska lösningar och metoder som åstadkommer den elsäkerhet som föreskrivs av svenska myndigheter och av EU.

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Stora delar av arbetet sker internationellt

Utformningen av standarder sker i allt väsentligt i internationellt och europeiskt samarbete. SEK är svensk nationalkommitté av International Electrotechnical Commission (IEC) och Comité Européen de Normalisation Electrotechnique (CENELEC).

Standardiseringsarbetet inom SEK är organiserat i referensgrupper bestående av ett antal tekniska kommittéer som speglar hur arbetet inom IEC och CENELEC är organiserat.

Arbetet i de tekniska kommittéerna är öppet för alla svenska organisationer, företag, institutioner, myndigheter och statliga verk. Den årliga avgiften för deltagandet och intäkter från försäljning finansierar SEKs standardiseringsverksamhet och medlemsavgift till IEC och CENELEC.

Var med och påverka!

Den som deltar i SEKs tekniska kommittéarbete har möjlighet att påverka framtida standarder och får tidig tillgång till information och dokumentation om utvecklingen inom sitt teknikområde. Arbetet och kontakterna med kollegor, kunder och konkurrenter kan gynnsamt påverka enskilda företags affärsutveckling och bidrar till deltagarnas egen kompetensutveckling.

Du som vill dra nytta av dessa möjligheter är välkommen att kontakta SEKs kansli för mer information.

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**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)

This European Standard was approved by CENELEC on 2009-12-01. CENELEC members are bound to comply with the CEN/CENELEC Internal Regulations which stipulate the conditions for giving this European Standard the status of a national standard without any alteration.

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.

This European Standard exists in three official versions (English, French, German). A version in any other language made by translation under the responsibility of a CENELEC member into its own language and notified to the Central Secretariat has the same status as the official versions.

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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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.

<u>Publication</u>	<u>Year</u>	<u>Title</u>	<u>EN/HD</u>	<u>Year</u>
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	-

CONTENTS

1	Scope and object.....	5
2	Normative references	5
3	Terms and definitions	6
4	Requirements	6
4.1	Test levels.....	6
4.2	Test requirements	6
5	Test equipment.....	8
6	Test set-up	8
6.1	General	8
6.2	Voltage dips	8
6.3	Voltage interruptions	8
6.4	Alternating component in d.c. (ripple)	8
6.5	Gradual shut-down/start-up test	8
6.6	Polarity inversion.....	9
7	Test procedure	9
8	Criteria for acceptance	9
9	Test report.....	10
	Bibliography.....	11
	Figure 1 – Gradual shut down/start up test.....	8
	Table 1 – Type, levels and duration of tests	7
	Table 2 – Criteria for acceptance	9

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*