

Svenska Elektriska Kommissionen, SEK

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Reläer – Del 5: Isolationskoordination för mätande reläer och skyddsutrustning – Fordringar och provning

Electrical relays –

Part 5: Insulation coordination for measuring relays and protection equipment –

Requirements and tests

Som svensk standard gäller europastandarden EN 60255-5:2001. Den svenska standarden innehåller den officiella engelska språkversionen av EN 60255-5:2001.

Nationellt förord

Europastandarden EN 60255-5:2001

består av:

- **europastandardens ikraftsättningsdokument**, utarbetat inom CENELEC
- **IEC 60255-5, Second edition, 2000 - Electrical relays - Part 5: Insulation coordination for measuring relays and protection equipment - Requirements and tests**

utarbetad inom International Electrotechnical Commission, IEC.

Tidigare utgiven svensk standard, SS-IEC 255-5, utgåva 1, 1983, gäller ej fr o m 2004-03-01.

Electrical relays
Part 5: Insulation coordination for measuring relays
and protection equipment -
Requirements and tests
(IEC 60255-5:2000)

Relais électriques
Partie 5: Coordination de l'isolement
des relais de mesure et des dispositifs
de protection -
Prescriptions et essais
(CEI 60255-5:2000)

Elektrische Relais
Teil 5: Isolationskoordination für
Meßrelais und Schutzeinrichtungen -
Anforderungen und Prüfungen
(IEC 60255-5:2000)

This European Standard was approved by CENELEC on 2001-03-01. 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, Czech Republic, Denmark, Finland, France, Germany, Greece, Iceland, Ireland, Italy, Luxembourg, Netherlands, Norway, Portugal, Spain, Sweden, Switzerland and United Kingdom.

CENELEC

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

Central Secretariat: rue de Stassart 35, B - 1050 Brussels

Foreword

The text of document 95/98/FDIS, future edition 2 of IEC 60255-5, 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 60255-5 on 2001-03-01.

This standard should be read in conjunction with HD 625.1 S1:1996.

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) 2001-12-01
- latest date by which the national standards conflicting
with the EN have to be withdrawn (dow) 2004-03-01

Annexes designated "normative" are part of the body of the standard.
Annexes designated "informative" are given for information only.
In this standard, annex ZA is normative and annexes A to D are informative.
Annex ZA has been added by CENELEC.

Endorsement notice

The text of the International Standard IEC 60255-5:2001 was approved by CENELEC as a European Standard without any modification.

Annex ZA (normative)

Normative references to international publications with their corresponding European publications

This European Standard incorporates by dated or undated reference, provisions from other publications. These normative references are cited at the appropriate places in the text and the publications are listed hereafter. For dated references, subsequent amendments to or revisions of any of these publications apply to this European Standard only when incorporated in it by amendment or revision. For undated references the latest edition of the publication referred to applies (including amendments).

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 60050-151	1978	International Electrotechnical Vocabulary (IEV) Chapter 151: Electrical and magnetic devices	-	-
IEC 60050-448	1995	Chapter 448: Power system protection	-	-
IEC 60060-1 + corr. March	1989 1990	High-voltage test techniques Part 1: General definitions and test requirements	HD 588.1 S1	1991
IEC 60085	1984	Thermal evaluation and classification of electrical insulation	HD 566 S1	1990
IEC 60112	1979	Method for determining the comparative and the proof tracking indices of solid insulating materials under moist conditions	HD 214 S2	1980
IEC 60255	Series	Electrical relays	EN 60255	Series
IEC 60255-21-1	1988	Part 21: Vibration, shock, bump and seismic tests on measuring relays and protection equipment -- Section 1: Vibration tests (sinusoidal)	EN 60255-21-1	1995
IEC 60255-21-2	1988	Part 21: Vibration, shock, bump and seismic tests on measuring relays and protection equipment -- Section 2: Shock and bump tests	EN 60255-21-2	1995
IEC 60255-21-3	1993	Part 21: Vibration, shock, bump and seismic tests on measuring relays and protection equipment -- Section 3: Seismic tests	EN 60255-21-3	1995
IEC 60664-1 (mod)	1992	Insulation coordination for equipment within low-voltage systems Part 1: Principles, requirements and tests	HD 625.1 S1 + corr. November	1996 1996

<u>Publication</u>	<u>Year</u>	<u>Title</u>	<u>EN/HD</u>	<u>Year</u>
IEC 61000-4-5	1995	Electromagnetic compatibility (EMC) Part 4-5: Testing and measurement techniques - Surge immunity test	EN 61000-4-5	1995
IEC 61180-1	1992	High-voltage test techniques for low- voltage equipment Part 1: Definitions, test and procedure requirements	EN 61180-1	1994
IEC 61180-2	1994	Part 2: Test equipment	EN 61180-2	1994

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ELECTRICAL RELAYS –

Part 5: Insulation coordination for measuring relays and protection equipment – Requirements and tests

1 Scope and object

This part of IEC 60255 gives general requirements for the insulation coordination of measuring relays and protection equipment.

NOTE 1 Unless otherwise stated, the term “relay(s)” is used as an abbreviation for the expression “measuring relays and protection equipment” in this standard.

In particular, this standard, specifies the following:

- definition of terms;
- guidance for the selection of clearances and creepage distances and other aspects related to the insulation of measuring relays and protection equipment;
- requirements for voltage tests and insulation resistance measurement.

This standard is applicable to the installation and use at altitudes up to 2 000 m of equipment having a rated a.c. voltage up to 1 000 V, with a rated frequency up to 65 Hz, or a d.c. voltage up to 1 500 V.

This standard also applies to associated auxiliary devices such as shunts, series resistors, transformers, etc., used and tested together with measuring relays and protection equipment as mentioned above, except where the devices are covered by other IEC publications, for example communication interfaces.

NOTE 2 Requirements for altitudes exceeding 2 000 m can be derived from table B.1.

2 Normative references

The following normative documents contain provisions which, through reference in this text, constitute provisions of this part of IEC 60255. For dated references, subsequent amendments to, or revisions of, any of these publications do not apply. However, parties to agreements based on this part of IEC 60255 are encouraged to investigate the possibility of applying the most recent editions of the normative documents indicated below. For undated references, the latest edition of the normative document referred to applies. Members of ISO and IEC maintain registers of currently valid International Standards.

IEC 60050(151):1978, *International Electrotechnical Vocabulary (IEV) – Chapter 151: Electrical and magnetic devices*

IEC 60050(448):1995, *International Electrotechnical Vocabulary – Chapter 448: Power system protection*

IEC 60060-1:1989, *High-voltage test techniques – Part 1: General definitions and test requirements*

IEC 60085:1984, *Thermal evaluation and classification of electrical insulation*