SVENSK STANDARD SS-EN 61243-5

Fastställd	Utgåva	Sida	Ingår i
2001-10-26	1	1 (1+61)	SEK Område 78

Svenska Elektriska Kommissionen, SEK

Arbete med spänning – Spänningsprovare – Del 5: Spänningsdetekterande system (VDS)

Live working – Voltage detectors – Part 5: Voltage detecting systems (VDS)

Som svensk standard gäller europastandarden EN 61243-5:2001. Den svenska standarden innehåller den officiella engelska språkversionen av EN 61243-5:2001.

Nationellt förord

Europastandarden EN 61243-5:2001

består av:

– **europastandardens ikraftsättningsdokument,** utarbetat inom CENELEC

– **IEC 61243-5, First edition, 1997 - Live working - Voltage detectors - Part 5: Voltage detecting sytems (VDS)**

utarbetad inom International Electrotechnical Commission, IEC.

ICS 22.260.99

Denna standard är fastställd av Svenska Elektriska Kommissionen, SEK, som också kan lämna upplysningar om **sakinnehållet** i standarden.
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EUROPEAN STANDARD **EN 61243-5**

NORME EUROPÉENNE

EUROPÄISCHE NORM May 2001

ICS 22.260.99

English version

Live working - Voltage detectors
Part 5: Voltage detecting systems (VDS)
(IEC 61243-5:1997, modified)

Travaux sous tension -
Détecteurs de tension
Partie 5: Systèmes détecteurs de tension (VDS)
(CEI 61243-5:1997, modifiée)

Arbeiten unter Spannung -
Spannungsprüfer
Teil 5: Spannungsprüfsysteme (VDS)
(IEC 61243-5:1997, modifiziert)

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

Ref. No. EN 61243-5:2001 E

Foreword

The text of the International Standard IEC 61243-5:1997, prepared by IEC TC 78, Live working, together with the common modifications prepared by the Technical Committee CENELEC TC 78, Equipment and tools for live working, was submitted to the formal vote and was approved by CENELEC as EN 61243-5 on 2000-11-01.

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) 2001-11-01

- latest date by which the national standards conflicting with the EN have to be withdrawn (dow) 2003-11-01

Annexes designated "normative" are part of the body of the standard.
Annexes designated "informative" are given for information only.
In this standard, annexes A, B, C and ZB are normative and annexes D, E, F and ZA are informative.
Annexes ZA and ZB have been added by CENELEC.

Endorsement notice

The text of the International Standard IEC 61243-5:1997 was approved by CENELEC as a European Standard with agreed common modifications as given below.

COMMON MODIFICATIONS

[redacted]

Annex ZB
(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.

Publication	Year	Title	EN/HD	Year
IEC 60050-151	1978	International Electrotechnical Vocabulary (IEV) Chapter 151: Electrical and magnetic devices	-	-
IEC 60060-1 + corr. March	1989 1990	High-voltage test techniques Part 1: General definitions and test requirements	HD 588.1 S1	1991
IEC 60068-2-3	1969	Basic environmental testing procedures Part 2: Tests - Test Ca: Damp heat, steady state	HD 323.2.3 S2[1)]	1987
IEC 60068-2-6 + corr. March	1995 1995	Environmental testing Part 2: Tests - Test Fc and guidance: Vibration (sinusoidal)	EN 60068-2-6	1995
IEC 60068-2-11	1981	Part 2: Tests - Test Ka: Salt mist	EN 60068-2-11	1999
IEC 60068-2-14	1984	Part 2: Tests - Test N: Change of temperature	EN 60068-2-14[2)]	1999
IEC 60068-2-63	1991	Part 2: Test methods - Test Eg: Impact, spring hammer	EN 60068-2-63	1994
IEC 60096-0-1	1990	Radio-frequency cables Part 0: Guide to the design of detail specifications -- Section 1: Coaxial cables	-	-
IEC 60225	1966[3)]	Octave, half-octave and third-octave band filters intended for the analysis of sounds and vibrations	-	-
IEC 60227-3 (mod)	1993	Polyvinyl chloride insulated cables of rated voltages up to and including 450/750 V Part 3: Non-sheathed cables for fixed wiring	HD 21.3 S3	1995

1) HD 323.2.3 S2 includes A1:1984 to IEC 60068-2-3.

2) EN 60068-2-14 includes A1:1986 to IEC 60068-2-14.

3) IEC 60225 is superseded by IEC 61260:1995, which is harmonized as EN 61260:1995.

Publication	Year	Title	EN/HD	Year
IEC 60352-1	1983	Solderless connections Part 1: Solderless wrapped connections - General requirements, test methods and practical guidance	EN 60352-1[4)]	1994
IEC 60352-2	1990	Part 2: Solderless crimped connections - General requirements, test methods and practical guidance	EN 60352-2	1994
IEC 60352-5	1995	Part 5: Solderless press-in connections - General requirements, test methods and practical guidance	EN 60352-5[5)]	1995
IEC 60384 (mod)	series	Fixed capacitors for use in electronic equipment	EN 60384	series
IEC 60529	1989	Degrees of protection provided by enclosures (IP Code)	EN 60529 + corr. May	1991 1993
IEC 60536	1976	Classification of electrical and electronic equipment with regard to protection against electric shock	HD 366 S1[6)]	1977
IEC 60603-11	1992	Connectors for frequencies below 3 MHz for use with printed boards Part 11: Detail specification for concentric connectors (dimensions for free connectors and fixed connectors)	-	-
IEC 60651	1979	Sound level meters	EN 60651	1994
IEC 60694	1980	Common clauses for high-voltage switchgear and controlgear standards	HD 448 S4[7)]	1996
IEC 60760	1989	Flat, quick-connect terminations	-	-
IEC 60999-1	1990	Connecting devices - Safety requirements for screw-type and screwless-type clamping units for electrical copper conductors Part 1: General requirements and particular requirements for conductors from 0,5 mm² up to 35 mm² (included)	EN 60999-1[8)]	1993
IEC 61010-2-031	1993	Safety requirements for electrical equipment for measurement, control and laboratory use Part 2-031: Particular requirements for hand-held probe assemblies for electrical measurement and test	EN 61010-2-031	1994

4) EN 60352-1:1994 is superseded by EN 60352-1:1997, which is based on IEC 60352-1:1997.

5) EN 60352-5:1995 is superseded by EN 60352-5:2001, which is based on IEC 60352-5:2001.

6) HD 366 S1 is superseded by EN 61140:2001, which is based on IEC 61140:1997.

7) HD 448 S4 is superseded by EN 60694:1996 + corrigendum May 1999, which is based on IEC 60694:1996.

8) EN 60999-1:1993 is superseded by EN 60999-1:2000, which is based on IEC 60999-1:1999.

Publication	Year	Title	EN/HD	Year
ISO 3740	1980[9)]	Acoustics – Determination of sound power levels of noise sources - Guidelines for the use of basic standards and for the preparation of noise test codes	-	-
ISO 3744	1994	Acoustics – Determination of sound power levels of noise sources using sound pressure - Engineering method in an essentially free field over a reflecting plane	EN ISO 3744	1995
ISO 3745	1977	Acoustics – Determination of sound power levels of noise sources - Precision methods for anechoic and semi-anechoic rooms	-	-
ISO 3746	1995	Acoustics – Determination of sound power levels of noise sources using sound pressure - Survey method using an enveloping measurement surface over a reflecting plane	EN ISO 3746	1995
QC 001005	1994	Register of firms, products and services approved under the IECQ System, including ISO 9000	-	-

9) ISO 3740:2000 is harmonized as EN ISO 3740:2000.

CONTENTS

LIVE WORKING – VOLTAGE DETECTORS –

Part 5 : Voltage detecting systems (VDS)

1 Scope

This part of IEC 61243 is applicable to voltage detecting systems that are single-pole and are capacitively-coupled to live parts. They are used to detect the presence or absence of operating voltage on a.c. electrical systems for voltages from 1 kV to 52 kV, and for frequencies from $16^{2}/_{3}$ Hz to 60 Hz.

This standard is also applicable to phase comparators designed for voltage detecting systems.

EMC tests are not included as, at the present time, not enough information about minimum requirements is available.

NOTES

1 Except where specified otherwise, all the voltages defined in this standard refer to values of phase-to-phase voltages of three-phase systems. In other systems, the applicable phase-to-phase or phase-to-earth voltages are used to determine the operating voltage.

2 Voltage detecting systems based on fundamentally different principles (for example optical systems, resistive coupling elements) are not covered in this standard but should meet the requirements of this standard where applicable.

3 For frequencies differing from 50 Hz, the values C_s and U_t according to table 1 are valid. The threshold values for I_t have to be changed accordingly.

4 If in an electrical installation it is verified that the installation is dead by other means than using a voltage detecting system, a different device which can be termed voltage indicating system may be used for service information about the voltage state with reduced requirements concerning tests for clear and reliable indication. If so, this should be clearly stated and made explicit by the manufacturer (see annex F for further details).

2 Normative references

The following normative documents contain provisions which, through reference in this text, constitute provisions of this part of IEC 61243. At the time of publication, the editions indicated were valid. All normative documents are subject to revision, and parties to agreements based on this part of IEC 61243 are encouraged to investigate the possibility of applying the most recent editions of the normative documents indicated below. Members of IEC and ISO maintain registers of currently valid International Standards.

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

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

IEC 60068-2-3: 1969, *Environmental testing – Part 2: Tests – Test Ca: Damp heat, steady state*