SVENSK STANDARD SS-EN 60255-26

Fastställd	Utgåva	Sida	Ansvarig kommitté
2010-01-25	2	1 (1+16)	SEK TK 94/95

Mätande reläer och skyddsutrustingar – Del 26: EMC-fordringar

Measuring relays and protection equipment – Part 26: Electromagnetic compatibility requirements

Som svensk standard gäller europastandarden EN 60255-26:2009. Den svenska standarden innehåller den officiella engelska språkversionen av EN 60255-26:2009.

Nationellt förord

Europastandarden EN 60255-26:2009

består av:

– **europastandardens ikraftsättningsdokument,** utarbetat inom CENELEC
– **IEC 60255-26, Second edition, 2008 - Measuring relays and protection equipment - Part 26: Electromagnetic compatibility requirements**

utarbetad inom International Electrotechnical Commission, IEC.

Tidigare fastställd svensk standard SS-EN 60255-26, utgåva 1, 2005 och SS-EN 50263, utgåva 1, 2000, gäller ej fr o m 2012-09-01.

ICS 29.120.70; 33.100.10; 33.100.20

Denna standard är fastställd av SEK Svensk Elstandard,
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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.

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Stora delar av arbetet sker internationellt

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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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EUROPEAN STANDARD

NORME EUROPÉENNE

EUROPÄISCHE NORM

EN 60255-26

October 2009

ICS 29.120.70; 33.100.10; 33.100.20

Supersedes EN 50263:1999 and EN 60255-26:2005

English version

Measuring relays and protection equipment - Part 26: Electromagnetic compatibility requirements

(IEC 60255-26:2008)

Relais de mesure et dispositifs de protection - Partie 26: Exigences de compatibilité électromagnétique (CEI 60255-26:2008)

Messrelais und Schutzeinrichtungen - Teil 26: Anforderungen an die elektromagnetische Verträglichkeit (IEC 60255-26:2008)

CENELEC

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

Central Secretariat: Avenue Marnix 17, B - 1000 Brussels

Ref. No. EN 60255-26:2009 E

SEK Svensk Elstandard

Foreword

The text of document 95/230/FDIS, future edition 2 of IEC 60255-26, 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 60255-26 on 2009-09-01.

This European Standard supersedes EN 60255-26:2005 and EN 50263:1999.

The main difference with respect to EN 60255-26:2005 concerns the reference to EN 61000-4 series and to EN 55022.

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)	2010-06-01
– latest date by which the national standards conflicting with the EN have to be withdrawn	(dow)	2012-09-01

Annexes ZA and ZZ have been added by CENELEC.

Endorsement notice

The text of the International Standard IEC 60255-26:2008 was approved by CENELEC as a European Standard without any modification.

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 60255-11	1979	Electrical relays - Part 11: Interruptions to and alternating component (ripple) in d.c. auxiliary energizing quantity of measuring relays	-	-
IEC 60255-22-1	2007	Measuring relays and protection equipment - Part 22-1: Electrical disturbance tests - 1 MHz burst immunity tests	EN 60255-22-1	2008
IEC 60255-22-2	1996	Electrical relays - Part 22: Electrical disturbance tests for measuring relays and protection equipment - Section 2: Electrostatic discharge tests	EN 60255-22-2[1)]	1996
IEC 60255-22-3	2007	Measuring relays and protection equipment - Part 22-3: Electrical disturbance tests - Radiated electromagnetic field immunity	EN 60255-22-3	2008
IEC 60255-22-4	2002	Electrical relays - Part 22-4: Electrical disturbance tests for measuring relays and protection equipment - Electrical fast transient/burst immunity test	EN 60255-22-4[2)]	2002
IEC 60255-22-5	2002	Electrical relays - Part 22-5: Electrical disturbance tests for measuring relays and protection equipment - Surge immunity test	EN 60255-22-5	2002
IEC 60255-22-6	2001	Electrical relays - Part 22-6: Electrical disturbance tests for measuring relays and protection equipment - Immunity to conducted disturbances induced by radio frequency fields	EN 60255-22-6	2001
IEC 60255-22-7	2003	Electrical relays - Part 22-7: Electrical disturbance tests for measuring relays and protection equipment - Power frequency immunity tests	EN 60255-22-7	2003
IEC 60255-25	2000	Electrical relays - Part 25: Electromagnetic emission tests for measuring relays and protection equipment	EN 60255-25	2000
IEC 61000-4-2 A1 A2	1995 1998 2000	Electromagnetic compatibility (EMC) - Part 4-2: Testing and measurement techniques - Electrostatic discharge immunity test	EN 61000-4-2[3)] A1 A2	1995 1998 2001

[1)] EN 60255-22-2 is superseded by EN 60255-22-2:2008, which is based on IEC 60255-22-2:2008.

[2)] EN 60255-22-4 is superseded by EN 60255-22-4:2008, which is based on IEC 60255-22-4:2008.

[3)] EN 61000-4-2 is superseded by EN 61000-4-2:2009, which is based on IEC 61000-4-2:2008.

Publication	Year	Title	EN/HD	Year
IEC 61000-4-3	2006	Electromagnetic compatibility (EMC) - Part 4-3: Testing and measurement techniques - Radiated, radio-frequency, electromagnetic field immunity test	EN 61000-4-3	2006
IEC 61000-4-4	2004	Electromagnetic compatibility (EMC) - Part 4-4: Testing and measurement techniques - Electrical fast transient/burst immunity test	EN 61000-4-4	2004
IEC 61000-4-5	2005	Electromagnetic compatibility (EMC) - Part 4-5: Testing and measurement techniques - Surge immunity test	EN 61000-4-5	2006
IEC 61000-4-6 + A1 + A2	2003 2004 2006	Electromagnetic compatibility (EMC) - Part 4-6: Testing and measurement techniques - Immunity to conducted disturbances, induced by radio-frequency fields	EN 61000-4-6[4)] + corr. August	2007 2007
IEC 61000-4-8 A1	1993 2000	Electromagnetic compatibility (EMC) - Part 4-8: Testing and measurement techniques - Power frequency magnetic field immunity test	EN 61000-4-8 A1	1993 2001
IEC 61000-4-16 A1	1998 2001	Electromagnetic compatibility (EMC) - Part 4-16: Testing and measurement techniques - Test for immunity to conducted, common mode disturbances in the frequency range 0 Hz to 150 kHz	EN 61000-4-16 A1	1998 2004
IEC 61000-4-18	2006	Electromagnetic compatibility (EMC) - Part 4-18: Testing and measurement techniques - Damped oscillatory wave immunity test	EN 61000-4-18 + corr. September	2007 2007
IEC 61000-4-29	2000	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	2000
CISPR 22 (mod) A1 A2	2005 2005 2006	Information technology equipment - Radio disturbance characteristics - Limits and methods of measurement	EN 55022 A1 -	2006 2007 -

[4)] EN 61000-4-6 is superseded by EN 61000-4-6:2009, which is based on IEC 61000-4-6:2008.

CONTENTS

INTRODUCTION

This part of IEC 60255 specifies all of the requirements for electromagnetic compatibility in a single document. As such, it is considered as an overview document for measuring relays and protection equipment. The detailed test procedures are given in other referenced standards.

MEASURING RELAYS AND PROTECTION EQUIPMENT –

Part 26: Electromagnetic compatibility requirements

1 Scope and object

This part of IEC 60255 is applicable to measuring relays and protection equipment for power system protection, including the control, monitoring and process interface equipment used with those systems.

This standard specifies the essential requirements for electromagnetic compatibility for measuring relays and protection equipment intended to be used at industrial locations.

Measuring relays and protection equipment used in substations and power plants may require higher immunity test levels.

For equipment not incorporating electronic circuits, for example electromechanical relays, tests according to this standard are not required.

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.

1.1 Emission

The object of this standard is to specify limits and test methods, for measuring relays and protection equipment in relation to electromagnetic emissions which may cause interference in other equipment.

These emission limits represent electromagnetic compatibility essential requirements and have been selected to ensure that the disturbances generated by measuring relays and protection equipment, operated normally in substations and power plants, do not exceed a level which could prevent other equipment from operating as intended.

Test requirements are specified for the enclosure and power supply ports.

1.2 Immunity

The object of this standard is to specify the essential immunity test requirements for measuring relays and protection equipment in relation to continuous and transient, conducted and radiated disturbances, including electrostatic discharges.

These test requirements represent the essential electromagnetic compatibility immunity requirements selected to ensure an adequate level of immunity for measuring relays and protection equipment.

NOTE 1 Safety considerations are not covered in this standard.

NOTE 2 In special cases, situations will arise where the levels of disturbance may exceed the levels specified in this standard, for example where a hand-held transmitter is used in close proximity to measuring relays and protection equipment. In these instances, special precautions may have to be employed.

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 60255-11:1979, *Electrical relays – Part 11: Interruptions to and alternating component (ripple) in d.c. auxiliary energizing quantity of measuring relays*

IEC 60255-22-1:2007, *Measuring relays and protection equipment – Part 22-1: Electrical disturbance tests – 1 MHz burst immunity tests*

IEC 60255-22-2:1996, *Electrical relays – Part 22: Electrical disturbance tests for measuring relays and protection equipment – Section 2: Electrostatic discharge tests*

IEC 60255-22-3:2007, *Measuring relays and protection equipment – Part 22-3: Electrical disturbance tests – Radiated electromagnetic field immunity*

IEC 60255-22-4:2002, *Electrical relays – Part 22-4: Electrical disturbance tests for measuring relays and protection equipment – Electrical fast transient/burst immunity test*

IEC 60255-22-5:2002, *Electrical relays – Part 22-5: Electrical disturbance tests for measuring relays and protection equipment – Surge immunity test*

IEC 60255-22-6:2001, *Electrical relays – Part 22-6: Electrical disturbance tests for measuring relays and protection equipment – Immunity to conducted disturbances induced by radio frequency fields*

IEC 60255-22-7:2003, *Electrical relays – Part 22-7: Electrical disturbance tests for measuring relays and protection equipment – Power frequency immunity tests*

IEC 60255-25:2000, *Electrical relays – Part 25: Electromagnetic emission tests for measuring relays and protection equipment*

CISPR 22:2006, *Information technology equipment – Radio disturbance characteristics – Limits and methods of measurement*

IEC 61000-4-2:2001, *Electromagnetic compatibility (EMC) – Part 4-2: Testing and measurement techniques – Electrostatic discharge immunity test*

IEC 61000-4-3:2006, *Electromagnetic compatibility (EMC) – Part 4-3 : Testing and measurement techniques – Radiated, radio-frequency, electromagnetic field immunity test*

IEC 61000-4-4:2004, *Electromagnetic compatibility (EMC) – Part 4-4: Testing and measurement techniques – Electrical fast transient/burst immunity test*

IEC 61000-4-5:2005, *Electromagnetic compatibility (EMC) – Part 4-5: Testing and measurement techniques – Surge immunity test*

IEC 61000-4-6:2006, *Electromagnetic compatibility (EMC) – Part 4-6: Testing and measurement techniques – Immunity to conducted disturbances, induced by radio-frequency fields*

IEC 61000-4-8:2001, *Electromagnetic compatibility (EMC) – Part 4-8: Testing and measurement techniques – Power frequency magnetic field immunity test*

IEC 61000-4-16:2002, *Electromagnetic compatibility (EMC) – Part 4-16: Testing and measurement techniques – Test for immunity to conducted, common mode disturbances in the frequency range 0 Hz to 150 kHz*

IEC 61000-4-18:2006, *Electromagnetic compatibility (EMC) – Part 4-18: Testing and measurement techniques – Damped oscillatory wave immunity test*

IEC 61000-4-29:2000, *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*