SVENSK STANDARD SS-EN 61108-3

Fastställd	Utgåva	Sida	Ansvarig kommitté
2010-09-27	1	1 (1+60)	SEK TK 80

Utrustning för satellitbaserad positionsbestämning – Del 3: Galileo-mottagare – Tekniska fordringar, provningsmetoder och erforderliga provningsresultat

Maritime navigation and radiocommunication equipment and systems – Global navigation satellite systems (GNSS) – Part 3: Galileo receiver equipment – Performance requirements, methods of testing and required test results

Som svensk standard gäller europastandarden EN 61108-3:2010. Den svenska standarden innehåller den officiella engelska språkversionen av EN 61108-3:2010.

Nationellt förord

Europastandarden EN 61108-3:2010

består av:

– **europastandardens ikraftsättningsdokument,** utarbetat inom CENELEC

– **IEC 61108-3, First edition, 2010 - Maritime navigation and radiocommunication equipment and systems - Global navigation satellite systems (GNSS) - Part 3: Galileo receiver equipment - Performance requirements, methods of testing and required test results**

utarbetad inom International Electrotechnical Commission, IEC.

ICS 47.020.70

Denna standard är fastställd av SEK Svensk Elstandard,
som också kan lämna upplysningar om **sakinnehållet** i standarden.
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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

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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EUROPEAN STANDARD

NORME EUROPÉENNE

EUROPÄISCHE NORM

EN 61108-3

June 2010

ICS 47.020.70

English version

Maritime navigation and radiocommunication equipment and systems - Global navigation satellite systems (GNSS) - Part 3: Galileo receiver equipment - Performance requirements, methods of testing and required test results

(IEC 61108-3:2010)

Matériels et systèmes de navigation et de radiocommunication maritimes - Système mondial de navigation par satellite (GNSS) - Partie 3 : Equipement pour récepteur Galileo - Exigences d'exploitation et de fonctionnement, méthodes d'essai et résultats d'essai exigés (CEI 61108-3:2010)

Navigations- und Funkkommunikationsgeräte und -systeme für die Seeschifffahrt – Weltweite Navigations-Satellitensysteme (GNSS) - Teil 3: Galileo – Empfangsanlagen – Leistungsanforderungen, Prüfverfahren und geforderte Prüfergebnisse (IEC 61108-3:2010)

CENELEC

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

Management Centre: Avenue Marnix 17, B - 1000 Brussels

Ref. No. EN 61108-3:2010 E

SEK Svensk Elstandard

Foreword

The text of document 80/590/FDIS, future edition 1 of IEC 61108-3, prepared by IEC TC 80, Maritime navigation and radiocommunication equipment and systems, was submitted to the IEC-CENELEC parallel vote and was approved by CENELEC as EN 61108-3 on 2010-06-01.

Attention is drawn to the possibility that some of the elements of this document may be the subject of patent rights. CEN and CENELEC shall not be held responsible for identifying any or all such patent rights.

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)	2011-03-01
– latest date by which the national standards conflicting with the EN have to be withdrawn	(dow)	2013-06-01

Annex ZA has been added by CENELEC.

Endorsement notice

The text of the International Standard IEC 61108-3:2010 was approved by CENELEC as a European Standard without any modification.

In the official version, for Bibliography, the following notes have to be added for the standards indicated:

IEC 61108 series	NOTE	Harmonized in EN 61108 series (not modified).
IEC 61162-2	NOTE	Harmonized as EN 61162-2.

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 60721-3-6	1987	Classification of environmental conditions - Part 3: Classification of groups of environmental parameters and their severities - Ship environment	EN 60721-3-6[1)]	1993
IEC 60945	-	Maritime navigation and radiocommunication equipment and systems - General requirements - Methods of testing and required test results	EN 60945	-
IEC 61108-1	2003	Maritime navigation and radiocommunication equipment and systems - Global navigation satellite systems (GNSS) - Part 1: Global positioning system (GPS) - Receiver equipment - Performance standards, methods of testing and required test results	EN 61108-1	2003
IEC 61108-4	-	Maritime navigation and radiocommunication equipment and systems - Global navigation satellite systems (GNSS) - Part 4: Shipborne DGPS and DGLONASS maritime radio beacon receiver equipment - Performance requirements, methods of testing and required test results	EN 61108-4	-
IEC 61162	Series	Maritime navigation and radiocommunication equipment and systems - Digital interfaces	EN 61162	Series
IEC 61162-1	-	Maritime navigation and radiocommunication equipment and systems - Digital interfaces - Part 1: Single talker and multiple listeners	EN 61162-1	-
IEC 62288	-	Maritime navigation and radiocommunication equipment and systems - Presentation of navigation-related information on shipborne navigational displays - General requirements, methods of testing and required test results	EN 62288	-
IMO Resolution A.694(17)	-	General requirements for shipborne radio equipment forming part of the global maritime distress and safety system (GMDSS) and for electronic navigational aids	-	-

[1)] EN 60721-3-6 includes A1 to IEC 60721-3-6.

Publication	Year	Title	EN/HD	Year
IMO Resolution A.915(22)	-	Revised maritime policy and requirements for a future Global Navigation Satellite System (GNSS)	-	-
IMO Resolution A.953(23)	-	World-wide radionavigation system	-	-
IMO Resolution MSC.233(82)	-	Adoption of the Performance Standards for Shipborne GALILEO Receiver Equipment	-	-
ITU-R Recommendation M.823-3	-	Technical characteristics of differential transmissions for global navigation satellite systems from maritime radio beacons in the frequency band 283.5-315 kHz in Region 1 and 285-325 kHz in Regions 2 and 3	-	-
RTCM 10402 version 2.4	-	RTCM Recommended Standards for Differential GNSS (Global Navigation Satellite Systems) Service	-	-

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MARITIME NAVIGATION AND RADIOCOMMUNICATION EQUIPMENT AND SYSTEMS – GLOBAL NAVIGATION SATELLITE SYSTEMS (GNSS) –

Part 3: Galileo receiver equipment – Performance requirements, methods of testing and required test results

1 Scope

This part of IEC 61108 specifies the minimum performance standards, methods of testing and required test results for Galileo shipborne receiver equipment, based on IMO resolution MSC.233(82), which uses the signals from the Galileo Global Navigation Satellite System in order to determine position. It takes account of the general requirements given in IMO resolution A.694(17) and is associated with IEC 60945. When a requirement in this standard is different from IEC 60945, the requirement in this standard takes precedence. It also takes account, as appropriate, of requirements for the presentation of navigation-related information on shipborne navigational displays given in IMO resolution MSC.191(79) and is associated with IEC 62288.

A description of the Galileo Open Service and Safety of Life Service is given in the Galileo interface control documents (see Bibliography). This receiver standard applies to navigation in ocean waters for the open service and harbour entrances, harbour approaches and coastal waters for the Safety of Life service, as defined in IMO resolution A.953(23).

All text of this standard, whose meaning is identical to that in IMO resolution MSC.233(82), is printed in *italics* and the resolution and paragraph numbers are indicated in brackets i.e. (M.233/A1.2).

The requirements in Clause 4 are cross-referenced to the tests in Clause 5 and vice versa.

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 60721-3-6:1987, *Classification of environmental conditions – Part 3-6: Classification of groups of environmental parameters and their severities – Ship environment*

IEC 60945, *Maritime navigation and radiocommunication equipment and systems – General requirements – Methods of testing and required test results*

IEC 61108-1:2003, *Maritime navigation and radiocommunication equipment and systems – Global navigation satellite systems (GNSS) – Part 1: Global positioning system (GPS) – Receiver equipment – Performance standards, methods of testing and required test results*

IEC 61108-4, *Maritime navigation and radiocommunication equipment and systems – Global navigation satellite systems (GNSS) – Part 4: Shipborne DGPS and DGLONASS maritime radio beacon receiver equipment – Performance requirements, methods of testing and required test results*

IEC 61162 (all parts), *Maritime navigation and radiocommunication equipment and systems – Digital interfaces*

IEC 61162-1, *Maritime navigation and radiocommunication equipment and systems – Digital interfaces – Part 1: Single talker and multiple listeners*

IEC 62288, *Maritime navigation and radiocommunication equipment and systems – Presentation of navigation-related information on shipborne navigational displays – General requirements – Methods of testing and required test results*

IMO resolution A.694(17), *General requirements for shipborne radio equipment forming part of the Global maritime distress and safety system (GMDSS) and for electronic navigational aids*

IMO resolution A.915(22), *Revised maritime policy and requirements for a future Global Navigation Satellite System (GNSS)*

IMO resolution A.953(23), *World-wide radionavigation system*

IMO resolution MSC.233(82), *Adoption of the Performance Standards for Shipborne GALILEO Receiver Equipment*

ITU-R Recommendation M.823-3, *Technical characteristics of differential transmissions for Global Navigation Satellite Systems from maritime radio beacons in the frequency band 283.5-315 kHz in Region 1 and 285-325 kHz in Regions 2 and 3*

RTCM 10402 RTCM Recommended Standards for Differential GNSS (Global Navigation Satellite Systems) Service, Version 2.4