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Kommunikationssystem för marina tillämpningar – Larmsystem med röstannonsering

Public-address-general-emergency-alarm-system, communication-system for marine applications

Som svensk standard gäller europastandarden EN 50695:2021. Den svenska standarden innehåller den officiella engelska språkversionen av EN 50695:2021.

Standarder underlättar utvecklingen och höjer elsäkerheten

Det finns många fördelar med att ha gemensamma tekniska regler för bl a mätning, säkerhet och provning och för utförande, skötsel och dokumentation av elprodukter och elanläggningar.

Genom att utforma sådana standarder blir säkerhetsfordringar tydliga och utvecklingskostnaderna rimliga samtidigt som marknadens acceptans för produkten eller tjänsten ökar.

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SEK samordnar svenska intressenters medverkan i SEKs tekniska kommittéer och stödjer svenska experters medverkan i internationella och europeiska projekt.

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).

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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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English Version

**Public-address-general-emergency-alarm-system,
communication-system for marine applications**

Dispositifs de communication avec le public et systèmes
d'alarme générale en cas de situation critique pour
applications maritimes

Lautsprecher-Durchsage-System-General-Notfallalarm-
System, Kommunikations-System für Marine-Anwendungen

This European Standard was approved by CENELEC on 2021-04-26. 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 CEN-CENELEC Management Centre 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 CEN-CENELEC Management Centre has the same status as the official versions.

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

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Contents		Page
European foreword		3
Introduction		4
1	Scope	5
2	Normative references	6
3	Terms, definitions and abbreviations	6
4	Test requirements	9
5	Generic Performance, Safety, Marine Environmental and EMC	10
6	External interfaces	11
7	General functions	15
8	Audio performance	20
9	Systems failures, redundancies, back-up and fall-back arrangements	31
10	Loudspeakers	37
11	Information requirements for system compilation	38
12	Unauthorized modification of software configuration	39
Bibliography		40

European foreword

This document (EN 50695:2021) has been prepared by CLC/BTTF 157-1 "Public address and general emergency alarm systems".

The following dates are fixed:

- latest date by which this document has to be (dop) 2022-04-26
implemented at national level by publication of
an identical national standard or by
endorsement
- latest date by which the national standards (dow) 2024-04-26
conflicting with this document have to be
withdrawn

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

The EU-Commission has received requests from stakeholders for the development of standards for public address and general emergency alarm systems (entry A.2/1.5 in Annex A.2 of Directive 96/98/EC as amended by Commission Directive (EU) 2015/559) and therefore requests the European standardization organisations start the development of the respective standards.

The development of standards for public address and general emergency alarm systems is necessary because these systems are very important for safety on board and they are exposed to specific conditions (e.g. moisture, salt) which do not occur in other circumstances. The legislative provisions will detail the modalities for assessing that equipment.

The availability of testing standards will allow these products to be included in the scope of Directive 2014/90/EU, which in turn will allow them to be conformity assessed by a notified body and to affix the wheel mark.

Introduction

Public address and general emergency alarm systems have the primary purpose to inform persons on board of ships of emergency situations, and to enable the ship's officers relay voice messages to persons on board those ships in emergency situations.

EN 50695 has been written in pursuit of a request of the European Commission for a standard on equipment for public address and general emergency alarm systems (PA, GA and PAGA systems). The European Commission issued this request with the intention of taking this standard on board the Implementing Regulations belonging to the Marine Equipment Directive (MED), with the aim to enable and require MED certification for equipment for public address and general emergency alarm systems (PA, GA and PAGA systems). This will ensure that such equipment complies with all applicable requirements to that equipment set by the International Maritime Organization (IMO) in SOLAS 1974 and the LSA-code, before it is installed on board a ship.

Equipment compliant with this standard, certified according to the Marine Equipment Directive, can thus be used to engineer and install a public address and general emergency alarm system on board a ship flying the flag of an EU member state.

EN 50695 has been designed to make use of existing standards where possible, and specifies clarifications of requirements in other standards, additional requirements and methods of test and required test results where necessary to satisfy the IMO requirements.

Equipment based on EN 54 could be used as basis for PA and PAGA systems when additionally, compliant with this document.

1 Scope

This document describes operational and performance requirements, methods of testing and required test results for components of public address systems (PA), general emergency alarm systems (GA) and public address general emergency alarm systems (PAGA) for marine applications as in Table 1 in support of the requirements of IMO for such systems, while it is up to the manufacturer to define the components to be type approved together or separately, to build up a system.

NOTE 1 This document does not include system engineering for installation on board nor installation requirements.

This document refers as much as possible to relevant established standards. Where relevant standards do not exist or are not precise enough, this document will describe additionally own operational and performance requirements, methods of testing and required test results.

NOTE 2 All text of this document, whose wording is identical to that of IMO circular MSC.808 or to SOLAS convention requirements, is printed in *italics*, and the resolution and associated paragraph numbers are indicated in brackets.

Table 1 describes the applicable IMO requirements for each combination of ship category and type of system.

Table 1 — Product-ship type matrix

	GA	PA	PAGA
Cargo ship	SOLAS reg. II-2/12 .1 and .2 SOLAS reg. III/6.4 LSA Code 7.2.1 Res. A.1021(26) 5.10	LSA Code 7.2.2	SOLAS reg. II-2/12 .1 and .2 SOLAS reg. III/6.4 LSA Code 7.2 Res. A.1021(26) 5.8
Passenger ship (not SRtP)	SOLAS reg. II-2/12 .1 and .2 SOLAS reg. III/6.4 LSA Code 7.2.1 Res. A.1021(26) 5.10	SOLAS reg. II-2/12 .1 and .3 SOLAS reg. III/6.5 LSA Code 7.2.2 MSC/Circ.808	SOLAS reg. II-2/12 .1, .2 and .3 SOLAS reg. III/6.4, 6.5 LSA Code 7.2 A.1021(26) 5.8 MSC/Circ.808.
Passenger ship (SRtP)	SOLAS reg. II-2/12 .1 and .2 SOLAS reg. III/6.4 LSA Code 7.2.1 Res. A.1021(26) 5.10	SOLAS reg. II-2/12 .1 and .3 SOLAS reg. III/6.5 LSA Code 7.2.2 MSC/Circ.808 SOLAS reg. II-2/21&22 MSC.1/Circ.1369/Add.1	SOLAS reg. II-2/12 .1, .2 and .3 SOLAS reg. III/6.4, 6.5 LSA Code 7.2 Res. A.1021(26) 5.8 MSC/Circ.808 SOLAS reg. II-2/21&22 MSC.1/Circ.1369/Add.1

Unless this document explicitly states otherwise, each section in this document applies to all ship types.

This document indicates for each section if that section is applicable to PA, GA and/or PAGA systems.

Where this document makes sections applicable to “passenger ships”, these sections apply to both “Passenger ship (not SRtP)” and “Passenger ship (SRtP)”.

2 Normative references

The following documents are referred to in the text in such a way that some or all of their content constitutes requirements 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.

EN IEC 60268-4:2018, *Sound system equipment - Part 4: Microphones*

EN 60945:2002, *Maritime navigation and radiocommunication equipment and systems - General requirements - Methods of testing and required test results (IEC 60945:2002)*

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

EN 61162-2, *Maritime navigation and radiocommunication equipment and systems - Digital interfaces - Part 2: Single talker and multiple listeners, high-speed transmission (IEC 61162 2)*

EN IEC 61162-450, *Maritime navigation and radiocommunication equipment and systems - Digital interfaces - Part 450: Multiple talkers and multiple listeners - Ethernet interconnection (IEC 61162 450)*

EN 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 (IEC 62288)*

EN IEC 62923-1, *Maritime navigation and radiocommunication equipment and systems - Bridge alert management - Part 1: Operational and performance requirements, methods of testing and required test results*

EN IEC 62923-2, *Maritime navigation and radiocommunication equipment and systems - Bridge alert management - Part 2: Alert and cluster identifiers and other additional features*

IEC 60268-1, *Sound system equipment - Part 1: General (IEC 60268-1)*