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Electrical installations for lighting and beaconing of aerodromes - Technical requirements for aeronautical ground lighting control and monitoring systems - Units for selective switching and monitoring of individual lamps

## EESTI STANDARDI EESSÕNA

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**ICS 93.120**

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English version

**Electrical installations for lighting and beaconing of aerodromes -  
Technical requirements for aeronautical ground lighting control  
and monitoring systems -  
Units for selective switching and monitoring of individual lamps**

Installations électriques pour l'éclairage  
et le balisage des aérodromes -  
Exigences techniques pour les systèmes  
de contrôle et de commande du balisage  
aéronautique au sol -  
Unités pour la commutation sélective  
et le contrôle de lampes individuelles

Elektrische Anlagen für Beleuchtung  
und Befeuerung von Flugplätzen -  
Technische Anforderungen  
für Steuer- und Überwachungssysteme  
von Flugplatzbefeuerungsanlagen -  
Geräte für selektives Schalten  
und Überwachen individueller Feuer

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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.

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**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

This European Standard was prepared by Working Group 1 of the Technical Committee CENELEC TC 97, Electrical installations for lighting and beaconing of aerodromes.

The text of the draft was submitted to the Unique Acceptance Procedure and was approved by CENELEC as EN 50490 on 2008-04-01.

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) 2009-04-01
- latest date by which the national standards conflicting with the EN have to be withdrawn (dow) 2011-04-01

This European Standard has been prepared under a mandate given to CENELEC by the European Commission and the European Free Trade Association and covers essential requirements of EC Directive 2004/108/EC. See Annex ZZ.

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## Introduction

Aeronautical Ground Lighting (AGL) at an aerodrome provides the pilots of aircraft and drivers of vehicles moving on the aerodrome surface, with guidance information. Selective switching and individual lamp monitoring is one way of controlling the AGL to achieve this.

### 1 Scope

This European Standard is intended to give general minimum frame requirements for units that are independent of the technology used for switching and/or monitoring of individual or group of lamps in an AGL series circuit.

This European Standard

- applies to the units that are directly electrically connected to the primary or secondary side of an AGL series circuit and are needed to provide the selective switching and/or monitoring of lamps,
- does not cover communication protocols and application procedures,
- does not treat system aspects that influence the AGL operation.

NOTE These units may be used forming part of either a SMGCS or A-SMGCS to guide and/or control the surface movement of aircraft by means of visual aids.

### 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.

EN 60439-1, *Low voltage switchgear and control gear assemblies – Part 1: Type tested and partially type-tested assemblies* (IEC 60439-1)

EN 60529, *Degrees of protection provided by enclosures (IP Code)* (IEC 60529)

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

EN 61000-6-2, *Electromagnetic compatibility (EMC) – Part 6-2: Generic standards - Immunity for industrial environments* (IEC 61000-6-2)

EN 61000-6-3, *Electromagnetic compatibility (EMC) – Part 6-3: Generic standards - Emission standard for residential, commercial and light-industrial environments* (IEC 61000-6-3)

EN 61000-6-4, *Electromagnetic compatibility (EMC) – Part 6-4: Generic standards - Emission standard for industrial environments* (IEC 61000-6-4)

EN 61822, *Electrical installations for lighting and beaconing of aerodromes - Constant current regulators* (IEC 61822)

EN 61823, *Electrical installations for lighting and beaconing of aerodromes - AGL series transformers* (IEC 61823, mod.)

EN 62262, *Degrees of protection provided by enclosures for electrical equipment against external mechanical impacts (IK-Code)* (IEC 62262)

IEC/TS 61000-6-5, *Electromagnetic compatibility (EMC) – Part 6-5: Generic standards - Immunity for power station and substation environments*