



## **Aeronautical ground lighting electrical installation - Control and monitoring systems: General requirements**

## EESTI STANDARDI EESSÕNA

## NATIONAL FOREWORD

Käesolev Eesti standard EVS-ENV 50230:2008 sisaldab Euroopa standardi ENV 50230:1997 ingliskeelset teksti.

Standard on kinnitatud Eesti Standardikeskuse 19.08.2008 käskkirjaga ja jõustub sellekohase teate avaldamisel EVS Teatajas.

Euroopa standardimisorganisatsioonide poolt rahvuslikele liikmetele Euroopa standardi teksti kättesaadavaks tegemise kuupäev on 05.02.1997.

Standard on kättesaadav Eesti standardiorganisatsioonist.

This Estonian standard EVS-ENV 50230:2008 consists of the English text of the European standard ENV 50230:1997.

This standard is ratified with the order of Estonian Centre for Standardisation dated 19.08.2008 and is endorsed with the notification published in the official bulletin of the Estonian national standardisation organisation.

Date of Availability of the European standard text 05.02.1997.

The standard is available from Estonian standardisation organisation.

ICS 93.120

Võtmesõnad:

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Descriptors: Electrical installation, lighting, monitoring equipment, control equipment, aerodrome, requirement, performance, function

English version

**Aeronautical ground lighting electrical installation  
Control and monitoring systems: General requirements**

This European Prestandard (ENV) was approved by CENELEC on 1996-07-02 as a prospective standard for provisional application. The period of validity of this ENV is limited initially to three years. After two years the members of CENELEC will be requested to submit their comments, particularly on the question whether the ENV can be converted into a European Standard (EN).

CENELEC members are required to announce the existence of this ENV in the same way as for an EN and to make the ENV available promptly at national level in an appropriate form. It is permissible to keep conflicting national standards in force (in parallel to the ENV) until the final decision about the possible conversion of the ENV into an EN is reached.

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**CENELEC**

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

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### Foreword

This European Prestandard was prepared by the CENELEC BTTF 72-3, Lighting fittings for aerodromes.

The text of the draft was submitted to the CENELEC questionnaire and vote and was approved as ENV 50230 on 1996-07-02.

The following date was fixed:

- latest date by which the existence of the ENV  
has to be announced at national level (doa) 1996-12-01

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## Introduction

The International Civil Aviation Organization (ICAO) in its Annex 14 to the Convention on International Civil Aviation, paragraph 8.2 Electrical Systems and paragraph 8.3 Monitoring, presents provisions, either as international standards or recommended practices, regarding control and monitoring systems for visual aids:

'A system of monitoring visual aids should be employed to ensure lighting system reliability.

Where lighting systems are used for aircraft control purposes, such systems should be monitored automatically so as to provide an immediate indication of any fault which may affect the control function. This information should be automatically relayed to the air traffic service unit.'

And:

'For a precision approach runway, the electrical circuits for the main power supply, lighting and control shall be so designed that the failure of one circuit shall not leave the pilot without visual guidance or shall result in a misleading pattern.'

Different control and monitoring systems of airfield lighting exist nowadays. This is why the need appeared to define their general characteristics or requirements in order to guarantee compatibility between systems.

## 1 Scope

This prestandard specifies general requirements for control and monitoring system of aviation ground lighting installation.

The purpose of this prestandard is to provide a set of requirements which are applicable to the control and monitoring system of aviation ground lighting installation.

## 2 Normative references

This prestandard 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 prestandard only when incorporated in it by amendment or revision. For undated references the latest edition of the publication referred to applies.

ENV 50231	Aviation ground lighting electrical installation Constant current regulator: Equipment specifications and tests
ICAO	International standards and recommended practices Aerodromes Annex 14 to the Convention on International Civil Aviation, Volume 1 and 2, Aerodrome Design and Operations (Issued by International Civil Aviation Organisation)

## 3 Definitions

For the purposes of this prestandard the following definitions apply, as well as those given in ICAO Annex 14.

### 3.1 ATC system

Air Traffic Control system is located in the control tower. It provides to the controllers information and help for control and monitoring airfield aerodrome lightings circuits, radionavigation circuits and others.

### 3.2 visual aids system

The visual aid system used for navigation consists of indicators and signalling devices, markings, lights signs and markers on airfield.

### 3.3 CCR

CCR is the Constant Current Regulator. It is used to provide a constant current in aerodrome lighting circuits.