

## SLOVENSKI STANDARD SIST EN 62034:2007

01-september-2007

Samodejni preskušalni sistemi za baterijsko napajano nujnostno razsvetljavo evakuacijskih poti (IEC 62034:2006)

Automatic test systems for battery powered emergency escape lighting (IEC 62034:2006)

Automatische Prüfsysteme für batteriebetriebene Sicherheitsbeleuchtung für Rettungswege (IEC 62034:2006) TANDARD PREVIEW

Systeme automatique de tests pour éclairage de sécurité sur batteries (IEC 62034:2006)

SIST EN 62034:2007

Ta slovenski standard je istoveten z. 991312264219/sist-en-62034-2006

ICS:

29.140.50 Instalacijski sistemi za

razsvetljavo

Lighting installation systems

SIST EN 62034:2007

en

# iTeh STANDARD PREVIEW (standards.iteh.ai)

<u>SIST EN 62034:2007</u> https://standards.iteh.ai/catalog/standards/sist/6dff4f25-fb06-4d06-a343-991312264219/sist-en-62034-2007

### **EUROPEAN STANDARD**

### EN 62034

## NORME EUROPÉENNE EUROPÄISCHE NORM

December 2006

ICS 29.140.50

English version

### Automatic test systems for battery powered emergency escape lighting (IEC 62034:2006)

Système automatique de tests pour éclairage de sécurité sur batteries (CEI 62034:2006) Automatische Prüfsysteme für batteriebetriebene Sicherheitsbeleuchtung für Rettungswege (IEC 62034:2006)

### iTeh STANDARD PREVIEW

This European Standard was approved by CENELEC on 2006-09-12. 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 Central Secretariat of to any CENELEC member. 1006-4006-a343-

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.

CENELEC members are the national electrotechnical committees of Austria, Belgium, Cyprus, the Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, the Netherlands, Norway, Poland, Portugal, Romania, Slovakia, Slovenia, Spain, Sweden, Switzerland and the United Kingdom.

## **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**

The text of document 34D/855/FDIS, future edition 1 of IEC 62034, prepared by SC 34D, Luminaires, of IEC TC 34, Lamps and related equipment, was submitted to the IEC-CENELEC parallel vote and was approved by CENELEC as EN 62034 on 2006-09-12.

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) 2007-07-01

 latest date by which the national standards conflicting with the EN have to be withdrawn

(dow) 2011-10-01

Annex ZA has been added by CENELEC.

### **Endorsement notice**

The text of the International Standard IEC 62034:2006 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 61347-2-7 NOTE Harmonized as EN 61347-2-7:2006 (not modified).

(standards.iten.ai)

IEC 61347-2-11 NOTE Harmonized as EN 61347-2-11:2001 (not modified).

<u>SIST EN 62034:2007</u> https://standards.iteh.ai/catalog/<del>standards/sist/6</del>dff4f25-fb06-4d06-a343-991312264219/sist-en-62034-2007

# 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.

<u>Publication</u>	<u>Year</u>	<u>Title</u>	EN/HD	<u>Year</u>
IEC 60073	_1)	Basic and safety principles for man-machine interface, marking and identification - Coding principles for indicators and actuators	EN 60073	2002 <sup>2)</sup>
IEC 60598-1 (mod)	2003	Luminaires Part 1: General requirements and tests	EN 60598-1	2004
IEC 60598-2-22 (mod)	1997	Luminaires Part 2-22: Particular requirements - Luminaires for emergency lighting	EN 60598-2-22 + corr. December	1998 2005
IEC 61347-1	2000	Part 1: General and safety requirements	EN 61347-1 + corr. July	2001 2003
IEC 61547	1995	Equipment for general lighting purposes - EMC immunity requirements	EN 61547	1995

https://standards.iteh.ai/catalog/standards/sist/6dff4f25-fb06-4d06-a343-991312264219/sist-en-62034-2007

<sup>2)</sup> Valid edition at date of issue.

-

<sup>1)</sup> Undated reference.

# iTeh STANDARD PREVIEW (standards.iteh.ai)

<u>SIST EN 62034:2007</u> https://standards.iteh.ai/catalog/standards/sist/6dff4f25-fb06-4d06-a343-991312264219/sist-en-62034-2007

# NORME INTERNATIONALE INTERNATIONAL STANDARD

CEI IEC 62034

Première édition First edition 2006-05

# Système automatique de tests pour éclairage de sécurité sur batteries

# Automatic test systems for battery powered remergency escape lighting/

(standards.iteh.ai)

<u>SIST EN 62034:2007</u> https://standards.iteh.ai/catalog/standards/sist/6dff4f25-fb06-4d06-a343-991312264219/sist-en-62034-2007

#### © IEC 2006 Droits de reproduction réservés — Copyright - all rights reserved

Aucune partie de cette publication ne peut être reproduite ni utilisée sous quelque forme que ce soit et par aucun procédé, électronique ou mécanique, y compris la photocopie et les microfilms, sans l'accord écrit de l'éditeur.

No part of this publication may be reproduced or utilized in any form or by any means, electronic or mechanical, including photocopying and microfilm, without permission in writing from the publisher.

International Electrotechnical Commission, 3, rue de Varembé, PO Box 131, CH-1211 Geneva 20, Switzerland Telephone: +41 22 919 02 11 Telefax: +41 22 919 03 00 E-mail: inmail@iec.ch Web: www.iec.ch



CODE PRIX PRICE CODE

S

### CONTENTS

FΟ	REW	ORD	5			
INT	ROD	UCTION	9			
1	Scop	pe	11			
2	Norn	native references	11			
3	Terms and definitions					
4	Requirements					
	4.1	Safety, construction and installation instructions	13			
	4.2	Monitoring of the timing circuit	15			
	4.3	Functional requirements	15			
	4.4	Protection against system part failures and faults	17			
	4.5	Test of emergency lamp(s)	19			
5	Test	duration and interval	21			
	5.1	Functional test	21			
	5.2	Duration test	21			
6		ection of a building during the periods of test and subsequent recharge of the rgency lighting system	21			
	6.1	General iTeh STANDARD PREVIEW	21			
	6.2					
	6.3	Accuracy and protection of timing periods				
_		periods	23			
7	Indic	eation and recording of results of tests that the equipment has to perform	27			
	7.1	General991312264219/sist-cn-62034-2007	27			
	7.2	Indication				
	7.3	Recording	29			
Anı	nex A	(informative) Examples of typical automatic test systems	31			
		(informative) Classification of ATS types				
		(				
Bib	liogra	phy	43			
Fig	ure 1	Stand-alone, self-contained luminaire with automatic test facilities	31			
Fig	ure 2	- Direct connection between luminaires and remote panel	33			
		Alternative system luminaires connection is marshalled by a connection box mission to remote indicators and control panel	35			
		- Direct connection between luminaires and remote panel				
Tal	ole A.	1 – Standards conformity guide	33			
		2 – Standards conformity guide				
		3 – Standards conformity guide				

### INTERNATIONAL ELECTROTECHNICAL COMMISSION

## AUTOMATIC TEST SYSTEMS FOR BATTERY POWERED EMERGENCY ESCAPE LIGHTING

#### **FOREWORD**

- 1) The International Electrotechnical Commission (IEC) is a worldwide organization for standardization comprising all national electrotechnical committees (IEC National Committees). The object of IEC is to promote international co-operation on all questions concerning standardization in the electrical and electronic fields. To this end and in addition to other activities, IEC publishes International Standards, Technical Specifications, Technical Reports, Publicly Available Specifications (PAS) and Guides (hereafter referred to as "IEC Publication(s)"). Their preparation is entrusted to technical committees; any IEC National Committee interested in the subject dealt with may participate in this preparatory work. International, governmental and non-governmental organizations liaising with the IEC also participate in this preparation. IEC collaborates closely with the International Organization for Standardization (ISO) in accordance with conditions determined by agreement between the two organizations.
- 2) The formal decisions or agreements of IEC on technical matters express, as nearly as possible, an international consensus of opinion on the relevant subjects since each technical committee has representation from all interested IEC National Committees.
- 3) IEC Publications have the form of recommendations for international use and are accepted by IEC National Committees in that sense. While all reasonable efforts are made to ensure that the technical content of IEC Publications is accurate, IEC cannot be held responsible for the way in which they are used or for any misinterpretation by any end user.
- 4) In order to promote international uniformity, IEC/National Committees undertake to apply IEC Publications transparently to the maximum extent possible in their national and regional publications. Any divergence between any IEC Publication and the corresponding national or regional publication shall be clearly indicated in the latter.
- 5) IEC provides no marking procedure to indicate its approval and cannot be rendered responsible for any equipment declared to be in conformity with an IEC Publication.
- 6) All users should ensure that they have the ratest edition of this publication 6-4d06-a343-
- 7) No liability shall attach to IEC or its directors, employees, servants or agents including individual experts and members of its technical committees and IEC National Committees for any personal injury, property damage or other damage of any nature whatsoever, whether direct or indirect, or for costs (including legal fees) and expenses arising out of the publication, use of, or reliance upon, this IEC Publication or any other IEC Publications.
- 8) Attention is drawn to the Normative references cited in this publication. Use of the referenced publications is indispensable for the correct application of this publication.
- 9) Attention is drawn to the possibility that some of the elements of this IEC Publication may be the subject of patent rights. IEC shall not be held responsible for identifying any or all such patent rights.

International Standard IEC 62034 has been prepared by subcommittee 34D: Luminaires, of IEC technical committee 34: Lamps and related equipment.

The text of this standard is based on the following documents:

FDIS	Report on voting
34D/855/FDIS	34D/858/RVD

Full information on the voting for the approval of this standard can be found in the report on voting indicated in the above table.

This publication has been drafted in accordance with the ISO/IEC Directives, Part 2.

The committee has decided that the contents of this publication will remain unchanged until the maintenance result date indicated on the IEC web site under "http://webstore.iec.ch" in the data related to the specific publication. At this date, the publication will be

- · reconfirmed:
- withdrawn;
- replaced by a revised edition, or
- amended.

# iTeh STANDARD PREVIEW (standards.iteh.ai)

<u>SIST EN 62034:2007</u> https://standards.iteh.ai/catalog/standards/sist/6dff4f25-fb06-4d06-a343-991312264219/sist-en-62034-2007

### INTRODUCTION

Emergency lighting systems are a safety related product; their correct performance can only be assured by systematic testing and maintenance. Conventional techniques for testing are reliant upon manual testing procedures, and are highly susceptible to neglect. These limitations of conventional techniques can be overcome by automating the testing process. It is essential that automatic testing systems for emergency luminaires schedule tests reliably, and provide timely notification of failures or degradation of performance.

Automatic test systems (ATSs) will still require manual intervention to correct faults when they are identified, and procedures should be put in place for such intervention. These systems provide information to assist users to manage risk on their premises.

Automatic test systems for emergency escape lighting assist the operator of the building by showing the results of tests that will have been made at prescribed intervals, without disrupting any other electrical services. It is essential that the notification of failures or reduction in performance be given at the earliest opportunity to enable the emergency escape system to be restored to full operation.

The automatic test system will provide those responsible for an emergency lighting installation with information to enable them to ensure that the installed luminaires operate correctly when required.

The automatic test system maybe part of a Building Management System (BMS) for making the emergency lighting tests, this standard would only apply to the emergency lighting testing part of a BMS.

(standards.iteh.ai)

A visual check of system components and indicators should be included in the routine of safety staff. This check should be made regularly to ensure that the emergency luminaire is present and intact, with lamps and indicators working and visible i.e. not obscured, covered or painted.