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Project No. 2023/00474

Responsible committee: CPL/34 Lamps and Related Equipment

Interested committees:

Title: BS EN IEC 63494-2-1 Lighting System Electro-Mechanical Interfaces

Part 2: Interchangeability requirements: Part 2-1: Four-pin ELV twist-lock interface

Please notify the secretary if you are aware of any keywords that might assist in classifying or identifying the standard or if the content of this standard

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- iii) requires additional national guidance or information

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Responsible Committee Secretary: **Mr Simon Bounds (BSI)**
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Introduction

This draft standard is based on national and international discussions. Your comments on this draft are invited and will assist in the preparation of the consequent standard.

For international standards, comments will be reviewed by the relevant UK national committee before sending the consensus UK vote and comments to the international committee, which will then decide appropriate action. If the international standard is approved, it is usual for the text to be published as a British Standard.

For national standards, comments will be reviewed by the relevant UK national committee and the resulting standards published as a British Standard.

UK Vote

Please indicate whether you consider the UK should submit a negative (with supporting technical reasons) or positive vote on this draft. Please indicate if you are aware of any reason why this draft standard should not be published as a British Standard.

Submission of Comments

- **Annotated drafts are not acceptable and will be rejected.**
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Template for comments and secretariat observations

Date: xx/xx/20xx	Document: ISO/DIS xxxx
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1	2	(3)	4	5	(6)	7
MB	Clause No./ Subclause No./Annex (e.g. 3.1)	Paragraph/Figure/ Table/Note	Type of comment	Commend (justification for change) by the MB	Proposed change by the MB	Secretariat observations on each comment submitted
	3.1	Definition 1	ed	Definition is ambiguous and needs clarifying.	Amend to read '...so that the mains connector to which no connection...'	
	6.4	Paragraph 2	te	The use of the UV photometer as an alternative cannot be supported as serious problems have been encountered in its use in the UK.	Delete reference to UV photometer.	



34/1096/CD

COMMITTEE DRAFT (CD)

PROJECT NUMBER:

IEC 63494-2-1 ED1

DATE OF CIRCULATION:

2023-09-15

CLOSING DATE FOR COMMENTS:

2023-12-08

SUPERSEDES DOCUMENTS:

34/1002/NP, 34/1029B/RVN

IEC TC 34 : LIGHTING

SECRETARIAT:

United Kingdom

SECRETARY:

Mr Petar Luzajic

OF INTEREST TO THE FOLLOWING COMMITTEES:

TC 23

PROPOSED HORIZONTAL STANDARD:



Other TC/SCs are requested to indicate their interest, if any, in this CD to the secretary.

FUNCTIONS CONCERNED:

☐ EMC

☐ ENVIRONMENT

☐ QUALITY ASSURANCE

☐ SAFETY

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Recipients of this document are invited to submit, with their comments, notification of any local regulations or technical reasons that may exist and should be considered should this proposal proceed, recognizing that failure to address such requirements could result in the need for new or existing "In Some Countries" clauses. (SEE [AC/22/2007](#) OR [NEW GUIDANCE DOC](#)).

TITLE:

Lighting system electro-mechanical interfaces – Part 2: Interchangeability requirements – Part 2-1: Four-pin ELV twist-lock interface – Type ZB18

NOTE FROM TC/SC OFFICERS:

To support particular requirements for interchangeability performance and safety of the Zhaga Book 18 Edition 2.0 interface, TC 34 has approved the IEC 63494-2-1 project (see 34/1002/NP and 34/1029A/RVN). Specifications for this interface can be found in IEC PAS 63421:2022. The following draft for this proposed standard has been prepared by TC 34/WG 14 experts.

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INTERNATIONAL ELECTROTECHNICAL COMMISSION

Lighting system electro-mechanical interfaces – Part 2: Interchangeability requirements – Part 2-1: Four-pin ELV twist-lock interface – Type ZB18

FOREWORD

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International Standard IEC 63494-2-1 has been prepared by IEC technical committee 34: Lighting

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

FDIS	Report on voting
XX/XXX/FDIS	XX/XXX/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 stability 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.

The National Committees are requested to note that for this publication the stability data is 20XX.

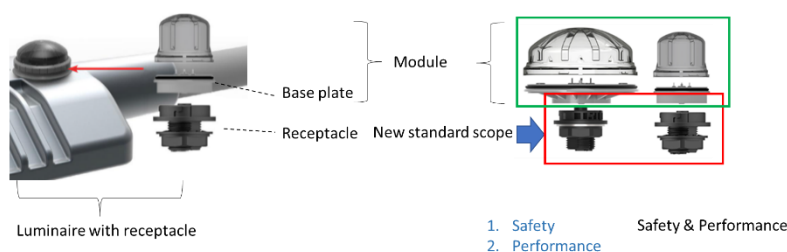
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WILL BE DELETED AT THE PUBLICATION STAGE.

INTRODUCTION

(not part of the proposal or document manuscript)

The market demand for networked IoT upgradeable lighting includes an increasing emphasis on interchangeability and interoperability within lighting systems. To meet this demand, standards are needed to address the performance and safety aspects (mechanical, electrical and data exchange) of interfaces. Evidence of this demand is the emergence of interface standards from regional SDOs, industry associations and consortia. The IEC TC 34 is adopting the first set of these lighting system interface standards by transfer of Zhaga Books 18 and 20.

To support particular requirements for interchangeability performance and safety of the Zhaga Book 18 Edition 2.0 interface, TC 34 has approved the IEC 63494-2-1 project (see 34/1002/NP and 34/1029A/RVN). Specifications for this interface can be found in IEC PAS 63421:2022. The intention is to keep the requirements of this standard confined to the mating surfaces that comprise the interface and not place requirements on the devices that can utilize the interface such as sensors, communication modules, cameras, etc. During the 2022-03-18 PWI 34-10 ad hoc meetings the following illustration based on the document, Scoping proposal PWI34-10 (OD) 20220318.docx, was helpful for discussing various product and interface standards:



During the observation of comments to the NPs, WG 14 members recognized a value to reorganizing the IEC 63494-2-1 document as a combined safety and performance standard for the Zhaga Book 18, Ed. 2.0 electro-mechanical interface. Originally proposed product specific annexes from the IEC 63494-1 draft have been relocated to this IEC 63494-2-1 document. This provides a common document for all requirements related to this particular electro-mechanical interface.

The following draft for this proposed standard has been prepared by TC 34/WG 14 experts.