

TECHNICAL REPORT

Electrical interface specification for phase-cut dimmer in phase-cut dimmed lighting systems

INTERNATIONAL
ELECTROTECHNICAL
COMMISSION

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INTERNATIONAL ELECTROTECHNICAL COMMISSION

**ELECTRICAL INTERFACE SPECIFICATION FOR PHASE-CUT
DIMMER IN PHASE-CUT DIMMED LIGHTING SYSTEMS**

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IEC TR 63036, which is a technical report, has been prepared by subcommittee 23B: Plugs, socket-outlets and switches, of IEC technical committee 23: Electrical accessories.

The text of this technical report is based on the following documents:

| | |
|---------------|------------------|
| Enquiry draft | Report on voting |
| 23B/1201/DTR | 23B/1214/RVC |

Full information on the voting for the approval of this technical report 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 website 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- withdrawn,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.

A bilingual version of this publication may be issued at a later date.

INTRODUCTION

This document describes the technical requirements for phase-cut dimmers to work with controlgear and self ballasted lamps. For a complete picture of the technical requirements the reader should also refer to IEC TR 63037 that contains technical requirements and testing methods for controlgear and self ballasted lamps.

ELECTRICAL INTERFACE SPECIFICATION FOR PHASE-CUT DIMMER IN PHASE-CUT DIMMED LIGHTING SYSTEMS

1 Scope

This technical report specifies the electrical interface and test procedures for the control by mains voltage phase-cut dimming of the brightness of mains operated electronic lighting equipment intended to be controlled by mains voltage phase-cut dimmers, such as LED integrated lamps, and light sources with external control gear.

Electronic switches that use a comparable circuitry to a phase-cut dimmer but do not contain means for the adjustability of the phase-cut angle should fulfill the same requirements as a phase-cut dimmer.

Safety requirements are not covered by this document, but by respective product standards.

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.

IEC 60038, *IEC standard voltages*

IEC 60050-845, *International Electrotechnical Vocabulary (IEV) – Part 845: Lighting* (available at www.electropedia.org)

IEC 60364 (all parts), *Low-voltage electrical installations*

IEC 62504, *General lighting – Light emitting diode (LED) products and related equipment – Terms and definitions*