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Interested committees:

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- ii) affects other national standard(s)
- iii) requires additional national guidance or information

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Full document details: 21/30434832 DC

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.

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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 Please indicate if you are aware of any reason why this draft standard should not be published as a British Standard.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.**
- All comments should be submitted online at <https://standardsdevelopment.bsigroup.com/>. You will need to register in order to comment.

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.	



96/507/CDV

COMMITTEE DRAFT FOR VOTE (CDV)

PROJECT NUMBER:
IEC 61558-2-14 ED2

DATE OF CIRCULATION:
2021-04-30

CLOSING DATE FOR VOTING:
2021-07-23

SUPERSEDES DOCUMENTS:
96/502/RR

IEC TC 96 : TRANSFORMERS, REACTORS, POWER SUPPLY UNITS, AND COMBINATIONS THEREOF	
SECRETARIAT: Germany	SECRETARY: Mr Wolfgang Reichelt
OF INTEREST TO THE FOLLOWING COMMITTEES: SC 3C,TC 14,TC 22,SC 22E,SC 34C,TC 51,TC 55,TC 61,SC 62A,TC 64,TC 66,TC 77,TC 97,TC 106,TC 108,TC 109,TC 111,TC 112	PROPOSED HORIZONTAL STANDARD: ☐ Other TC/SCs are requested to indicate their interest, if any, in this CDV to the secretary.
FUNCTIONS CONCERNED: ☐ EMC ☐ ENVIRONMENT ☐ QUALITY ASSURANCE ☒ SAFETY	
☒ SUBMITTED FOR CENELEC PARALLEL VOTING Attention IEC-CENELEC parallel voting The attention of IEC National Committees, members of CENELEC, is drawn to the fact that this Committee Draft for Vote (CDV) is submitted for parallel voting. The CENELEC members are invited to vote through the CENELEC online voting system.	☐ NOT SUBMITTED FOR CENELEC PARALLEL VOTING

This document is still under study and subject to change. It should not be used for reference purposes.

Recipients of this document are invited to submit, with their comments, notification of any relevant patent rights of which they are aware and to provide supporting documentation.

TITLE:

Safety of transformers, reactors, power supply units and combinations thereof - Part 2-14: Particular requirements and tests for variable transformers and power supply units incorporating variable transformers for general applications

PROPOSED STABILITY DATE: 2025

NOTE FROM TC/SC OFFICERS:

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INTERNATIONAL ELECTROTECHNICAL COMMISSION

SAFETY OF TRANSFORMERS, REACTORS, POWER SUPPLY UNITS AND COMBINATIONS THEREOF –**Part 2-14: Particular requirements and tests for variable transformers and power supply units incorporating variable transformers for general applications**

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.
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International standard IEC 61558-2-14 has been prepared by IEC technical committee 96: Transformers, reactors, power supply units and combinations thereof.

This second edition cancels and replaces the first edition published in 2012. This edition constitutes a technical revision.

This edition includes the following significant technical changes with respect to the previous edition:

- a) Adjustment of structure and references in accordance with IEC 61558-1:2017;
- b) Description of constructions moved to IEC 61558-1:2017;
- c) New symbols for power supply units with linearly regulated output voltages and required current collector position changes.

96

97 The text of this International Standard is based on the following documents:

Draft	Report on voting
96/XXX/FDIS	96/XXX/RVD

98

99 Full information on the voting for its approval can be found in the report on voting indicated in
100 the above table.

101 The language used for the development of this International Standard is English.

102 This document was drafted in accordance with ISO/IEC Directives, Part 2, and developed in
103 accordance with ISO/IEC Directives, Part 1 and ISO/IEC Directives, IEC Supplement, available
104 at www.iec.ch/members_experts/refdocs. The main document types developed by IEC are
105 described in greater detail at www.iec.ch/standardsdev/publications.

106 It has the status of a group safety publication in accordance with IEC Guide 104.

107 This International Standard is to be used in conjunction with IEC 61558-1:2017.

108 NOTE When "Part 1" is mentioned in this standard, it refers to IEC 61558-1:2017.

109 This document supplements or modifies the corresponding clauses in IEC 61558-1:2017, so as
110 to convert that publication into the IEC standard: *Particular requirements and tests for variable*
111 *transformers and power supply units incorporating variable transformers for general*
112 *applications*.

113 A list of all parts in the IEC 61558 series published under the general title *Safety of*
114 *transformers, reactors, power supply units and combinations thereof*, can be found on the IEC
115 website.

116 Future standards in this series will carry the new general title as cited above. Titles of existing
117 standards in this series will be updated at the time of the next edition.

118 Where this document states "*addition*", "*modification*" or "*replacement*", the relevant text of
119 IEC 61558-1:2017 is to be adapted accordingly.

120 In this document, the following print types are used:

- 121 – requirements proper: in roman type;
- 122 – *test specifications: in italic type*;
- 123 – explanatory matter: in smaller roman type.

124 In the text of this document, the words in **bold** are defined in Clause 3.

125 Subclauses, notes, figures and tables additional to those in IEC 61558-1:2017 are numbered
126 starting from 101; supplementary annexes are entitled AA, BB, etc.

127 The committee has decided that the contents of this document will remain unchanged until the
128 stability date indicated on the IEC website under "<http://webstore.iec.ch>" in the data related to
129 the specific document. At this date, the document will be

- 130 • reconfirmed,
- 131 • withdrawn,
- 132 • replaced by a revised edition, or
- 133 • amended.

INTRODUCTION

IEC/TC 96 has group safety function in accordance with IEC Guide 104 for transformers other than those intended to supply distribution networks, in particular transformers and power supply units intended to allow the application of protective measures against electric shock as defined by TC 64, but in certain cases including limitation of voltage and horizontal safety function for SELV in accordance with IEC 60364-4-41.

The group safety function (GSF) is necessary because of responsibility e.g. for safety extra-low voltage (SELV) in accordance with IEC 61140:2016 5.2.6 and IEC 60364-4-41:2017 414.3.1 or control circuits in accordance with IEC 60204-1: 2016, 7.2.4.

The group safety function is needed for each part of IEC 61558-2 because different standards of the IEC 61558 series can be combined in one construction but in certain cases with no limitation of rated output power.

For example an auto-transformer in accordance with IEC 61558-2-13 can be designed with a separate SELV-circuit in accordance with the particular requirements for IEC 61558-2-6 relating to the general requirements of IEC 61558-1.