

SLOVENSKI STANDARD oSIST prEN IEC 63522-3:2025

01-april-2025

Električni releji - Preskusi in meritve - 3. del: Lastnosti tuljave releja

Electrical relays - Tests and measurements - Part 3: Relay coil properties

Elektrische Relais – Mess- und Prüfverfahren – Teil 3: Eigenschaften von Relaisspulen

Relais électriques - Essais et mesurages - Partie 3: Caractéristiques de la bobine du relais

Ta slovenski standard je istoveten z: prEN IEC 63522-3:2025

ICS:

29.120.70 Releji

Relays

oSIST prEN IEC 63522-3:2025

en

iTeh Standards (https://standards.iteh.ai) Document Preview

oSIST prEN IEC 63522-3:2025

https://standards.iteh.ai/catalog/standards/sist/cbe4538a-d408-4a5a-a33a-ef43ff33e7e2/osist-pren-iec-63522-3-2025

PROJECT NUMBER: IEC 63522-3 ED1

2025-02-28

DATE OF CIRCULATION:



94/1106/CDV

COMMITTEE DRAFT FOR VOTE (CDV)

CLOSING DATE FOR VOTING:

2025-04-25

	SUPERSEDES DOCUMENTS:			
	94/1023/CDV, 94/1104/RVC			
IEC TC 94 : ELECTRICAL RELAYS				
SECRETARIAT:		SECRETARY:		
Austria		Mr Bernhard Spalt		
OF INTEREST TO THE FOLLOWING COMMITTE	ES:	HORIZONTAL FUNCTION(S):		
Aspects concerned:				
☐ SUBMITTED FOR CENELEC PARALLEL VO	oting eh Sta	☐ NOT SUBMITTED FOR CENELEC PARALLEL VOTING		
Attention IEC-CENELEC parallel voting	c.//ctand			
The attention of IEC National Commit CENELEC, is drawn to the fact that this O Vote (CDV) is submitted for parallel voting	Committee Draft for			
The CENELEC members are invited to CENELEC online voting system.	vote through the			
standards.iteh.ai/catalog/standards/sist/cbe4538a-d408-4a5a-a33a-ef43ff33e7e2/osist-pren-iec-63522-				
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.				
Recipients of this document are invited to submit, with their comments, notification of any relevant "In Some Countries" clauses to be included should this proposal proceed. Recipients are reminded that the CDV stage is the final stage for submitting ISC clauses. (SEE AC/22/2007 OR NEW GUIDANCE DOC).				
Time co.				
TITLE:				
Electrical relays - Tests and Measurements - Part 3: Relay coil properties				
PROPOSED STABILITY DATE: 2027				
NOTE FROM TC/SC OFFICERS:				

Copyright © 2025 International Electrotechnical Commission, IEC. All rights reserved. It is permitted to download this electronic file, to make a copy and to print out the content for the sole purpose of preparing National Committee positions. You may not copy or "mirror" the file or printed version of the document, or any part of it, for any other purpose without permission in writing from IEC.

IEC CDV 63522-3 ED1 © IEC 2025

CONTENTS

- 2 -

2				
3	FC	DREWO	RD	.3
4	1	Scop	e	.5
5	2	Norm	native references	.5
6	3	Term	s and definitions	.5
7		3.1	Back-EMF	.5
8	4	Test	procedure	.5
9		4.1	General	.5
10		4.2	Coil resistance	.5
11		4.2.1	Purpose	.5
12		4.2.2	Procedure	.5
13		4.2.3	Conditions to be specified	.6
14		4.3	Coil impedance	.7
15		4.3.1	Purpose	.7
16		4.3.2	Procedure	.7
17		4.3.3	Conditions to be specified	
18		4.4	Coil inductance	
19			Purpose	
20			Procedure 11611 Statitual us	
21		4.4.3	Conditions to be specified	.8
22		4.5	Coil power consumption	.8
23		4.5.1	Purpose Procedure	.8
24				
25			Conditions to be specified	
26		4.6	Coil transient suppression test	.9
27			Purpose standards/sist/cbe4538a-d408-4a5a-a33a-ef43f133e7e2/osist-pren-iec-63	
28			Procedure	
29	_		Conditions to be specified	
30	5		uation1	
31		5.1	General1	
32		5.2	Test report	
33	Bil	bliograp	Jhy1	3
34				
35	Fi	gure 1 -	Example four-wire resistance measurement	.6
36	Fi	gure 2 -	Example presence of diodes in the coil circuit	.7
37	Fig	gure 3 -	- Example circuit for the measurement of coil transient suppression	0
38 39		_	- Example traces on an oscilloscope screen during transient voltage	i 1

No table of figures entries found.

40 41

INTERNATIONAL ELECTROTECHNICAL COMMISSION

44

43

45

Electrical relays - Tests and Measurements -

46 47 48

Part 3: Relay coil properties

49

50

51

52 53

54

55 56 57

58

59 60

61

62

63

64 65

66

67

68

69

70 71 72

73

74

75

76

77 78 79

80

81

82 83

84

85 86

87

88

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 itself does not provide any attestation of conformity. Independent certification bodies provide conformity assessment services and, in some areas, access to IEC marks of conformity. IEC is not responsible for any services carried out by independent certification bodies.
- 6) All users should ensure that they have the latest edition of this publication.
- 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
- 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) IEC draws attention to the possibility that the implementation of this document may involve the use of (a) patent(s). IEC takes no position concerning the evidence, validity or applicability of any claimed patent rights in respect thereof. As of the date of publication of this document, IEC had not received notice of (a) patent(s), which may be required to implement this document. However, implementers are cautioned that this may not represent the latest information, which may be obtained from the patent database available at https://patents.iec.ch. IEC shall not be held responsible for identifying any or all such patent rights.
- IEC 63522-3 has been prepared by IEC technical committee 94: Electrical relays. It is an International Standard.

89

90

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

CDV	Report on voting
94/1023/CDV	94/1104/RVC

91 92

93

- Full information on the voting for the approval of this International Standard can be found in the report on voting indicated in the above table.
- The language used for the development of this International Standard is English. 94

94/1106/CDV

IEC CDV 63522-3 ED1 © IEC 2025

- This document was drafted in accordance with ISO/IEC Directives, Part 2, and developed in accordance with ISO/IEC Directives, Part 1 and ISO/IEC Directives, IEC Supplement, available at www.iec.ch/members_experts/refdocs. The main document types developed by IEC are described in greater detail at www.iec.ch/publications.
- A list of all parts of IEC 63522 series, published under the general title *Electrical relays Relay coil properties*, can be found on the IEC website.
- The committee has decided that the contents of this document will remain unchanged until the stability date indicated on the IEC website under webstore.iec.ch in the data related to the specific document. At this date, the document will be
- 104 reconfirmed,
- 105 withdrawn, or
- 106 revised.

107

108

IMPORTANT – The 'colour inside' logo on the cover page of this publication indicates that it contains colours which are considered to be useful for the correct understanding of its contents. Users should therefore print this document using a colour printer.

(https://standards.iteh.ai) Document Preview

https://standards.iteh.ai/catalog/standards/sist/cbe4538a-d408-4a5a-a33a-ef43ff33e7e2/osist-pren-jec-63522-3-2025