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INTERNATIONAL STANDARD

CONSOLIDATED VERSION

Electromechanical telecom elementary relays of assessed quality - Part 1: Generic specification and blank detail specification

CONTENTS

F	DREWO	PRD	4		
1	Scop	e	6		
2	Norm	native references	6		
3	Terms and definitions				
	3.1	Type of relays			
	3.2	Types of contacts			
	3.3	Contact fault and contact failure			
	3.4	Relay malfunction, relay failure			
	3.5	Relay construction types			
	3.6	Inspection level and sample size			
4		d values			
	4.1 General				
	4.2	Rated coil voltages			
	4.3	Contact-circuit resistance			
	4.4	Dielectric test			
	4.5	Impulse voltage test			
	4.6	Insulation resistance			
	4.7	Number of operations determining electrical endurance			
	4.8	Contact failure rate for test evaluation purposes			
5		ing and documentation			
Ü	5.1	General			
	5.2	Marking of the relay			
	5.2	Marking of the package			
	5.4	Coded date of manufacture			
6	-	aration of blank detail and detail specifications			
	-				
7		ity assessment procedures			
	7.1	Primary stage of manufacture			
	7.2	Structurally similar relays			
	7.3	Qualification approval procedures			
	7.4	Quality conformance inspection			
	7.4.1				
	7.4.2	,			
	7.4.3	, , ,			
	7.4.4	,			
	7.4.5				
	7.4.6	•			
	7.4.7	, , , , , , , , , , , , , , , , , , , ,			
	7.4.8				
	7.4.9	•			
	7.4.1	•			
	7.5	Periodic inspection / Intervals between tests			
8		schedule			
	8.1	Test sequence	14		
	8.2 Types of relays, based upon environmental protection (relay technology (RT))				
	8.3	Categories of application of contacts	15		

	8.4	Order of tests	15
	8.5	Test groups and subgroups	15
9	Tests		20
	9.1	Standard conditions for testing	20
	9.2	Mounting of test specimens during the test	
	9.3	General conditions for testing	
10		ing information	
Αſ	,	informative) Relay reliability – Failure rate data	
	A.1	General	
	A.2	Scope	
	A.3	Description of the relay	
	A.3.1		
	A.3.2	S .	
	A.4	Fault and failure data	22
	A.4.1	Fault and failure definition	
	A.4.2	Fault application	22
	A.4.3	Failure definition	22
	A.4.4	Failure application	22
	A.5	Source of data	22
	A.6	Weibull approach	22
	A.7	WeiBayes approach	23
	A.7.1	Description	23
	A.7.2	Method	23
	A.7.3	WeiBayes without failures	23
	A.7.4		
	A.7.5	•	
Ar		informative) Characteristic values of the relay	
	B.1	General data	
	B.2	Coil data	
		Contact data	
			27
	B.3.2		
	B.3.3		
	B.3.4	,	
	B.4	Mounting	
	B.5	Environmental data	
	B.6	Package of relays for automatic handling (if applicable)	
Ar	nnex C (informative) Blank detail and detail specification	29
	C.1	Examples for front pages	29
	C.1.1	General	29
	C.1.2	Type 0 – Non-standardized types and construction	29
	C.1.3	Type 1 – Two change-over contacts, 20 mm × 10 mm base	30
	C.1.4		
	C.1.5	, · · · · · · · · · · · · · · · · · · ·	
	C.1.6		
	C.1.7		
	C.2	Qualification approval procedures	
	C.3	Quality conformance inspection	
	U.U	Quality Combinative inspection	

C.4 Formation of inspection lots	35		
Annex D (informative) Definition of subgroups	53		
Bibliography			
Figure A.1 – New compressor design WeiBayes versus old design	25		
Table 1 – Group A	16		
Table 2 – Group B	17		
Table 3 – Group C	18		
Table B.1 – Dielectric test voltages	26		
Table B.2 – Impulse test voltages	26		
Table B.3 – Coil data	27		
Table B.4 – Loads, contact-circuit resistance limits, switching cycles and frequencies for electrical endurance and overload tests	27		
Table C.1 – Quality conformance inspection	35		
Table C.2 – Qualification approval	50		
Table C.3 – Industrial qualification	52		

INTERNATIONAL ELECTROTECHNICAL COMMISSION

Electromechanical telecom elementary relays of assessed quality - Part 1: Generic specification and blank detail specification

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This consolidated version of the official IEC Standard and its amendment has been prepared for user convenience.

IEC 61811-1 edition 2.1 contains the second edition (2015-01) [documents 94/379/FDIS and 94/383/RVD] and its amendment 1 (2025-12) [documents 94/1172/FDIS and 94/1180/RVD].

In this Redline version, a vertical line in the margin shows where the technical content is modified by amendment 1. Additions are in green text, deletions are in strikethrough red text. A separate Final version with all changes accepted is available in this publication.

International Standard IEC 61811-1 has been prepared by IEC technical committee 94: All-ornothing electrical relays.

This second edition of IEC 61811-1 cancels and replaces

- IEC 61811-1 published in 1999,
- IEC 61811-10 published in 2002.
- IEC 61811-11 published in 2002,
- IEC 61811-50 published in 2002,
- IEC 61811-51 published in 2002,
- IEC 61811-52 published in 2002,
- IEC 61811-53 published in 2002,
- IEC 61811-54 published in 2002,
- IEC 61811-55 published in 2002,

and constitutes a technical revision. This edition includes the following significant technical changes with respect to the previous editions:

- a) to get one document for telecom relays;
- b) update all relevant references;

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

FDIS	Report on voting
94/379/FDIS	94/383/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.

A list of all parts in the IEC 61811 series, published under the general title *Electromechanical* telecom elementary relays of assessed quality, can be found on the IEC website.

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

This publication was drafted in accordance with ISO/IEC Directives, Part 2.

The committee has decided that the contents of this document and its amendment 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

- reconfirmed,
- withdrawn, or
- revised.

1 Scope

This part of IEC 61811 applies to electromechanical telecom elementary relays. Relays according to this standard are provided for the operation in telecommunication applications. However, as electromechanical elementary relays, they are also suitable for particular industrial and other applications.

This standard selects from IEC 61810 series and other sources the appropriate methods of test to be used in detail specifications derived from this specification, and contains basic test schedules to be used in the preparation of such specifications in accordance with this standard.

Detailed test schedules are contained in the detail specifications.

2 Normative references

The following documents, in whole or in part, are normatively referenced in this document and are indispensable for its application. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

IEC 60062:2004, Marking codes for resistors and capacitors

IEC 60068-1:2013, Environmental testing - Part 1: General and guidance

IEC 60068-2-17:1994, Basic environmental testing procedures – Part 2-17: Tests – Test Q: Sealing

IEC 60068-2-20:2008, Environmental testing – Part 2-20: Tests – Test T: Test methods for solderability and resistance to soldering heat of devices with leads

IEC 60068-2-58:2004, Environmental testing – Part 2-58: Tests – Test Td: Test methods for solderability, resistance to dissolution of metallization and to soldering heat of surface mounting devices (SMD)

IEC 60410:1973, Sampling plans and procedures for inspection by attributes

IEC 60695-11-5:2004, Fire hazard testing – Test flames – Needle-flame test method – Apparatus, confirmatory test arrangement and guidance

IEC 61810 (all parts), Electromechanical elementary relays

IEC 61810-1:2008, Electromechanical elementary relays – Part 1: General requirements

IEC 61810-2:2011, Electromechanical elementary relays – Part 2: Reliability

IEC 61810-7:2006, Electromechanical elementary relays – Part 7: Test and measurement procedures

ISO 2859 (all parts), Sampling procedures for inspection by attributes

Bibliography

IEC 60050 (all parts), *International Electrotechnical Vocabulary (IEV)* (available at http://www.electropedia.org)

IEC 60068-2-47:2005, Environmental testing – Part 2-47: Tests – Mounting of specimens for vibration, impact and similar dynamic tests

IEC 61649, Weibull analysis

IEC 61709:2011, Electronic components – Reliability – Reference conditions for failure rates and stress models for conversion

ISO 8601:2004, Data elements and interchange formats – Information interchange – Representation of dates and times

ISO 9001, Quality management systems – Requirements