

### SLOVENSKI STANDARD SIST EN IEC 62020-1:2021

01-oktober-2021

Nadomešča:

SIST EN 62020:2000

SIST EN 62020:2000/A1:2006

Električni pribor - Nadzorovanje preostalega (difernečnega) toka (RCM) - 1. Del: RCM za gospodinjske in podobne namene (IEC 62020-1:2020 + COR1:2020)

Electrical accessories - Residual current monitors (RCMs) - Part 1: RCMs for household and similar uses (IEC 62020-1:2020 + COR1:2020)

#### iTeh STANDARD PREVIEW

Elektrisches Installationsmaterial - Differenzstrom-Überwachungsgeräte (RCMs) - Teil 1: RCMs für Hausinstallationen und ähnliche Verwendungen (IEC 62020-1:2020 + COR1:2020)

SIST EN IEC 62020-1:2021

https://standards.iteh.ai/catalog/standards/sist/085a3f61-0eb6-4a53-a7fe-

Petit appareillage électrique - Contrôleurs d'isolement à courant différentiel résiduel (RCM) - Partie 1: RCM pour usages domestiques et analogues (IEC 62020-1:2020 + COR1:2020)

Ta slovenski standard je istoveten z: EN IEC 62020-1:2021

ICS:

29.120.50 Varovalke in druga Fuses and other overcurrent

nadtokovna zaščita protection devices

SIST EN IEC 62020-1:2021 en,fr,de

**SIST EN IEC 62020-1:2021** 

# iTeh STANDARD PREVIEW (standards.iteh.ai)

SIST EN IEC 62020-1:2021

https://standards.iteh.ai/catalog/standards/sist/085a3f61-0eb6-4a53-a7fe-60d6a8effbbc/sist-en-iec-62020-1-2021

**EUROPEAN STANDARD** 

**EN IEC 62020-1** 

NORME EUROPÉENNE

**EUROPÄISCHE NORM** 

April 2021

ICS 29.120.50

Supersedes EN 62020:1998 and all of its amendments and corrigenda (if any)

#### **English Version**

Electrical accessories - Residual current monitors (RCMs) – Part 1: RCMs for household and similar uses (IEC 62020-1:2020 + COR1:2020)

Petit appareillage électrique - Contrôleurs d'isolement à courant différentiel résiduel (RCM) - Partie 1: RCM pour usages domestiques et analogues (IEC 62020-1:2020 + COR1:2020)

Elektrisches Installationsmaterial - Differenzstrom-Überwachungsgeräte (RCMs) - Teil 1: RCMs für Hausinstallationen und ähnliche Verwendungen (IEC 62020-1:2020 + COR1:2020)

This European Standard was approved by CENELEC on 2020-05-26. CENELEC members are bound to comply with the CEN/CENELEC Internal Regulations which stipulate the conditions for giving this European Standard the status of a national standard without any alteration.

Up-to-date lists and bibliographical references concerning such national standards may be obtained on application to the CEN-CENELEC Management Centre or to any CENELEC member.

This European Standard exists in three official versions (English, French, German). A version in any other language made by translation under the responsibility of a CENELEC member into its own language and notified to the CEN-CENELEC Management Centre has the same status as the official versions. SIST EN IEC 62020-1:20

https://standards.iteh.ai/catalog/standards/sist/085a3f61-0eb6-4a53-a7fe-

CENELEC members are the national electrotechnical committees of Austria, Belgium, Bulgaria, Croatia, Cyprus, the Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, the Netherlands, Norway, Poland, Portugal, Republic of North Macedonia, Romania, Serbia, Slovakia, Slovenia, Spain, Sweden, Switzerland, Turkey and the United Kingdom.



European Committee for Electrotechnical Standardization Comité Européen de Normalisation Electrotechnique Europäisches Komitee für Elektrotechnische Normung

CEN-CENELEC Management Centre: Rue de la Science 23, B-1040 Brussels

#### **European foreword**

The text of document 23E/1180/FDIS, future edition 1 of IEC 62020-1, prepared by SC 23E "Circuit-breakers and similar equipment for household use" of IEC/TC 23 "Electrical accessories" was submitted to the IEC-CENELEC parallel vote and approved by CENELEC as EN IEC 62020-1:2021.

The following dates are fixed:

- latest date by which the document has to be implemented at national (dop) 2021-10-16 level by publication of an identical national standard or by endorsement
- latest date by which the national standards conflicting with the (dow) 2024-04-16 document have to be withdrawn

This document supersedes EN 62020:1998 and all of its amendments and corrigenda (if any).

Attention is drawn to the possibility that some of the elements of this document may be the subject of patent rights. CENELEC shall not be held responsible for identifying any or all such patent rights.

This document has been prepared under a mandate given to CENELEC by the European Commission and the European Free Trade Association, and supports essential requirements of EU Directive(s).

For the relationship with EU Directive(s) see informative Annexes ZZA and ZZB, which are an integral part of this document.

#### iTeh STANDARD PREVIEW

### (stendorsement notice i)

#### SIST EN IEC 62020-1:2021

The text of the International Standard IEC 62020-1:2020 was approved by CENELEC as a European Standard without any modification.

In the official version, for Bibliography, the following notes have to be added for the standards indicated:

IEC 60051 (series)	NOTE	Harmonized as EN 60051 (series)
IEC 60364 (series)	NOTE	Harmonized as HD 60364 (series)
IEC 61000 (series)	NOTE	Harmonized as EN IEC 61000 (series)
IEC 61008-1:2010	NOTE	Harmonized as EN 61008-1:2012 (modified)
IEC 61543	NOTE	Harmonized as EN 61543
IEC 61557-8	NOTE	Harmonized as EN 61557-8
ISO/IEC Guide 2:2004	NOTE	Harmonized as EN 45020:2006 (not modified)

### Annex ZA (normative)

## Normative references to international publications with their corresponding European publications

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.

NOTE 1 Where an International Publication has been modified by common modifications, indicated by (mod), the relevant EN/HD applies.

NOTE 2 Up-to-date information on the latest versions of the European Standards listed in this annex is available here: www.cenelec.eu.

<u>Publication</u>	<u>Year</u>	<u>Title</u>	EN/HD	<u>Year</u>
IEC 60664-3	2017	Insulation coordination for equipment within low-voltage systems Part 3: Use of coating, potting or moulding for protection against pollution	EN 60664-3	2017
CISPR 14-1	2016	Electromagnetic compatibility - Requirements for household appliances, electric tools and similar apparatus - Part 1: Emission	EN 55014-1	2017
IEC 60038	2009	IEC standard voltages	EN 60038	2011
IEC 60068-2-30	1 <b>2005</b> star	ndEnvironmentalgtestingls/sisPart 2-30:0Tests 53- Test0Db8eDampstheat;-6ŷclic-l(1224 12 hour cycle)	TEN 60068-2-30	2005
IEC 60068-3-4	2001	Environmental testing – Part 3-4: Supporting documentation and guidance – Damp heat tests	EN 60068-3-4	2002
IEC 60529	1989	Degrees of protection provided by	EN 60529	1991
A1	1999	enclosures (IP Code)	A1	2000
A2	2013		A2	2013
IEC 60664-1	2007	Insulation coordination for equipment within low-voltage systems – Part 1: Principles, requirements and tests	EN 60664-1	2007
IEC 60695-2-10	2013	Fire hazard testing – Part 2-10: Glowing/hot- wire based test methods – Glow-wire apparatus and common test procedure	EN 60695-2-10	2013
IEC 60695-2-11	2014	Fire hazard testing – Part 2-11: Glowing/hot- wire based test methods – Glow-wire flammability test method for end-products (GWEPT)	EN 60695-2-11	2014
IEC 61000-4-2	2008	Electromagnetic compatibility (EMC) - Part 4- 2: Testing and measurement techniques – Electrostatic discharge immunity test	EN 61000-4-2	2009

<u>Publication</u>	<u>Year</u>	<u>Title</u>	EN/HD	<u>Year</u>
IEC 61000-4-3	2020	Electromagnetic compatibility (EMC) - Part 4-3: Testing and measurement techniques – Radiated, radio-frequency, electromagnetic field immunity test	EN IEC 61000- 4-3	2020
IEC 61000-4-4	2012	Electromagnetic compatibility (EMC) - Part 4- 4: Testing and measurement techniques - Electrical fast transient/burst immunity test	EN 61000-4-4	2012
IEC 61000-4-5 AMD1	2014 2017	Electromagnetic compatibility (EMC) - Part 4-5: Testing and measurement techniques - Surge immunity test	EN 61000-4-5 AMD1	2012 2017
IEC 61000-4-6	2013	Electromagnetic compatibility (EMC) - Part 4- 6: Testing and measurement techniques - Immunity to conducted disturbances, induced by radio-frequency fields	EN 61000-4-6	2014
IEC 61000-4-11	2020	Electromagnetic compatibility (EMC) - Part 4- 11: Testing and measurement techniques - Voltage dips, short interruptions and voltage variations immunity tests	EN IEC 61000- 4-11	2020
IEC 61000-4-34 AMD1	2005 2009	Electromagnetic compatibility (EMC) - Part 4-34: Testing and measuring techniques - Voltage dips, short interruptions and voltage variations immunity tests for equipment with input current more than 16 A per phase	EN 61000-4-34 AMD1	2007 2009
IEC 61543	1995	Residual current-operated protective devices	EN 61543	1995
AMD1	2004	(RCDs) for household and similar use – Electromagnetic compatibility	AMD11	2003
AMD2	2005	SIST EN IEC 62020-1:2021	AMD12	2005 2006
IEC 62873-2	2016	ndards.iteh.ai/catalog/standards/sist/085a3f61-0eb6-4a53-a Residual current operated circuit-breakers for household and similar use – Part 2: Residual current devices (RCDs) – Vocabulary	a /lexi-bz	2000
IEC 62873-3-1	2016	Residual current operated circuit-breakers for household and similar use — Part 3-1: Particular requirements for RCDs with screwless-type terminals for external copper conductors		
IEC 62873-3-2	2016	Residual current operated circuit-breakers for household and similar use – Part 3-2: Particular requirements for RCDs with flat quick-connect terminations		
IEC 62873-3-3	2016	Residual current operated circuit-breakers for household and similar use — Part 3-3: Specific requirements for RCDs with screwtype terminals for external untreated aluminium conductors and with aluminium screw-type terminals for use with copper or with aluminium conductors		
CASRN 110-54-3		Chemical Abstracts Service Registry Number		

### Annex ZZA (informative)

Relationship between this European standard and the essential requirements of Directive 2014/30/EU [2014 OJ L96] aimed to be covered

This European standard has been prepared under the European Commission standardisation request C(2016) 7641 final of 30.11.2016<sup>1</sup>, ('M/552'), as regards harmonised standards in support of Directive 2014/30/EU relating to electromagnetic compatibility, to provide one voluntary means of conforming to essential requirements of Directive 2014/30/EU of the European Parliament and of the Council of 26 February 2014 on the harmonisation of the laws of the Member States relating to electromagnetic compatibility [2014 OJ L96].

Once this standard is cited in the Official Journal of the European Union under that Directive, compliance with the normative clauses of this standard given in Table ZZA.1 confers, within the limits of the scope of this standard, a presumption of conformity with the corresponding essential requirements of that Directive, and associated EFTA regulations.

Table ZZA.1 — Correspondence between this European standard and the Essential Requirements set out in Directive 2014/30/EU [2014 OJ L96]

Essential requirements of Directive 2014/30/EU	Clause(s) / sub-clause(s) of this EN	Remarks / Notes
Annex I. 1(a) (electromagnetic disturbances)  https://standards	SIST EN IEC 62020-1:2021 siteh.ai/catalog/standards/sist/085a3160d6a8effbbc/sist-en-iec-62020-1-	normatively references EN 55014-1 for emission requirements the following applies:  Clause 7.1 of EN 55014-1 (Significance of a CISPR limit) shall not be applied, if Clause 4 of EN 55014-1 (Limits of disturbances) is applied for the purposes of the presumption of conformity.  Clause 7.1 of EN 55014-1 (Significance of a CISPR limit) shall not be applied, if Clause 6 of EN 55014-1 (Operating conditions) is applied for the purposes of the presumption of conformity  The following shall not be applied for the purpose of presumption of conformity:  Clause 7 of EN 55014-1 (Interpretation of CISPR radio disturbance limits).

<sup>&</sup>lt;sup>1</sup> COMMISSION IMPLEMENTING DECISION C(2016) 7641 final of 30.11.2016 on a standardisation request to the European Committee for Standardisation, to the European Committee for Electrotechnical Standardisation and to the European Telecommunications Standards Institute as regards harmonised standards in support of Directive 2014/30/EU of the European Parliament and of the Council of 26 February 2014 on the harmonisation of the laws of the Member States relating to electromagnetic compatibility.

5

Essential requirements of Directive 2014/30/EU	Clause(s) / sub-clause(s) of this EN	Remarks / Notes
Annex I. 1(b) (electromagnetic immunity)	8.18.2 9.22	

**WARNING 1**: Presumption of conformity stays valid only as long as a reference to this European standard is maintained in the list published in the Official Journal of the European Union. Users of this standard should consult frequently the latest list published in the Official Journal of the European Union.

**WARNING 2**: Other Union legislation may be applicable to the product(s) falling within the scope of this standard.

## iTeh STANDARD PREVIEW (standards.iteh.ai)

SIST EN IEC 62020-1:2021 https://standards.iteh.ai/catalog/standards/sist/085a3f61-0eb6-4a53-a7fe-60d6a8effbbc/sist-en-iec-62020-1-2021

### **Annex ZZB** (informative)

## Relationship between this European standard and the safety objectives of Directive 2014/35/EU [2014 OJ L96] aimed to be covered

This European Standard has been prepared under a Commission's standardization request relating to harmonized standards in the field of the Low Voltage Directive, M/511, to provide one voluntary means of conforming to safety objectives of Directive 2014/35/EU of the European Parliament and of the Council of 26 February 2014 on the harmonization of the laws of the Member States relating to the making available on the market of electrical equipment designed for use within certain voltage limits [2014 OJ L96].

Once this standard is cited in the Official Journal of the European Union under that Directive, compliance with the normative clauses of this standard given in Table ZZB.1 confers, within the limits of the scope of this standard, a presumption of conformity with the corresponding essential requirements of that Directive, and associated EFTA regulations.

Table ZZB.1 — Correspondence between this European standard and Article 3 of Directive 2014/35/EU [2014 OJ L153]

Safety Objectives of Directive 2014/35/EU	Clause(s) / sub-clause(s) of this EN	Remarks / Notes
(1)(a)	(\$2,314,5,36°-0,3 iteh.ai)	
(1)(b)	8.1 – 9.4 and 9.5 SIST EN IEC 62020-1:2021	
(1)(c) https://standard	7 04 100 040	b6-4a53-a7fe-
(2) (a)	8.2 8 9.6, 8.5 1 9.9.1 10 9.9.3, 8.6 - 9.9.5, 8.13 - 9.9, 8.16 - 9.19, 8.7 - 9.10, 8.15 - 9.17, 8.20 -9.23, Annex A, 8.19 - 9.9.4	
(2) (b)	8.4 - 9.8 and 9.10.2.2, 8.14 - 9.16, 8.7 - 9.10, 8.8 - 9.11, Annex A	
(2) (c)	8.1.4.3 and 8.1.4.4 – inspection, 8.12 – 9.15	
(2) (d)	8.1.3 – 9.7, Annex B, 8.3 – 9.7	
(3) (a)	8.9 - 9.12, 8.17 - 9.20, 8.17 - 9.21	
(3) (b)	8.10 - 9.13, 8.11 - 9.14, 8.18 - 9.22, 8.15 - 9.17	
(3) (c)	8.14 - 9.16, 8.8 - 9.11, 8.4 - 9.10.2.2	

**WARNING 1** — Presumption of conformity stays valid only as long as a reference to this European standard is maintained in the list published in the Official Journal of the European Union. Users of this standard should consult frequently the latest list published in the Official Journal of the European Union.

**WARNING 2** — Other Union legislation may be applicable to the product(s) falling within the scope of this standard.

## iTeh STANDARD PREVIEW (standards.iteh.ai)

SIST EN IEC 62020-1:2021 https://standards.iteh.ai/catalog/standards/sist/085a3f61-0eb6-4a53-a7fe-60d6a8effbbc/sist-en-iec-62020-1-2021



IEC 62020-1

Edition 1.0 2020-04

### INTERNATIONAL STANDARD

### NORME INTERNATIONALE

Electrical accessories A Residual current monitors (RCMs) + Part 1: RCMs for household and similar uses (RCMs) + ai)

Petit appareillage électrique - <u>Contrôleurs d'isol</u>ement à courant différentiel résiduel (RCM) <del>intps://standards.iteh.ai/catalog/standards/sist/085a3f61-0eb6-4a53-a7fe-</del> Partie 1: RCM pour usages domestiques et analogues

INTERNATIONAL
ELECTROTECHNICAL
COMMISSION

COMMISSION ELECTROTECHNIQUE INTERNATIONALE

ICS 29.120.50 ISBN 978-2-8322-8145-1

Warning! Make sure that you obtained this publication from an authorized distributor.

Attention! Veuillez vous assurer que vous avez obtenu cette publication via un distributeur agréé.

#### CONTENTS

		KU					
IN	TRODU	ICTION	. 10				
1	Scop	e	.11				
2	Norm	rmative references					
3	Term	s and definitions	.13				
4	Class	sification	. 15				
	4.1	According to the method of operation	.15				
	4.1.1						
	4.1.2	RCM functionally dependent on an energy source other than line					
		voltage					
	4.2	According to the type of installation					
	4.3	According to the number of current paths					
	4.4	According to the ability to adjust the residual operating current					
	4.5	According to the possibility of adjusting the time-delay					
	4.6	According to the protection against external influences					
	4.7	According to the method of mounting					
	4.8	According to the method of connection					
	4.9	According to the type of connection of the load conductors					
	4.9.1	- · · · · · · · · · · · · · · · · · · ·					
	4.9.2 4.10	RCM to which the monitored line is directly connected	.10				
	4.10	According to ability to directionally discriminate between supply-side and	. 10				
	4.11	load-side residual currents catalog/standards/sist/085a3f61-0eb6-4x53-a7fe	.16				
	4.12	According to the supplydsystemo/sist-on-icc-62020-1-2021	.16				
	4.12.						
	4.12.						
	4.13	According to the type of residual current monitored	.16				
	4.14	According to the method of residual current detection					
5	Char	acteristics of RCMs	. 16				
	5.1	Summary of characteristics	.16				
	5.2	Rated quantities and other characteristics	. 17				
	5.2.1	Rated voltage	. 17				
	5.2.2	Rated current (I <sub>n</sub> )	. 17				
	5.2.3	Rated residual operating current ( $I_{ extstyle \Delta  extstyle n}$ )	. 17				
	5.2.4						
	5.2.5	Rated frequency	. 18				
	5.2.6	Operating characteristics	. 18				
	5.3	Standard and preferred values	.18				
	5.3.1	3 ( 6)					
	5.3.2	(11)					
	5.3.3	Ι Ο (ΔΠ)					
	5.3.4	, 9 (ДПО)	.19				
	5.3.5	ı G	40				
	<b>5</b> 2 6	single-phase load through an RCM					
	5.3.6	, ,	. 19				
	5.3.7	Standard and preferred values of the rated conditional short-circuit current $(I_{\rm NC})$ (only applicable to RCMs classified according to 4.9.2)	.19				

	5.3.8	Maximum actuating time $(T_{\sf max})$	20
	5.3.9	Minimum non-actuating time (T <sub>min</sub> )	20
	5.4	Coordination with short-circuit protective devices (SCPDs) (only valid for	
		RCMs classified according to 4.9.2)	
	5.4.1		
	5.4.2	V IIO	
_	5.4.3	( \( \D \) (	
6		ing and other product information	
7	Stan	dard conditions for operation in service and for installation	
	7.1	Standard conditions	
	7.2	Conditions of installation	
8	Requ	irements for construction and operation	24
	8.1	Mechanical design	24
	8.1.1	General	24
	8.1.2	Features	24
	8.1.3	Clearances and creepage distances	25
	8.1.4	, , , , , , , , , , , , , , , , , , , ,	
	8.1.5	Terminals for external conductors	27
	8.2	Protection against electric shock	29
	8.3	Dielectric properties	30
	8.4	Dielectric properties  Temperature riseh STANDARD PREVIEW	30
	8.4.1	General(ctandarda italia)	30
	8.4.2	General(standards.iteh.ai) Temperature rise limits	30
	8.4.3		
	8.5	Operating characteristic ai/catalog/standards/sixt/085a3f61-0eb6-4a53-a7fe	
	8.6	Directional discrimination asethbc/sist-en-iec-62020-1-2021	31
	8.7	Operational endurance	31
	8.8	Performance at short-circuit currents	31
	8.9	Resistance to mechanical impact	31
	8.10	Resistance to heat	
	8.11	Resistance to abnormal heat and to fire	32
	8.12	Test device	32
	8.13	Correct operation of RCMs within the supply voltage range	
	8.14	Behaviour of RCMs in case of overcurrents in the main circuit	
	8.15	Resistance of RCMs to unwanted initiating of an alarm due to current surges caused by impulse voltages	33
	8.16	Behaviour of RCMs in case of earth fault currents comprising DC components	
	8.17	Reliability	
	8.18	Electromagnetic compatibility (EMC)	
	8.18.	- , , , , ,	
	8.18.		
	8.18.	•	
	8.19	Connection of an external current transformer (CT)	
	8.20	Response to temporary overvoltages on the LV side due to fault conditions	-
	-	on the HV side	33
9	Tests	S	34
	9.1	General	34
	9.2	Test conditions	35

9.3	Test of indelibility of marking	35
9.4	Test of reliability of screws, current-carrying parts and connections	36
9.5	Test of reliability of terminals for external conductors	37
9.6	Verification of protection against electric shock	38
9.7	Test of dielectric properties	39
9.7.1	Resistance to humidity	39
9.7.2	Insulation resistance of the main circuits of RCMs classified according to 4.9.2	39
9.7.3		
9.7.4	circuits	
9.7.5	,	42
9.7.6	Capability of the RCM to withstand high DC voltages due to insulation measurements	42
9.7.7	Verification of impulse withstand voltages	42
9.8	Test of temperature rise	44
9.8.1	Ambient air temperature	44
9.8.2	Past procedure	44
9.8.3	Measurement of the temperature rise of parts	45
9.8.4	Temperature rise of a part	45
9.9	Verification of the operating characteristics PREVIEW	
9.9.1	Test circuit(standards:iteh.ai)  Off-load tests with residual sinusoidal alternating currents at the	45
9.9.2	reference temperature of 20 °C ± 2 °C	45
9.9.3	313 L PIN TPA (DZADZA) - L ZADZI	
9.9.4	Verification of the connection and the function of an external current transformer (CT)	
9.9.5	to 4.11	
9.10	Verification of operational endurance	48
9.10.	.1 General	48
9.10.	'	
9.11	Verification of short-circuit withstand capability	48
9.11.	.1 List of the short-circuit tests	48
9.11.	.2 Short-circuit tests	48
9.12	Verification of resistance to mechanical impact	
9.12.		
9.12.	- 71	
9.12.		
9.12.	.4 Plug-in type RCMs	55
9.13	Test of resistance to heat	
9.14	Test of resistance to abnormal heat and to fire	
9.15	Verification of the operation of the test device at the limits of rated voltage	57
9.16	Verification of limiting values of the non-operating current under overcurrent	
	conditions	
9.16.		57
9.16.	.2 Verification of the limiting value of overcurrent in the case of a load through an RCM with two current paths	57

9.16.		erification of the limiting value of overcurrent in the case of a single- ohase load through a three-pole or four-pole RCM	58
9.16.4		Perification of the limiting value of overcurrent in the case of a single- shase load through an RCM with an external detecting device	
9.17		transformer)cation of resistance against unwanted operation due to current surges	58
9.17		ed by impulse voltages	59
9.18	Void.		59
9.19		onal verification of the correct operation at residual currents with DC	
0.40	•	onents	
9.19.		General	59
9.19.		/erification of the correct operation for RCM Type A, Type F and Type B	61
9.19.		/erification of correct operation for RCM Type F and Type B	
9.19.		/erification of correct operation for RCM Type B	
9.20		cation of reliability	
9.20.	1 (	General	66
9.20.	2 (	Climatic test	66
9.20.	3 7	Fest with temperature of 40 °C	68
9.21		cation of ageing of electronic components	
9.22		cation of EMC requirements	
9.22.	1 (	General Teh. S.T.A.N.D.A.R.D. P.R.E.V.III.W	68
9.22.	2 [	Description of quiescent mode and operate mode	70
9.22.		Criterion A1 (standards.iteh.ai)	
9.22.	4 (	Criterion A2	70
9.22.	5 (	https://standards.iteh.a/catalog/standards/sist/085a3f61-0eb6-4a53-a7fe-	70
9.23	condi	https://standards.itch.ai/catalog/standards/sist/085a3f61-0ch6-4a53-a7fe- onse of the RCM to temporary overvoltages on the LV side, due to fault tions on the HV side	71
9.24		of resistance to rusting	
Annex A (		itive) Test sequence and number of samples to be submitted for	
		onformity to this document	. 102
A.1	Gene	ral	. 102
A.2	Test	sequences	. 102
A.3	Numb	per of samples to be submitted for full test procedure	. 103
A.4		per of samples to be submitted for simplified test procedures in case of	
A D. /		itting simultaneously a range of RCMs of the same fundamental design	
	-	tive) Determination of clearances and creepage distances	
Bibliograp	hy		. 109
•		ding current in FE conductor	
Figure 2 -	- Stan	dard test finger (9.6)	73
Figure 3 -	- Test	circuit for verification of the operating characteristics for RCMs	74
		circuit for verification of directional discrimination in IT systems for I according to 4.12	75
		circuit for verification of the correct operation of RCMs in the case of ng direct currents	76
		circuit for verification of the correct operation of RCMs in the case of any direct currents superimposed by smooth direct current of 0,006 A	78
•		circuit for verification of the coordination with an SCPD of an RCM with	
two curre	nt path	ns (9.11)	79