

## SLOVENSKI STANDARD oSIST prEN IEC 61869-20:2024

01-april-2024

# IEC 61869-20: Varnostne zahteve instrumentalnih transformatorjev za visokonapetostne aplikacije

IEC 61869-20: Safety requirements of Instrument Transformers for High Voltage applications

## iTeh Standards (https://standards.iteh.ai)

### Ta slovenski standard je istoveten z: prEN IEC 61869-20:2024

oSIST prEN IEC 61869-20:2024 https://st<mark>ICS:</mark>ds.iteh.ai/catalog/standards/sist/3381e9b9-c1e8-4f1f-b218-8ee2846a5960/osist-pren-iec-61869-20-20

17.220.20 Merjenje električnih in magnetnih veličin

Measurement of electrical and magnetic quantities

oSIST prEN IEC 61869-20:2024

en

oSIST prEN IEC 61869-20:2024

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

o<u>SIST prEN IEC 61869-20:2024</u> https://standards.iteh.ai/catalog/standards/sist/3381e9b9-c1e8-4f1f-b218-8ee2846a5960/osist-pren-iec-61869-20-2024



## 38/786/CDV

#### COMMITTEE DRAFT FOR VOTE (CDV)

PROJECT NUMBER:	
IEC 61869-20 ED1	
DATE OF CIRCULATION:	CLOSING DATE FOR VOTING:
2024-02-09	2024-05-03
SUPERSEDES DOCUMENTS:	

38/725/NP, 38/771A/RVN

EC TC 38 : Instrument Transformers	
Secretariat:	Secretary:
Italy	Mr Filippo Frugoni
OF INTEREST TO THE FOLLOWING COMMITTEES:	PROPOSED HORIZONTAL STANDARD:
TC 64	
	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	NOT 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.	andards dards.iteh.ai)

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

Vista 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).

#### TITLE:

IEC 61869-20: Safety requirements of Instrument Transformers for High Voltage applications

PROPOSED STABILITY DATE: 2028

NOTE FROM TC/SC OFFICERS:

**Copyright** © **2023 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.

38/786/CD	V
-----------	---

1

### CONTENTS

2			
3	FOREWO	RD	4
4	1 Scop	e	6
5	2 Norm	ative references	6
6	3 Term	s and definitions	6
7		ection against electric shock	
8	4.1	General	
9	4.2	Earthing of housing, terminals and connection to carrier-frequency	
10		accessory	7
11	4.2.1	General	7
12	4.2.2	<b>3 3 4 5</b>	7
13	4.2.3	Earthing of HV VTs	9
14	4.3	Access to secondary terminals	
15	4.3.1	General	
16	4.3.2		
17	4.3.3		12
18 19	4.3.4	Protection of equipment against mechanical impact under normal service conditions	13
20	4.4	Risk of open CTs and shorted VTs secondary terminals	
21	4.4.1	General	
22	4.4.2		
23	4.4.3	Protections against the risk of shorted VTs secondary terminals	13
24	5 Prote	ection against thermal and chemical hazards	13
25	5.1	General	
26	5.2	Risk of fire	
27	5.3	Risk of internal arc	
28	5.4	Risk of leakage of oil or release of gases	14
29	6 Prote	ction against mechanical hazards	
30	6.1	General	14
31	6.2	Hazards during mounting and dismounting	14
32	Bibliograp	hy	15
33			
34	Figure 1 -	- Earthing of a CT with one secondary circuit	8
35	Figure 2 -	- Earthing of a CT with one secondary circuit having a tap	8
36	Figure 3 -	- Earthing of a CT with two secondary circuits	8
37	Figure 4 -	- Earthing terminal connected to the steel support structure	9
38	-	Earthing terminal connected to earth via an earthing conductor	
39	-	- Earthing of an earthed VT with one secondary circuit	
	•		
40	•	- Earthing of an unearthed VT with one secondary circuit	
41	•	- Earthing of an earthed VT with two secondary circuits	
42	-	- Earthing of an earthed VT with a multi-tap secondary circuit	
43	•	<ul> <li>Earthing terminal connected to the steel support structure</li> </ul>	
44	Figure 11	- Earthing terminal connected to earth via an earthing conductor	12
45			

	IEC CDV 61869-20 © IEC:2023	- 3 -	38/786/CDV
46	Table 1 – Fire hazard of electrotechn	ical products	14
47			
48			
49			

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

<u>oSIST prEN IEC 61869-20:2024</u> https://standards.iteh.ai/catalog/standards/sist/3381e9b9-c1e8-4f1f-b218-8ee2846a5960/osist-pren-iec-61869-20-2024 oSIST prEN IEC 61869-20:2024

	38/786/CDV	- 4 -	IEC CDV 61869-20 © IEC:2023
50	INTERNATIONAL	ELECTROTECHNIC	AL COMMISSION
51			
52 53 54 55	INSTR Part 20: Safety requirement	UMENT TRANSFOR ts of instrument tra applications	
56 57		FOREWORD	
58 59 60 61 62 63 64 65 66	co-operation on all questions concernin in addition to other activities, IEC publish Publicly Available Specifications (PAS preparation is entrusted to technical con may participate in this preparatory work. with the IEC also participate in this prep	(IEC National Committees). T g standardization in the elect nes International Standards, T G) and Guides (hereafter re mmittees; any IEC National Co International, governmental a paration. IEC collaborates clo	organization for standardization comprising he object of IEC is to promote international rical and electronic fields. To this end and echnical Specifications, Technical Reports, ferred to as "IEC Publication(s)"). Their mmittee interested in the subject dealt with nd non-governmental organizations liaising sely with the International Organization for greement between the two organizations.
67 68 69	<ol> <li>The formal decisions or agreements of I consensus of opinion on the relevant interested IEC National Committees.</li> </ol>		ess, as nearly as possible, an international al committee has representation from all
70 71 72 73		asonable efforts are made to	al use and are accepted by IEC National ensure that the technical content of IEC way in which they are used or for any
74 75 76	transparently to the maximum extent pos	ssible in their national and reg	ees undertake to apply IEC Publications ional publications. Any divergence between ation shall be clearly indicated in the latter.
77 78 79	<ol> <li>IEC itself does not provide any attesta assessment services and, in some are services carried out by independent cert</li> </ol>	as, access to IEC marks of	conformity. IEC is not responsible for any
80	6) All users should ensure that they have t	he latest edition of this public	ation.
81 82 83 84 85	members of its technical committees an other damage of any nature whatsoev expenses arising out of the publication	d IEC National Committees for yer, whether direct or indirect on, use of, or reliance upor	or agents including individual experts and or any personal injury, property damage or t, or for costs (including legal fees) and a, this IEC Publication or any other IEC
86 87	<ol> <li>Attention is drawn to the Normative ref indispensable for the correct application</li> </ol>	erences cited in this publication	ion. Use of the referenced publications is
88 89	<ol> <li>Attention is drawn to the possibility that s rights. IEC shall not be held responsible</li> </ol>		
90 91	IEC 61869-20 has been prepared International Standard.	d by committee 38: Ir	nstrument Transformers. It is an
92	The text of this International Standa	ard is based on the follow	wing documents:

Draft	Report on voting
XX/XX/FDIS	XX/XX/RVD

93

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

<sup>96</sup> The language used for the development of this International Standard is English.

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/standardsdev/publications.