SLOVENSKI STANDARD
SIST EN 62689-1:2017

01-februar-2017

Tokovna in napetostna zaznavala ali detektorji, ki se uporabljajo za javljanje mesta okvare - 1. del: Sistemski vidiki (IEC 62689-1:2016)

Current and Voltage sensors or detectors, to be used for fault passage indication purposes - Part 1: System aspects (IEC 62689-1:2016)

Ta slovenski standard je istoveten z: **EN 62689-1:2016**

ICS:

17.220.20	Merjenje električnih in magnetnih veličin	Measurement of electrical and magnetic quantities

SIST EN 62689-1:2017 **en**

EUROPEAN STANDARD

NORME EUROPÉENNE

EUROPÄISCHE NORM

EN 62689-1

December 2016

ICS 17.220.20

English Version

Current and voltage sensors or detectors, to be used for fault passage indication purposes - Part 1: General principles and requirements (IEC 62689-1:2016)

Capteurs ou détecteurs de courant et de tension, à utiliser pour indiquer le passage d'un courant de défaut - Partie 1: Exigences et principes généraux (IEC 62689-1:2016)

Strom- und Spannungs-Sensoren oder Anzeigegeräte zur Erkennung von Kurz- und Erdschlüssen - Teil 1: Allgemeine Grundsätze und Anforderungen (IEC 62689-1:2016)

This European Standard was approved by CENELEC on 2016-06-16. 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.

CENELEC members are the national electrotechnical committees of Austria, Belgium, Bulgaria, Croatia, Cyprus, the Czech Republic, Denmark, Estonia, Finland, Former Yugoslav Republic of Macedonia, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, the Netherlands, Norway, Poland, Portugal, Romania, 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: Avenue Marnix 17, B-1000 Brussels

European foreword

The text of document 38/503/FDIS, future edition 1 of IEC 62689-1, prepared by IEC/TC 38 "Instrument transformers" was submitted to the IEC-CENELEC parallel vote and approved by CENELEC as EN 62689-1:2016.

The following dates are fixed:

• latest date by which the document has to be implemented at national level by publication of an identical national standard or by endorsement	(dop)	2017-06-16
• latest date by which the national standards conflicting with the document have to be withdrawn	(dow)	2019-12-16

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

Endorsement notice

The text of the International Standard IEC 62689-1:2016 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 60044-7	NOTE	Harmonized as EN 60044-7.
IEC 60044-8	NOTE	Harmonized as EN 60044-8.
IEC 60068-2-64	NOTE	Harmonized as EN 60068-2-64.
IEC 60068-2-75	NOTE	Harmonized as EN 60068-2-75.
IEC 60255-1:2009	NOTE	Harmonized as EN 60255-1:2010 (not modified).
IEC 60660	NOTE	Harmonized as EN 60660
IEC 60695-1-10	NOTE	Harmonized as EN 60695-1-10.
IEC 60721-3-3	NOTE	Harmonized as EN 60721-3-3.
IEC 60721-3-4	NOTE	Harmonized as EN 60721-3-4.
IEC 61000-4-30	NOTE	Harmonized as EN 61000-4-30.
IEC 61109	NOTE	Harmonized as EN 61109.
IEC 61850-6	NOTE	Harmonized as EN 61850-6.
IEC 61850-7-3	NOTE	Harmonized as EN 61850-7-3.
IEC 61850-7-4	NOTE	Harmonized as EN 61850-7-4.
IEC 61869-1	NOTE	Harmonized as EN 61869-1.
IEC 61869-2	NOTE	Harmonized as EN 61869-2.
IEC 61869-3	NOTE	Harmonized as EN 61869-3.
IEC 61869-4	NOTE	Harmonized as EN 61869-4.
IEC 61869-6	NOTE	Harmonized as EN 61869-6.
IEC 62262	NOTE	Harmonized as EN 62262.
IEC 62689-2	NOTE	Harmonized as EN 62689-2.

Annex ZA
(normative)

Normative references to international publications with their corresponding European publications

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.

NOTE 1 When 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

Publication	Year	Title	EN/HD	Year
IEC 60028	-	International standard of resistance for copper	-	-
IEC 60038	-	IEC standard voltages	EN 60038 [1)]	-
IEC 60060-1	-	High-voltage test techniques - Part 1: General definitions and test requirements	EN 60060-1	-
IEC 60068-2-1	-	Environmental testing - Part 2-1: Tests - Test A: Cold	EN 60068-2-1	-
IEC 60068-2-14	-	Environmental testing - Part 2-14: Tests - Test N: Change of temperature	EN 60068-2-14	-
IEC 60068-2-2	-	Environmental testing - Part 2-2: Tests - Test B: Dry heat	EN 60068-2-2	-
IEC 60068-2-6	-	Environmental testing - Part 2-6: Tests - Test Fc: Vibration (sinusoidal)	EN 60068-2-6	-
IEC 60068-2-30	-	Environmental testing - Part 2-30: Tests - Test Db: Damp heat, cyclic (12 h + 12 h cycle)	EN 60068-2-30	-
IEC 60068-2-78	-	Environmental testing - Part 2-78: Tests - Test Cab: Damp heat, steady state	EN 60068-2-78	-
IEC 60071-1	-	Insulation co-ordination - Part 1: Definitions, principles and rules	EN 60071-1	-
IEC 60085	-	Electrical insulation - Thermal evaluation and designation	EN 60085	-
IEC 60121	-	Recommendation for commercial annealed aluminium electrical conductor wire	-	-
IEC 60270	-	High-voltage test techniques - Partial discharge measurements	EN 60270	-
IEC 60417-DB	-	Graphical symbols for use on equipment	-	-

[1)] The title of EN 60038 is “CENELEC standard voltages”.

Publication	Year	Title	EN/HD	Year
IEC 60455	Series	Resin based reactive compounds used for electrical insulation	EN 60455	Series
IEC 60529	-	Degrees of protection provided by enclosures (IP Code)	EN 60529	-
IEC 60695-1-30	-	Fire hazard testing - Part 1-30: Guidance for assessing the fire hazard of electrotechnical products - Preselection testing process - General guidelines	EN 60695-1-30	-
IEC 60695-7-1	-	Fire hazard testing - Part 7-1: Toxicity of fire effluent - General guidance	EN 60695-7-1	-
IEC/TS 60815	Series	Selection and dimensioning of high-voltage insulators intended for use in polluted conditions	-	-
IEC/TS 60815-1	-	Selection and dimensioning of high-voltage insulators intended for use in polluted conditions - Part 1: Definitions, information and general principles	-	-
IEC/TS 60815-2	-	Selection and dimensioning of high-voltage insulators intended for use in polluted conditions - Part 2: Ceramic and glass insulators for a.c. systems	-	-
IEC/TS 60815-3	-	Selection and dimensioning of high-voltage insulators intended for use in polluted conditions - Part 3: Polymer insulators for a.c. systems	-	-
IEC 60870-5-101	-	Telecontrol equipment and systems - Part 5-101: Transmission protocols - Companion standard for basic telecontrol tasks	EN 60870-5-101	-
IEC 60870-5-104	-	Telecontrol equipment and systems - Part 5-104: Transmission protocols - Network access for IEC 60870-5-101 using standard transport profiles	EN 60870-5-104	-
IEC 61000-4-10	-	Electromagnetic compatibility (EMC) - Part 4-10: Testing and measurement techniques - Damped oscillatory magnetic field immunity test	EN 61000-4-10	-
IEC 61000-4-11	-	Electromagnetic compatibility (EMC) - Part 4-11: Testing and measurement techniques - Voltage dips, short interruptions and voltage variations immunity tests	EN 61000-4-11	-
IEC 61000-4-12	-	Electromagnetic compatibility (EMC) - Part 4-12: Testing and measurement techniques - Ring wave immunity test	EN 61000-4-12	-

Publication	Year	Title	EN/HD	Year
IEC 61000-4-16	-	Electromagnetic compatibility (EMC) - Part 4-16: Testing and measurement techniques - Test for immunity to conducted, common mode disturbances in the frequency range 0 Hz to 150 kHz	EN 61000-4-16	-
IEC 61000-4-18	-	Electromagnetic compatibility (EMC) - Part 4-18: Testing and measurement techniques - Damped oscillatory wave immunity test	EN 61000-4-18	-
IEC 61000-4-2	-	Electromagnetic compatibility (EMC) - Part 4-2: Testing and measurement techniques - Electrostatic discharge immunity test	EN 61000-4-2	-
IEC 61000-4-3	-	Electromagnetic compatibility (EMC) - Part 4-3: Testing and measurement techniques - Radiated, radio-frequency, electromagnetic field immunity test	EN 61000-4-3	-
IEC 61000-4-4	-	Electromagnetic compatibility (EMC) - Part 4-4: Testing and measurement techniques - Electrical fast transient/burst immunity test	EN 61000-4-4	-
IEC 61000-4-5	-	Electromagnetic compatibility (EMC) - Part 4-5: Testing and measurement techniques - Surge immunity test	EN 61000-4-5	-
IEC 61000-4-6	-	Electromagnetic compatibility (EMC) - Part 4-6: Testing and measurement techniques - Immunity to conducted disturbances, induced by radio-frequency fields	EN 61000-4-6	-
IEC 61000-4-8	-	Electromagnetic compatibility (EMC) - Part 4-8: Testing and measurement techniques - Power frequency magnetic field immunity test	EN 61000-4-8	-
IEC 61000-4-9	-	Electromagnetic compatibility (EMC) - Part 4-9: Testing and measurement techniques - Pulse magnetic field immunity test	EN 61000-4-9	-
IEC 61000-6-2	2005	Electromagnetic compatibility (EMC) - Part 6-2: Generic standards - Immunity for industrial environments	EN 61000-6-2	2005
IEC 61850-7-2	-	Communication networks and systems for power utility automation - Part 7-2: Basic information and communication structure - Abstract communication service interface (ACSI)	EN 61850-7-2	-
IEC 60255-27	2013	Measuring relays and protection equipment - Part 27: Product safety requirements	EN 60255-27	2014

Publication	Year	Title	EN/HD	Year
IEC 61000-4-13	-	Electromagnetic compatibility (EMC) - Part 4-13: Testing and measurement techniques - Harmonics and interharmonics including mains signaling at a.c. power port, low frequency immunity tests	EN 61000-4-13	-
IEC 61000-4-29	-	Electromagnetic compatibility (EMC) - Part 4-29: Testing and measurement techniques - Voltage dips, short interruptions and voltage variations on d.c. input power port immunity tests	EN 61000-4-29	-

IEC 62689-1

Edition 1.0 2016-05

INTERNATIONAL STANDARD

NORME INTERNATIONALE

colour inside

Current and voltage sensors or detectors, to be used for fault passage indication purposes –
Part 1: General principles and requirements

Capteurs ou détecteurs de courant et de tension, à utiliser pour indiquer le passage d'un courant de défaut –
Partie 1: Exigences et principes généraux

INTERNATIONAL
ELECTROTECHNICAL
COMMISSION

COMMISSION
ELECTROTECHNIQUE
INTERNATIONALE

ICS 17.220.20
ISBN 978-2-8322-3361-0

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CURRENT AND VOLTAGE SENSORS OR DETECTORS, TO BE USED FOR FAULT PASSAGE INDICATION PURPOSES –

Part 1: General principles and requirements

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 62689-1 has been prepared by IEC technical committee 38: Instrument transformers.

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

FDIS	Report on voting
38/503/FDIS	38/510/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.

This publication has been drafted in accordance with the ISO/IEC Directives, Part 2.