



SLOVENSKI STANDARD
SIST EN IEC 60669-2-1:202X/oprAA:2022
01-april-2022

**Stikala za gospodinjstva in podobne nepremične električne inštalacije - 2-1. del:
Posebne zahteve - Elektronska stikala - Dopolnilo AA**

Switches for household and similar fixed electrical installations - Part 2-1: Particular requirements - Electronic control devices

Schalter für Haushalt und ähnliche ortsfeste elektrische Installationen - Teil 2-1:
Besondere Anforderungen - Elektronische Schalter

Interrupteurs pour installations électriques fixes domestiques et analogues - Partie 2-1:
Exigences particulières - Dispositifs de commande électronique

Ta slovenski standard je istoveten z: EN IEC 60669-2-1:2021/prAA

[SIST EN IEC 60669-2-1:202X/oprAA:2022
https://standards.itec.ai/catalog/standards/sist/115aca71-6136-4ddb-ab21-2688b66119c1/sist-en-iec-60669-2-1-202x-opraa-2022](https://standards.itec.ai/catalog/standards/sist/115aca71-6136-4ddb-ab21-2688b66119c1/sist-en-iec-60669-2-1-202x-opraa-2022)

ICS:

29.120.40 Stikala Switches

SIST EN IEC 60669-2-1:202X/oprAA:2022 **en,fr,de**

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EUROPEAN STANDARD
NORME EUROPÉENNE
EUROPÄISCHE NORM

DRAFT
EN IEC 60669-2-1:2021

prAA

February 2022

ICS 29.120.40

English Version

Switches for household and similar fixed electrical installations - Part 2-1: Particular requirements - Electronic control devices

Interrupteurs pour installations électriques fixes
domestiques et analogues - Partie 2-1: Exigences
particulières - Dispositifs de commande électronique

Schalter für Haushalt und ähnliche ortsfeste elektrische
Installationen - Teil 2-1: Besondere Anforderungen -
Elektronische Schalter

This draft amendment prAA, if approved, will modify the European Standard EN IEC 60669-2-1:2021; it is submitted to CENELEC members for enquiry.

Deadline for CENELEC: 2022-05-06.

It has been drawn up by CLC/TC 23BX.

If this draft becomes an amendment, CENELEC members are bound to comply with the CEN/CENELEC Internal Regulations which stipulate the conditions for giving this amendment the status of a national standard without any alteration.

This draft amendment was established by CENELEC 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.

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Recipients of this draft are invited to submit, with their comments, notification of any relevant patent rights of which they are aware and to provide supporting documentation.

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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

EN IEC 60669-2-1:2021/prAA:2022 (E)**European foreword**

This document EN IEC 60669-2-1:2021/prAA:2022 has been prepared by CLC/TC 23BX “Switches, boxes and enclosures for household and similar purposes, plugs and socket outlet for D.C.”.

This document is currently submitted to the Enquiry.

The following dates are proposed:

- latest date by which the existence of this document has to be announced at national level (doa) dor + 6 months
- latest date by which this document has to be implemented at national level by publication of an identical national standard or by endorsement (dop) dor + 12 months
- latest date by which the national standards conflicting with this document have to be withdrawn (dow) dor + 36 months (to be confirmed or modified when voting)

This document is read in conjunction with EN IEC 60669-2-1:2021.

This document has been prepared under a Standardization Request given to CENELEC by the European Commission and the European Free Trade Association.

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1 Modification to Clause 1, “Scope”

Delete Note 2.

Replace the beginning of the 8th paragraph with:

“The operation and/or control as mentioned in the paragraph above can be transmitted by an electronic signal...”

Replace the last but one paragraph with:

“This standard also applies to electronic control devices using DLT-technology in accordance with IEC 62756-1. Additional Requirements are given in Annex CC.”

2 Modification to Clause 16, “Insulation resistance and electric strength”

In Table 15, delete Note 4.

3 Modification to 17.1, “General”

In Table 101, in Note b) and c), replace the word “relevant” with “assessed”.

In Table 101, replace Note g) with:

“g) If a component complies to an IEC component standard and thermal considerations are included in such a standard, this Table 101 shall not be applicable to such a component.”

4 Modification to 18.1, “General”

Change Note 1 and 2 to normative text.

Change the Note in Table 102 to normative text.

Replace the paragraph below Table 102 with: [60669-2-1:202X/oprAA:2022](https://standards.iteh.ai/catalog/standards/sist/1f3aca77-6136-4ddb-ab21-2688b66119c1/sist-en-iec-60669-2-1-202x-oprAA-2022)

“The tests are made by means of an apparatus which is arranged to simulate normal operation.”

In **18.102 Electronic switches and HBES/BACS switches for control of the voltage of iron core transformers for extra-low-voltage incandescent lamps**, delete “to simulate making” in the 3rd but last paragraph.

5 Modification to 19.1, “General”

Replace the 5th, 6th and 7th paragraphs with:

“For HBES/BACS switches, the tests according to 19.101 and 19.108 are conducted on the complete HBES/BACS switch which shall be controlled by the electronic extension units as described in the product instructions.

The electronic extension units are tested when installed according to the product instructions so as to verify that they are capable of controlling the electronic switch or the HBES/BACS switch in accordance with this Clause 19.

For electronic switches and HBES/BACS switches with included automatic function the number of operations for tests of 19.101, 19.102, 19.104, 19.106 and 19.108 is that specified in the relevant subclause. If the declared number of operations are higher than those indicated in the relevant subclause, the tests shall be made according to the declared value.”

6 Modification to Clause 26, “EMC requirements”

In **26.1 General**, add the following after the 3rd paragraph:

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“For electronic control devices using Radio Technology, depending on the frequency, the RF-requirements of ETSI EN 300 328, ETSI EN 300 220-1, ETSI EN 300 220-2, ETSI EN 300 440, ETSI EN 301 489-1, ETSI EN 301 489-3, ETSI EN 301 489-4, ETSI EN 301 489-17 apply.

For EN 55015 and EN 55032, 80/80 rules shall not be considered as they do not ensure the presumption of conformity of the EMC and RED directive.”

Add at the end of the 5th paragraph:

“..., as given in the manufacturer`s documentation.”

Replace the 6th paragraph and Note 1 with:

“**26.1.1** For electronic control devices not using RF (Radio Frequency), 26.2 and 26.3 apply.

26.1.2 For electronic control devices using RF (Radio Frequency), 26.2 and 26.3 apply with the following additions:

Exclusion bands are defined in the EUT relevant part of ETSI EN 301 489 series. In the exclusion bands a temporary loss of RF transmission is allowed.

In case ETSI EN 301 489 series requests additional tests they shall be carried out and the RF functions shall meet the performance criteria.”

Replace the last two paragraphs and Note 2 with:

“For HBES/BACS switches using PL (power line), the emission requirements of EN 50065-1 and in addition the relevant requirements of EN 50065-2-2, EN 50065-2-3, EN 50561-1, EN 50561-2, EN 50561-3 apply.

Compliance is checked by the tests of 26.2 up to 26.3.”

In 26.2.1 General:

Replace in the 2nd paragraph:

“manufacturers specifications” with “product instructions”

Replace the 5th paragraph with:

“The electronic control device shall be tested according to Table 113 with or without operation of the electronic control device as specified in the relevant paragraph of Clause 26.”

Replace in the last but one paragraph:

“As an alternative,” with “For devices,”

In 26.2.6 Radiated electromagnetic field test:

Replace the third paragraph with:

“The test is carried out according to IEC 61000-4-3 by applying requirements in Table 117 with the exception of the exclusion band as defined in the relevant product standard for transmitters, receivers and duplex transceivers, providing the device contains such transmitters, receivers and duplex transceivers.”

Add at the end of 5th paragraph:

“..., according to the intended use of the product”

In Table 117:

Replace note b with:

“A test level of 10 V/m applies except for the ITU broadcast frequency bands 87 MHz to 108 MHz, 174 MHz to 230 MHz and 470 MHz to 790 MHz.”

In 26.3.1 Low-frequency emission:

Replace the 2nd paragraph with:

“Electronic control devices shall comply with IEC 61000-3-2:2018 and IEC 61000-3-3:2013 with IEC 61000-3-3:2013/AMD1:2017.”

In 26.3.2 Conducted radio-frequency emission on main, load/or control terminal:

Replace the third paragraph with:

“CISPR 15:2018 is applicable with the following modifications of Clause 7.4:”

In 26.3.3 Conducted radio frequency emission 0,15 MHz to 30 MHz on TP media and communications terminals:

Replace the 2nd and 3rd paragraph, and Table 118 with:

“Electronic control devices with communications terminals and HBES/BACS switches and their extension unit based on TP cable shall meet the class B conducted emission requirements of CISPR 32 Table A12, as shown in Table 118.

Tests shall be performed on TP cable only according to the method defined in CISPR 32:2015, as shown in Table 118.

Table 118 — Measurement methods

Terminal	Measurement method	Standard
TP media	Asymmetric Artificial Network (AAN)	CISPR 32
Telecommunication	Asymmetric Artificial Network (AAN)	CISPR 32
Asymmetric control line (2-core)	Voltage probe	CISPR 32
Telecommunication with more than 4 × 2 core and coaxial cable	Capacitive Voltage probe and current clamp	CISPR 32
Telecommunication with more than 4 × 2 core (with screen)	Capacitive Voltage probe and current clamp	CISPR 32

In 26.3.4 Radiated radio frequency emission above 30 MHz:

Replace the 2nd paragraph with:

“Electronic control devices with communications terminals and HBES/BACS switches and their extension unit based on TP cable shall meet the class B requirements for radiated emission of CISPR 32 Tables A4 and A5.”

7 Modification to Clause 101, “Abnormal conditions”

In 101.2.4, replace the 2nd paragraph with:

“The test shall be carried out according to the protection method following Table 119”

In 101.4, replace “environment” with “surrounding” in the paragraph after Note 6.

In 102.3 **Capacitors**, replace the 1st paragraph with:

“Capacitors,

- the short circuiting or disconnection of which would cause an infringement of the requirements under fault conditions with regards to shock or fire hazard, or
- the short circuiting of which would cause a current of 0,5 A or more through the terminals of the capacitor, or
- for suppression of electromagnetic interference,

shall comply with IEC 60384-14 and shall be in accordance with Table 120.”

In 102.4 **Resistors**, replace the 3rd paragraph with:

“Compliance is checked by test a) or test b) depending on the type of the connection of the resistor as specified in a) or b) carried out on a sample of 10 specimen.”