SLOVENSKI STANDARD

SIST EN 60898-1:2004/A11:2006

januar 2006

Električni pribor – Odklopniki za nadtokovno zaščito za gospodinjstvo in podobne inštalacije – 1. del: Odklopniki za izmenični tok

(istoveten EN 60898-1:2003/A11:2005)

Electrical accessories - Circuit breakers for overcurrent protection for household and similar installations - Part 1: Circuit-breakers for a.c. operation

ICS 29.120.50

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English version

Electrical accessories – Circuit breakers for overcurrent protection for household and similar installations Part 1: Circuit-breakers for a.c. operation

Petit appareillage électrique – Disjoncteurs pour la protection contre les surintensités pour installations domestiques et analogues Partie 1: Disjoncteurs pour le fonctionnement en courant alternatif

Elektrisches Installationsmaterial - Leitungsschutzschalter für Hausinstallationen und ähnliche Zwecke Teil 1: Leitungsschutzschalter für Wechselstrom (AC)

This amendment A11 modifies the European Standard EN 60898-1:2003; it was approved by CENELEC on 2005-05-01. 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.

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

This amendment 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 Central Secretariat has the same status as the official versions.

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CENELEC

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

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Foreword

This amendment, aiming to improve the interpretation of some requirements/testing specifications of EN 60898-1:2003, has been prepared by the Technical Committee CENELEC TC 23E, Circuit breakers and similar devices for household and similar applications.

The text of the draft was submitted to Unique Acceptance Procedure and was approved by CENELEC as amendment A11 to EN 60898-1:2003 on 2005-05-01.

The following dates were fixed:

– latest date by which the amendment has to be implemented at national level by publication of an identical national standard or by endorsement	(dop)	2006-05-01
– latest date by which the national standards conflicting with the amendment have to be withdrawn	(dow)	2010-05-01

Tables which are additional to those in IEC 60898-1 are prefixed “Z”.

The following modifications refer to the text of the International Standard IEC 60898-1:2002 and are in addition to the common modifications in EN 60898-1:2003 and its corrigendum February 2004.

1 **Add** at the end of the 4th paragraph:

…and overvoltage category III.

Replace note 1 by:

NOTE 1 For more severe overvoltage conditions, circuit-breakers complying with additional requirements or other standards should be used.

3.1.2 **Add** to "IEV 441-14-02":

", modified"

3.2.7.3 **Add** the following note after 3.2.7.3:

NOTE The switched neutral pole may remain closed when the circuit-breaker opens.

3.2 **Add** the following new definition:

3.2.15
routine test
a test to which each individual device is subjected during or after manufacture to ascertain whether it complies with certain criteria

3.5.14.2 **Add** to "IEV 441-17-15":

", modified"

3.5.14.7 **Add** to "IEV 441-17-16":

", modified"

3.5.15 **Add:**

"(IEV 442-05-54, modified)"

3.5.16 **Add:**

"(IEV 442-05-55, modified)"

3.5.17 **Add:**

"(IEV 442-05-47, modified)"

3.6.11 **Add** to "IEV 441-17-35":

", modified"

4.6 **Replace** the whole subclause by:

4.6 According to the I^2t

Circuit-breakers of B-type and C-type, having rated current up to and including 40 A and having short-circuit breaking capacity of 3 000 A, 4 500 A, 6 000 A and 10 000 A, may be classified according to their I^2t characteristics, measured according to 9.12.6 (see Annex ZA).

5.3.2 **Delete** the common modification in EN 60898-1:2003 and reinsert the value "8 A" in the second line.

7 **Replace** the whole clause by:

7 Standard conditions for operation in service and for installation

7.1 Standard conditions

Circuit breakers complying with this standard shall be capable of operating under the standard conditions shown in Table Z1.

Table Z1 – Standard conditions for operation in service

Influencing quantity	Standard range of application	Reference value	Test tolerances [f]
Ambient temperature [a g]	–5 °C to +40 °C [b]	20 °C	± 5 °C
Altitude	Not exceeding 2 000 m		
Relative humidity maximum value 40 °C	50 % [c]		
External magnetic field	Not exceeding 5 times the earth's magnetic field in any direction	Earth's magnetic field	[d]
Position	As stated by the manufacturer, with a tolerance of 2° in any direction [e]	As stated by the manufacturer	2° in any direction
Frequency	Reference value ± 5 % [f]	Rated value	± 2 %
Sinusoidal wave distortion	Not exceeding 5 %	Zero	5 %

[a] The maximum value of the mean daily temperature is +35 °C.

[b] Values outside the range are admissible where more severe climatic conditions prevail, subject to agreement between manufacturer and user.

[c] Higher relative humidities are admitted at lower temperature (for example 90 % at 20 °C).

[d] When a Circuit breaker is installed in proximity of a strong magnetic field, supplementary requirements may be necessary.

[e] The device shall be fixed without causing deformation liable to impair its functions.

[f] The tolerances given apply unless otherwise specified in the relevant test.

[g] Extreme limits of –20 °C and +60 °C are admissible during storage and transportation, and should be taken into account in the design of the device.

7.2 Conditions of installation

Circuit breakers shall be installed in accordance with the manufacturer's instructions.

8.1.2 **Delete** in the second sentence of 6th paragraph:

"without operating handle,".

8.1.3 In Table 4, first column, box 2, **add** a reference to footnote j.

Delete item 5.

Delete note 3.

Add the following new footnote:

[j] This applies also to clearance and creepage distances between live parts of different polarity of circuit breakers mounted close to one another.

8.1.4.4 **Replace** in the last paragraph "parts of electronic devices" by "electronic parts, including circuit boards,"

Add a new paragraph at the end of the subclause:

Compliance is checked by inspection in accordance with manufacturer's declaration.

8.1.5.12 **Add** a new paragraph at the end of the subclause:

Compliance is checked by inspection.

8.1.7 **Delete** from the first paragraph ", the holding in position of which does not depend solely on their plug-in connection(s),".

8.6.1 **Delete** the note in Table 7.

9.7.2 **Delete** item d).

Rename item e) as item d).

Modify the beginning of the last but one paragraph as follows:

For the measurements according to items b) to d), ….

9.12.12.1 **Modify** the beginning of the first sentence as follows:

After each of the following tests 9.12.11.2, 9.12 11.3 and 9.12.11.4.2…

Figures B.1 and B.2 **Add** the following:

Key

F = Creepage distance

C = Conducting part

A = Insulating material

Annex C **Replace** in Table C.1, test sequence A, 9.5 with its corresponding description by:

8.1.5 Terminals for external conductors

Figures D.1 to D.3 **Replace** in the drawing of the circuit breakers " –-I " by a cross " X "

Annex E **Delete** the whole annex.

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