SLOVENSKI STANDARD
SIST HD 639 S1:2003/A1:2004

01-januar-2004

Elektriļ ni pribor - Prenosne naprave na preostali (diferenļ ni) tok brez vgrajene nadtokovne zaġļ ite za uporabo v gospodinjstvu in za podobno uporabo

Electrical accessories - Portable residual current devices without integral overcurrent protection for household and similar use (PRCDs)

Elektrisches Installationsmaterial - Ortsveränderliche Fehlerstrom-Schutzeinrichtungen ohne eingebauten Überstromschutz für Hausinstallationen und für ähnliche Anwendungen (PRCDs)

Petit appareillage - Dispositifs différentiels mobiles sans dispositif de protection contre les surintensités incorporé pour usages domestiques et analogues (PCDM)

Ta slovenski standard je istoveten z: **HD 639 S1:2002/A1:2003**

ICS:

29.120.50	Varovalke in druga medtokovna zaġļ ita	Fuses and other overcurrent protection devices

SIST HD 639 S1:2003/A1:2004 **en**

HARMONIZATION DOCUMENT **HD 639 S1/A1**

DOCUMENT D'HARMONISATION

HARMONISIERUNGSDOKUMENT July 2003

ICS 29.120.60

English version

Electrical accessories – Portable residual current devices without integral overcurrent protection for household and similar use (PRCDs)

Petit appareillage – Dispositifs différentiels mobiles sans dispositif de protection contre les surintensités incorporé pour usages domestiques et analogues (PCDM)

Elektrisches Installationsmaterial – Ortsveränderliche Fehlerstrom-Schutzeinrichtungen ohne eingebauten Überstromschutz für Hausinstallationen und für ähnliche Anwendungen (PRCDs)

This amendment A1 modifies the Harmonization Document HD 639 S1:2002; it was approved by CENELEC on 2003-03-01. CENELEC members are bound to comply with the CEN/CENELEC Internal Regulations which stipulate the conditions for implementation of this amendment on a national level.

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

This amendment exists in three official versions (English, French, German).

CENELEC members are the national electrotechnical committees of Austria, Belgium, Czech Republic, Denmark, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Lithuania, Luxembourg, Malta, Netherlands, Norway, Portugal, Slovakia, Spain, Sweden, Switzerland and United Kingdom.

CENELEC

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

Central Secretariat: rue de Stassart 35, B - 1050 Brussels

Ref. No. HD 639 S1:2002/A1:2003 E

Foreword

This amendment was 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 the Unique Acceptance Procedure and was approved by CENELEC as amendment A1 to HD 639 S1:2002 on 2003-03-01.

The following dates were fixed:

– latest date by which the existence of the amendment has to be announced at national level	(doa)	2003-03-31
– latest date by which the amendment has to be implemented at national level by publication of a harmonized national standard or by endorsement	(dop)	2004-02-01
– latest date by which the national standards conflicting with the amendment have to be withdrawn	(dow)	2005-06-01

In this standard, the following print types are used:
- requirements: in roman type;
- *test specifications: in italic type;*
- notes: in smaller roman type.

Clauses which are additional to those given in IEC 61540 are prefixed “Z”.

8.1.3 Clearances and creepage distances (see Annex C)

Renumber as 8.1.3.Z1.

8.1.3.Z1

Replace the last paragraph by:

For electronic circuits connected between active conductors (phase and neutral), the verification of clearances and creepage distances is replaced by the tests of 9.32.

Add, after Table 5, the following new subclause:

8.1.3.Z2 Requirements for PRCDs having the earthing path connected to live parts

In the case that the earthing path has connection with live parts, this connection shall be made through a protective impedance, which shall consist of at least two independent impedances in series.

Capacitors or resistors used for this protective impedance shall comply with the requirements of 9.33.

The removal of the protective impedance shall only be possible by destruction of the PRCD or by rendering it unusable.

Compliance is checked by inspection and by the test of 9.Z1.

9.32

Replace the title by:

Tests replacing the verifications of creepage distances and clearances for electronic circuits connected between active conductors (phases and neutral) and/or between active conductors and the earth circuit

9.33

Replace the title by:

Requirements for capacitors and specific resistors and inductors used in electronic circuits connected between active conductors (phases and neutral) and/or between active conductors and the earth

Add, after 9.33.2, the following new subclause:

9.Z1 Verification of the protective impedance

Samples specially prepared by the manufacturer are used for this test.

The PRCD is plugged-in in an appropriate socket-outlet supplied at rated voltage.

The earthing path and the protective impedance of the PRCD are connected in series with a non-inductive resistor of 2 $\kappa\Omega$ and with earth, through an ammeter.

Before each measurement, each one of the independent impedances being components of the protective impedance is short-circuited, in turn.

The current flowing to earth over the test circuit is measured in each of the short-circuit conditions of the independent impedances, the PRCD being alternatively

- *supplied at rated voltage and loaded with rated current, in the closed position,*
- *supplied at rated voltage in the open position.*

The current measured shall not exceed

a) 1 mA, no independent impedance being short-circuited,

b) 2 mA after short-circuiting, in turn, each one of the independent impedances.

The temperatures resulting from the most unfavourable fault condition are measured for the parts mentioned in table 18 after steady state has been reached or after 4 h (whichever is the shorter time)

These temperatures shall not exceed the values given in Table 18.

After the tests the PRCD may no longer be capable of meeting all performance requirements, but it shall comply with the requirements of protection against electric shock according to 9.6.