SLOVENSKI STANDARD
SIST EN 60947-6-2:1998/A2:2000

01-september-2000

Nizkonapetostne stikalne in krmilne naprave ï 6. del: Veļ funkcijska oprema ï 2. oddelek: Krmilne in zaģļ itne stikalne in krmilne naprave (ali oprema) (CPS) ï Dopolnilo A2

Low-voltage switchgear and controlgear -- Part 6-2: Multiple function equipment - Control and protective switching devices (or equipment) (CPS)

Niederspannungsschaltgeräte - Teil 6-2: Mehrfunktions-Schaltgeräte - Steuer- und Schutz-Schaltgeräte (CPS)

Appareillage à basse tension -- Partie 6-2: Matériels à fonctions multiples - Appareils (ou matériel) de connexion de commande et de protection (ACP)

Ta slovenski standard je istoveten z: **EN 60947-6-2:1993/A2:1999**

ICS:

29.130.20	Nizkonapetostne stikalne in krmilne naprave	Low voltage switchgear and controlgear

SIST EN 60947-6-2:1998/A2:2000 **en**

EUROPEAN STANDARD

NORME EUROPÉENNE

EUROPÄISCHE NORM

EN 60947-6-2/A2

January 1999

ICS 91.140.50
UDC 621.316.5.027.2

Descriptors: Low-voltage switchgear and controlgear, multiple function equipment, control and protective switching devices (CPS)

English version

Low-voltage switchgear and controlgear
Part 6-2: Multiple function equipment
Control and protective switching devices (or equipment) (CPS)
(IEC 60947-6-2:1992/A2:1998)

Appareillage à basse tension
Partie 6-2: Matériels à fonctions multiples - Appareils (ou matériel) de connexion de commande et de protection (ACP)
(CEI 60947-6-2:1992/A2:1998)

Niederspannungsschaltgeräte
Teil 6-2: Mehrfunktions-Schaltgeräte
Steuer- und Schutz-Schaltgeräte
(IEC 60947-6-2:1992/A2:1998)

This amendment A2 modifies the European Standard EN 60947-6-2:1993; it was approved by CENELEC on 1999-01-01. 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

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

Foreword

The text of document 17B/943/FDIS, future amendment 2 to IEC 60947-6-2:1992, prepared by SC 17B, Low-voltage switchgear and controlgear, of IEC TC 17, Switchgear and controlgear, was submitted to the IEC-CENELEC parallel vote and was approved by CENELEC as amendment A2 to EN 60947-6-2:1993 on 1999-01-01.

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) 1999-10-01
- latest date by which the national standards conflicting with the amendment have to be withdrawn (dow) 2001-10-01

Endorsement notice

The text of amendment 2:1998 to the International Standard IEC 60947-6-2:1992 was approved by CENELEC as an amendment to the European Standard without any modification.

NORME INTERNATIONALE

INTERNATIONAL STANDARD

CEI
IEC
60947-6-2

1992

AMENDEMENT 2
AMENDMENT 2

1998-11

Amendement 2

Appareillage à basse tension –

Partie 6-2:
Matériels à fonctions multiples –
Appareils (ou matériel) de connexion de commande de protection (ACP)

Amendment 2

Low-voltage switchgear and controlgear –

Part 6-2:
Multiple function equipment –
Control and protective switching devices (or equipment) (CPS)

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FOREWORD

This amendment has been prepared by subcommittee 17B: Low-voltage switchgear and controlgear, of IEC technical committee 17: Switchgear and controlgear.

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

FDIS	Report on voting
17B/943/FDIS	17B/956/RVD

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

Page 13

1 Scope and object

Modify the first sentence of the second paragraph to read:

CPSs are intended to provide both protective and control functions for circuits and are operated otherwise than by hand.

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3.1 Control and protective switching device (or equipment) (CPS)

Replace the first sentence of the first paragraph by the following:

A switching device (or equipment) capable of operation other than by hand, but with or without local manual operating means.

Add, under this paragraph, the following note:

NOTE 1 – The term "capable of operation other than by hand" means that the device is intended to be controlled and kept in working position from one or more external supplies.

Modify the first sentence of the third paragraph to read:

A CPS has overload and short-circuit protection, these functions being associated and coordinated so as to permit continuity of service at all currents up to its rated service short-circuit breaking capacity I_{cs}.

Number the existing note, NOTE 2.

Add the following NOTE 3:

NOTE 3 – In the context of this standard, the term "manufacturer" means any person, company or organization with ultimate responsibility as follows:

- to verify compliance with this standard;
- to provide the product information according to clause 6 (marking, identification, characteristics).

Change the last paragraph "In the context... of this section." *into NOTE 4.*

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8.2.5 Ability to make, carry and break short-circuit currents

Modify the first dash of 8.2.5 a) as follows:

– Prospective conventional short-circuit currents I_{cr} and "r" current (I_r)

Modify the first line of 8.2.5 b) as follows:

b) An additional test of three making and breaking operations shall be . . .

Table 13 – Prospective conventional test current I_{cr} as a function of the maximum I_e for a given construction

Replace the title and table by the following:

Table 13 – Prospective conventional test current I_{cr} and "r" current (I_r) as a function of the maximum I_e for a given construction

Maximum I_e for a given construction	I_{cr}		"r" current (I_r)
A	(I_{cr})/(I_e max.)	min. kA	kA
$0 < I_e \leq 16$	30	0,2	1
$16 < I_e \leq 32$	30	0,2	3
$32 < I_e \leq 63$	25	1	3
$63 < I_e \leq 125$	20	1,6	5
$125 < I_e \leq 250$	20	1,6	10
$250 < I_e \leq 315$	15	5	10
$315 < I_e \leq 630$	15	5	18

The power-factor or the time-constant shall be according to table 16 of IEC 60947-1.

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Table 14 – Test sequences

Replace the test sequence III by the following:

Test sequence No.	Tests	Test Sub-clause	Perfor-mance Sub-clause	U_e/I_e	U_e/I_{cs}	Test sample Quantity	Test sample No. 4)	Setting of release 3)
III	– Operational performance at U_e/I_e	9.4.3.1	8.2.4.2 b)					
	– Rated breaking capacity at I_{cr}	9.4.3.2	8.2.5 a)					
	– Operational performance at U_e/I_e	9.4.3.1	8.2.4.2 b)			2	1	
	– Dielectric withstand verification	9.4.3.4	Annex B					Max.
	– Overload releases verification	9.4.3.5	8.2.1.5	5)				
	– Rated breaking capacity at I_r	9.4.3.2	8.2.5 a)				2	
	– Dielectric withstand verification	9.4.3.4	Annex B					
	– Overload releases verification	9.4.3.5	8.2.1.5					

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9.4.3 Test sequence III: Operational performance before and after operating sequences at I_{cr}

Modify the title to read:

9.4.3 Test sequence III: Operational performance before and after operating sequences at I_{cr} and "r" current test

Replace the existing text of this subclause by the following:

Test on the first sample:

- Operational performance test at U_e/I_e (9.4.3.1)
- Rated breaking capacity at short-circuit current I_{cr}, with the operating sequence O - t - CO - t - CO - t - O - t - rCO - t - rCO
- Operational performance test at U_e/I_e (9.4.3.1)
- Dielectric withstand verification (9.4.3.4)
- Overload releases verification (9.4.3.5).