Thermocouples -- Part 3: Extension and compensating cables - Tolerances and identification systems

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EESTI STANDARDI EESSÕNA

NATIONAL FOREWORD

Käesolev Eesti standard EVS-EN 60584-3:2008 sisaldab Euroopa standardi EN 60584-3:2008 ingliskeelset teksti.

This Estonian standard EVS-EN 60584-3:2008 consists of the English text of the European standard EN 60584-3:2008.

Standard on kinnitatud Eesti Standardikeskuse 20.02.2008 käskkirjaga ja jõustub sellekohase teate avaldamisel EVS Teatajas.

This standard is ratified with the order of Estonian Centre for Standardisation dated 20.02.2008 and is endorsed with the notification published in the official bulletin of the Estonian national standardisation organisation.

Euroopa standardimisorganisatsioonide poolt rahvuslikele liikmetele Euroopa standardi teksti kättesaadavaks tegemise kuupäev on 25.01.2008.

Date of Availability of the European standard text 25.01.2008.

Standard on kättesaadav Eesti standardiorganisatsioonist.

The standard is available from Estonian standardisation organisation.

ICS 17.200.20

Võtmesõnad:

Standardite reprodutseerimis- ja levitamisõigus kuulub Eesti Standardikeskusele

Andmete paljundamine, taastekitamine, kopeerimine, salvestamine elektroonilisse süsteemi või edastamine ükskõik millises vormis või millisel teel on keelatud ilma Eesti Standardikeskuse poolt antud kirjaliku loata.

Kui Teil on küsimusi standardite autorikaitse kohta, palun võtke ühendust Eesti Standardikeskusega: Aru 10 Tallinn 10317 Eesti; www.evs.ee; Telefon: 605 5050; E-post: info@evs.ee

EUROPEAN STANDARD

EN 60584-3

NORME EUROPÉENNE EUROPÄISCHE NORM

January 2008

ICS 17.200.20

Supersedes HD 446.3 S1:1993

English version

Thermocouples Part 3: Extension and compensating cables Tolerances and identification system

(IEC 60584-3:2007)

Couples thermoélectriques -Partie 3: Câbles d'extension et de compensation -Tolérances et système d'identification (CEI 60584-3:2007)

Thermopaare Teil 3: Thermoleitungen
und Ausgleichsleitungen Grenzabweichungen
und Kennzeichnungssystem
(IEC 60584-3:2007)

This European Standard was approved by CENELEC on 2007-12-01. 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 Central Secretariat 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 Central Secretariat has the same status as the official versions.

CENELEC members are the national electrotechnical committees of Austria, Belgium, Bulgaria, Cyprus, the Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, the Netherlands, Norway, Poland, Portugal, Romania, Slovakia, Slovenia, Spain, Sweden, Switzerland and the 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

Foreword

The text of document 65B/642/FDIS, future edition 2 of IEC 60584-3, prepared by SC 65B, Devices and process analysis, of IEC TC 65, Industrial-process measurement, control and automation, was submitted to the IEC-CENELEC parallel vote and was approved by CENELEC as EN 60584-3 on 2007-12-01.

This European Standard supersedes HD 446.3 S1:1993.

The main technical changes with regard to HD 446.3 S1:1993 are as follows:

- addition of Subclause 5.4 Connectors;
- addition of Clauses 7 Dimensions and 8 Requirements.

The following dates were fixed:

 latest date by which the EN has to be implemented at national level by publication of an identical national standard or by endorsement

(dop) 2008-09-01

 latest date by which the national standards conflicting with the EN have to be withdrawn

(dow) 2010-12-01

Annex ZA has been added by CENELEC.

Endorsement notice

The text of the International Standard IEC 60584-3:2007 was approved by CENELEC as a European Standard without any modification.

Annex ZA (normative)

Normative references to international publications with their corresponding European publications

The following referenced documents are indispensable for the application of this document. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

NOTE When an international publication has been modified by common modifications, indicated by (mod), the relevant EN/HD applies.

 Publication
 Year
 Title
 EN/HD
 Year

 IEC 60584-1
 1995
 Thermocouples EN 60584-1
 1995

Part 1: Reference tables is a protion opposited of the

THERMOCOUPLES -

Part 3: Extension and compensating cables – Tolerances and identification system

1 Scope

This part of IEC 60584 specifies manufacturing tolerances for extension and compensating cables (other than mineral insulated cables) provided directly to users of industrial processes. These tolerances are determined with respect to the e.m.f.-temperature relationship of Part 1 of the standard.

The method for identification of insulated thermocouple extension and compensating cables other than mineral insulated cables is described.

Furthermore, requirements for extension and compensating cables for use in industrial process control are specified.

2 Normative references

The following referenced documents are indispensable for the application of this document. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

IEC 60584-1:1995, Thermocouples - Part 1: Reference tables

3 Terms and definitions

For the purposes of this document, the following terms and definitions apply.

3.1

extension and compensating cables

are used for the electrical connection between the open ends of a thermocouple and the reference junction in those installations where the conductors of the thermocouple are not directly connected to the reference junction. The thermoelectric properties of extension and compensating cables shall be close to the properties of the corresponding thermocouple.

3.1.1

extension cables

are manufactured from conductors having the same nominal composition as those of the corresponding thermocouple. They are designated by the letter "X" following the designation of the thermocouple, for example "JX".

3.1.2

compensating cables

are manufactured from conductors having a composition different from the corresponding thermocouple. They are designated by the letter "C" following the designation of the thermocouple, for example "KC". In some cases different tolerances apply for the same thermocouple type over different temperature ranges. These are distinguished by additional letters such as, for example, KCA and KCB.