SLOVENSKI STANDARD
SIST EN IEC 61788-26:2020

01-oktober-2020

Superprevodnost - 26. del: Meritve kritičnega toka - Enosmerni kritični tok pri superprevodnikih iz kompozita RE-Ba-Cu-O (IEC 61788-26:2020)

Superconductivity - Part 26: Critical current measurement - DC critical current of RE-Ba-Cu-O composite superconductors (IEC 61788-26:2020)

Supraleitfähigkeit - Teil 26: Messung des kritischen Stroms - Kritischer DC-Strom von RE-Ba-Cu-O-Kompositsupraleitern (IEC 61788-26:2020)

Supraconductivité - Partie 26: Mesurage du courant critique - Courant critique continu des composites supraconducteurs de RE-Ba-Cu-O (IEC 61788-26:2020)

Ta slovenski standard je istoveten z: **EN IEC 61788-26:2020**

ICS:

17.220.20	Merjenje električnih in magnetnih veličin	Measurement of electrical and magnetic quantities
29.050	Superprevodnost in prevodni materiali	Superconductivity and conducting materials

SIST EN IEC 61788-26:2020 **en**

EUROPEAN STANDARD

NORME EUROPÉENNE

EUROPÄISCHE NORM

EN IEC 61788-26

August 2020

ICS 17.220.20; 19.080; 29.050

English Version

Superconductivity - Part 26: Critical current measurement - DC critical current of RE-Ba-Cu-O composite superconductors (IEC 61788-26:2020)

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CENELEC

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

Ref. No. EN IEC 61788-26:2020 E

European foreword

The text of document 90/455/FDIS, future edition 1 of IEC 61788-26, prepared by IEC/TC 90 "Superconductivity" was submitted to the IEC-CENELEC parallel vote and approved by CENELEC as EN IEC 61788-26:2020.

The following dates are fixed:

- latest date by which the document has to be implemented at national level by publication of an identical national standard or by endorsement (dop) 2021-04-16
- latest date by which the national standards conflicting with the document have to be withdrawn (dow) 2023-07-16

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Endorsement notice

The text of the International Standard IEC 61788-26:2020 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 documents are referred to in the text in such a way that some or all of their content constitutes requirements 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 1 Where an International Publication has been modified by common modifications, indicated by (mod), the relevant EN/HD applies.

NOTE 2 Up-to-date information on the latest versions of the European Standards listed in this annex is available here: www.cenelec.eu.

Publication	Year	Title	EN/HD	Year
IEC 60050-815	-	International Electrotechnical Vocabulary - Part 815: Superconductivity	-	-

IEC 61788-26

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INTERNATIONAL STANDARD

NORME INTERNATIONALE

Superconductivity – Part 26: Critical current measurement – DC critical current of RE-Ba-Cu-O composite superconductors

Supraconductivité – Partie 26: Mesurage du courant critique – Courant critique continu des composites supraconducteurs de RE-Ba-Cu-O

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SUPERCONDUCTIVITY –

Part 26: Critical current measurement – DC critical current of RE-Ba-Cu-O composite superconductors

FOREWORD

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International Standard IEC 61788-26 has been prepared by IEC technical committee 90: Superconductivity.

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

FDIS	Report on voting
90/455/FDIS	90/458/RVD

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

This publication has been drafted in accordance with the ISO/IEC Directives, Part 2.

A list of all parts in the IEC 61788 series, published under the general title *Superconductivity*, can be found on the IEC website.

The committee has decided that the contents of this publication will remain unchanged until the stability date indicated on the IEC web site under "http://webstore.iec.ch" in the data related to the specific publication. At this date, the publication will be

- reconfirmed,
- withdrawn,
- replaced by a revised edition, or
- amended.

INTRODUCTION

In 1986, superconductivity in some perovskite type materials containing copper oxides at temperatures far above the critical temperatures of metallic superconductors was discovered. In 1987, it was discovered that Y-Ba-Cu-O (YBCO) has a critical temperature (T_c) of 93 K. After a quarter century, the RE-Ba-Cu-O (REBCO, RE = rare earth) superconductors became commercially available.

In 2013, VAMAS-TWA 16 started working on the critical current measurement methods in REBCO superconductors. In 2014, an international round robin test (RRT) on the critical current measurement method for REBCO superconductors was conducted that was led by VAMAS-TWA 16. 10 institutions/universities/industries from five countries participated. The pre-standardization work of VAMAS was taken as a base for this document, on the DC critical current test method of REBCO composite superconductors.

The test method covered in this document is intended to give an appropriate and accepted technical base to engineers working in the field of superconductivity technology.