

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

EESTI STANDARDI EESSÕNA

NATIONAL FOREWORD

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English Version

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

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

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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.

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- 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
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Annex ZA

(normative)

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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.

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

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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INTERNATIONAL ELECTROTECHNICAL COMMISSION

SUPERCONDUCTIVITY –

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

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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.

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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.