IEC 61378-3

Edition 2.0 2014-10

FINAL DRAFT INTERNATIONAL STANDARD

PROJET FINAL DE NORME INTERNATIONALE

Converter transformers – Part 3: Application guide

Transformateurs de conversion – Partie 3: Guide d'application

INTERNATIONAL ELECTROTECHNICAL COMMISSION

COMMISSION ELECTROTECHNIQUE INTERNATIONALE

PRICE CODE XD
CODE PRIX

ICS 29.180

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14/803/FDIS

FINAL DRAFT INTERNATIONAL STANDARD
PROJET FINAL DE NORME INTERNATIONALE

	Project number Numéro de projet **IEC 61378-3 Ed 2**	
	IEC/TC or SC CEI/CE ou SC **14**	Secretariat / Secrétariat **United Kingdom**
☐ Submitted for parallel voting in CENELEC Soumis au vote parallèle au CENELEC	Distributed on / Diffusé le **2014-10-31**	Voting terminates on / Vote clos le **2015-01-09**
Also of interest to the following committees Intéresse également les comités suivants	Supersedes document Remplace le document 14/757/CDV and 14/780A/RVC	

Horizontal standard
Norme horizontale

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Titre
IEC 61378-3: Transformateurs de conversion – Partie 3: Guide d'application

Title
IEC 61378-3: Converter transformers – Part 3: Application guide

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CONVERTER TRANSFORMERS –

Part 3: Application guide

FOREWORD

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International Standard IEC 61378-3 has been prepared by IEC technical committee 14: Power transformers.

This second edition cancels and replaces the first edition published in 2006 and constitutes a technical revision.

This edition includes the following significant technical changes with respect to the previous edition:

a) revision of clause on losses to reflect the changes introduced by the second edition of IEC 61378-1;
b) addition of a new clause about design review of converter transformer for both industrial and HVDC applications;
c) addition of content for transformer connected to voltage source converters;
d) reference to the work of CIGRE JWG A2/B4.28 on HVDC transformers.

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

FDIS	Report on voting
14/XX/FDIS	14/XX/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 61378 series, published under the general title *Converter transformers*, 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.

The National Committees are requested to note that for this publication the stability date is 2017.

THIS TEXT IS INCLUDED FOR THE INFORMATION OF THE NATIONAL COMMITTEES AND WILL BE DELETED AT THE PUBLICATION STAGE.

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TRANSFORMATEURS DE CONVERSION –

Partie 3: Guide d'application

1 Domaine d'application

La présente partie de l'IEC 61378 fournit aux utilisateurs des informations sur des sujets spécifiques pour lesquels il existe des différences de conception, de construction, d'essais et de conditions de fonctionnement entre les transformateurs industriels et de conversion CCHT d'une part et les transformateurs conventionnels utilisés dans les systèmes de puissance d'autre part. En outre l'objectif de la présente partie de l'IEC 61378 est de fournir aux fabricants les éléments techniques de fond qui constituent la base des principes utilisés dans l'IEC 61378-1 et l'IEC 61378-2.

La présente partie de l'IEC 61378 est prévue pour compléter et non pour remplacer ou annuler le guide d'application pour les transformateurs de puissance, l'IEC 60076-8, dans la mesure où nombre des principes généraux contenus dans ladite publication s'appliquent également aux transformateurs de conversion.

2 Références normatives

Les documents suivants sont cités en référence de manière normative, en intégralité ou en partie, dans le présent document et sont indispensables pour son application. Pour les références datées, seule l'édition citée s'applique. Pour les références non datées, la dernière édition du document de référence s'applique (y compris les éventuels amendements).

IEC 60076-1:2011, *Transformateurs de puissance – Partie 1: Généralités*

IEC 60076-5:2006, *Transformateurs de puissance – Partie 5: Tenue au court-circuit*

IEC 60076-14:2013, *Transformateurs de puissance – Partie 14: Transformateurs de puissance immergés dans du liquide utilisant des matériaux isolants haute température*

IEC 60296, *Fluides pour applications électrotechniques – Huiles minérales isolantes neuves pour transformateurs et appareillages de connexion*

IEC 60422, *Huiles minérales isolantes dans les matériels électriques – Lignes directrices pour la maintenance et la surveillance*

IEC 61378-1:2011, *Transformateurs de conversion – Partie 1: Transformateurs pour applications industrielles*

IEC 61378-2:2001, *Transformateurs de conversion – Partie 2: Transformateurs pour applications CCHT*

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