

INTERNATIONAL STANDARD

NORME INTERNATIONALE

Railway applications – Fixed installations – Particular requirements for a.c. switchgear –

Part 3-2: Measurement, control and protection devices for specific use in a.c. traction systems – Single-phase current transformers

Applications ferroviaires – Installations fixes – Exigences particulières pour appareillage à courant alternatif –

Partie 3-2: Dispositifs de mesure, de commande et de protection pour usage spécifique dans les systèmes de traction à courant alternatif – Transformateurs de courant monophasés



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INTERNATIONAL ELECTROTECHNICAL COMMISSION

RAILWAY APPLICATIONS – FIXED INSTALLATIONS – PARTICULAR REQUIREMENTS FOR AC SWITCHGEAR –

Part 3-2: Measurement, control and protection devices for specific use in a.c. traction systems – Single-phase current transformers

FOREWORD

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International Standard IEC 62505-3-2 has been prepared by IEC technical committee 9: Electrical equipment and systems for railways. This standard is based on EN 50152-3-2.

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

FDIS	Report on voting
9/1222/FDIS	9/1235/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 of IEC 62505 series, under the general title *Railway applications – Fixed installations – Particular requirements for a.c. switchgear*, can be found on the IEC website.

The committee has decided that the contents of this publication will remain unchanged until the maintenance result 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- withdrawn,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

Part 3 of IEC 62505 series, "Railway applications – Fixed installations – Particular requirements for a.c. switchgear", concerning the measurement, control and protection devices for specific use in a.c. traction systems, comprises:

IEC 62505-3-1: Application guide (informative document)

IEC 62505-3-2: Single-phase current transformers (normative document)

IEC 62505-3-3: Single-phase inductive voltage transformers (normative document)

This International Standard applies when the equipment is concerned with the specified characteristics.

The requirements contained in this standard complement those given in IEC 60044-1:1996, Amendment 1 (2000), Amendment 2 (2002).

**RAILWAY APPLICATIONS –
FIXED INSTALLATIONS –
PARTICULAR REQUIREMENTS FOR AC SWITCHGEAR –**

**Part 3-2: Measurement, control and protection devices
for specific use in a.c. traction systems –
Single-phase current transformers**

1 Scope

This part of IEC 62505 gives particular requirements for current transformers used in a.c. single-phase railway applications, fixed installations.

This International Standard applies to current transformers used at traction voltages and frequencies according to IEC 60850.

The main uses of these current transformers are:

- measurement;
- protection.

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 60044-1:1996, *Instrument transformers – Part 1: Current transformers*
Amendment 1 (2000), Amendment 2 (2002)

IEC 60529:2001, *Degrees of protection provided by enclosures (IP Code)*

IEC 60850, *Railway applications – Supply voltages of traction systems*

IEC 62236 (all parts), *Railway applications – Electromagnetic compatibility*

IEC 62497-1, *Railway applications – Insulation coordination – Part 1: Basic requirements – Clearances and creepage distances for all electrical and electronic equipment*

IEC 62505 (all parts), *Railway applications – Fixed installations – Particular requirements for a.c. switchgear*

3 Terms and definitions

For the purposes of this document, the terms and definitions given in IEC 62505-1 and in IEC 60044-1 apply.