

# CONSOLIDATED VERSION

# VERSION CONSOLIDÉE



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**Railway applications – Fixed installations – DC switchgear –  
Part 3: Indoor d.c. disconnectors, switch-disconnectors and earthing switches**

**Applications ferroviaires – Installations fixes – Appareillage à courant continu –  
Partie 3: Interrupteurs-sectionneurs, sectionneurs et sectionneurs de terre à  
courant continu, pour l'intérieur**



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## INTERNATIONAL ELECTROTECHNICAL COMMISSION

### RAILWAY APPLICATIONS – FIXED INSTALLATIONS – DC SWITCHGEAR –

#### Part 3: Indoor d.c. disconnectors, switch-disconnectors and earthing switches

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**This Consolidated version of IEC 61992-3 bears the edition number 2.1. It consists of the first edition (2006-02) [documents 9/888/FDIS and 9/910/RVD] and its amendment 1 (2015-09) [documents 9/2017/CDV and 9/2066/RVC]. The technical content is identical to the base edition and its amendment.**

**In this Redline version, a vertical line in the margin shows where the technical content is modified by amendment 1. Additions are in green text, deletions are in strikethrough red text. A separate Final version with all changes accepted is available in this publication.**

International Standard IEC 61992-3 has been prepared by IEC technical committee 9: Electrical equipment and systems for railways.

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

- all requirements applying to more than one part of the IEC 61992 series are now specified in Part 1 and consequently the related clauses in this part of the series now make reference to Part 1;
- the list of applicable tests has been improved taking into account the new Part 4.

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

IEC 61992 consists of the following parts, under the general title *Railway applications – Fixed installations – DC switchgear*:

- Part 1: General
- Part 2: DC circuit breakers
- Part 3: Indoor d.c. disconnectors, switch-disconnectors and earthing switches
- Part 4: Outdoor d.c. disconnectors, switch-disconnectors and earthing switches
- Part 5: Surge arresters and low-voltage limiters for specific use in d.c. systems
- Part 6: DC switchgear assemblies
- Part 7-1: Measurement, control and protection devices for specific use in d.c. traction systems – Application guide
- Part 7-2: Measurement, control and protection devices for specific use in d.c. traction systems – Isolating current transducers and other current measuring devices
- Part 7-3: Measurement, control and protection devices for specific use in d.c. traction systems – Isolating voltage transducers and other voltage measuring devices

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# **RAILWAY APPLICATIONS – FIXED INSTALLATIONS – DC SWITCHGEAR –**

## **Part 3: Indoor d.c. disconnectors, switch-disconnectors and earthing switches**

### **1 Scope**

This part of IEC 61992 specifies requirements for d.c. disconnectors, switch-disconnectors and earthing switches for use in indoor fixed installations of traction systems.

NOTE 1 Switchgear assemblies, electromagnetic compatibility (EMC) and dependability are not covered in this standard, but rather by other parts of the IEC 61992 series or other documents as indicated in IEC 61992-1.

NOTE 2 In this standard, the word "unit" means "disconnector and/or switch-disconnector and/or earthing switch" as defined in 3.1.5, 3.1.6 and 3.1.7 of IEC 61992-1.

NOTE 3 Disconnectors, switch-disconnectors and earthing switches may have electrically latched mechanisms and, in such cases, may be indicated with the current term of "power contactors".

### **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 60694:1996, *Common specifications for high-voltage switchgear and controlgear standards*

IEC 60850:2000, *Railway applications – Supply voltage of traction systems*

IEC 61992-1:2006, *Railway applications – Fixed installations – DC switchgear – Part 1: General*

IEC 61992-6:2006, *Railway applications – Fixed installations – DC switchgear – Part 6: DC switchgear assemblies*

EN 50124-1:2001, *Railway applications – Insulation coordination – Part 1: Basic requirements – Clearances and creepage distances for electrical and electronic equipment*

### **3 Terms and definitions**

For the purposes of this document, the terms and definitions given in IEC 61992-1 apply.

### **4 Service requirements**

Environmental conditions applicable to the equipment discussed in this standard are covered in 4.1 of IEC 61992-1.