

INTERNATIONAL STANDARD

NORME INTERNATIONALE

Railway applications – Direct current signalling monostable relays of type N and type C

Applications ferroviaires – Relais monostables de signalisation en courant continu de type N et de type C



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INTERNATIONAL ELECTROTECHNICAL COMMISSION

RAILWAY APPLICATIONS – DIRECT CURRENT SIGNALLING MONOSTABLE RELAYS OF TYPE N AND TYPE C

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International Standard IEC 62912 has been prepared by IEC technical committee 9: Electrical equipment and systems for railways.

This standard is derived from EN 50578.

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

FDIS	Report on voting
9/2039/FDIS	9/2061/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.

The committee has decided that the contents of this publication will remain unchanged until the stability date indicated on the IEC website 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- withdrawn,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

This International Standard gives a set of generic and specific requirements for direct current signalling relays.

This International Standard introduces a set of recommendations and requirements for signalling relay characteristics, construction, magnetic system, contacts and insulation. Requirements are coordinated with current international standards on all-or-nothing relays.

RAILWAY APPLICATIONS – DIRECT CURRENT SIGNALLING MONOSTABLE RELAYS OF TYPE N AND TYPE C

1 Scope

This International Standard gives requirements for direct current relays intended for safety-related applications in railway signalling installations.

This International Standard is applicable to monostable relays of type N and type C.

2 Normative references

The following documents, in whole or in part, are normatively referenced in this document and are indispensable for its application. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

IEC 60664-1, *Insulation coordination for equipment within low-voltage systems – Part 1: Principles, requirements and tests*

IEC 61810-3:2015, *Electromechanical elementary relays – Part 3: Relays with forcibly guided (mechanically linked) contacts*

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

IEC 62498-3: 2010, *Railway applications – Environmental conditions for equipment – Part 3: Equipment for signalling and telecommunications*

3 Terms and definitions

For the purposes of this document, the following terms and definitions apply.

3.1

all-or-nothing relay

electrical relay, which is intended to be energised by a quantity, the value of which is either within its operative range or effectively zero

Note 1 to entry: "All-or-nothing relays" include both "elementary relays" and "time relays".

[SOURCE: IEC 60050-444:2002, 444-01-02]

3.2

armature

moveable part of a relay that controls contact members

3.3

bistable relay

electrical relay which, having responded to an energising quantity and having changed its condition, remains in that condition after the quantity has been removed; a further appropriate energisation is required to make it change its condition