International Standard

ISO 10924-2

Road vehicles — Circuit breakers —

Part 2: Guidance for users

Véhicules routiers — Coupe-circuits —

Partie 2: Recommandations pour les utilisateurs

Second edition
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Contents

Page

Foreword ..... **iv**
1 Scope **1**
2 Normative references **1**
3 Terms and definitions **1**
4 General **1**
4.1 Overview 1
4.2 Circuit breaker nominal voltage 2
4.3 Supply voltage maximum, U_{Smax} 2
4.4 Rated current, I_R, and continuous current 2
5 Current and conductors (cables) **3**
6 Current and contact resistance **4**
7 Current and ambient temperature **4**
8 Cable protection: temperature versus current characteristics **5**
9 Selectivity **7**
10 Replacement of circuit breakers **8**
11 Voltage peaks during opening of circuit breakers **8**
12 Inrush withstand characteristics of circuit breakers **8**
13 Electromagnetic compatibility (EMC) **9**
14 Raw material **9**
Annex A (informative) **Selection procedure for circuit breakers and cables** **10**
Annex B (informative) **Selection of circuit breakers** **24**
Annex C (informative) **Ambient temperature influence** **25**
Bibliography **26**

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Foreword

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The procedures used to develop this document and those intended for its further maintenance are described in the ISO/IEC Directives, Part 1. In particular, the different approval criteria needed for the different types of ISO document should be noted. This document was drafted in accordance with the editorial rules of the ISO/IEC Directives, Part 2 (see www.iso.org/directives).

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This document was prepared by Technical Committee ISO/TC 22, *Road vehicles*, Subcommittee SC 32, *Electrical and electronic components and general system aspects*.

This second edition cancels and replaces the first edition (ISO 10924-2:2014), which has been technically revised.

The main changes are as follows:

— added Clause 14.

A list of all parts in the ISO 10924 series can be found on the ISO website.

Any feedback or questions on this document should be directed to the user’s national standards body. A complete listing of these bodies can be found at www.iso.org/members.html.

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Road vehicles — Circuit breakers —

Part 2: Guidance for users

1 Scope

This document provides guidance for the choice and application of automotive circuit breakers. It describes the various parameters that are taken into account when selecting circuit breakers.

2 Normative references

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.

ISO 8820-1, *Road vehicles — Fuse-links — Part 1: Definitions and general test requirements*

ISO 10924-1, *Road vehicles — Circuit breakers — Part 1: Definitions and general test requirements*

3 Terms and definitions

For the purposes of this document, the terms and definitions given in ISO 8820-1 and ISO 10924-1 apply.

ISO and IEC maintain terminology databases for use in standardization at the following addresses:

— ISO Online browsing platform: available at https://www.iso.org/obp

— IEC Electropedia: available at https://www.electropedia.org/

4 General

4.1 Overview

ISO 10924-1, ISO 10924-3, ISO 10924-4 and ISO 10924-5 define basic requirements and test methods for nominal voltage, rated current, I_R, and time/current characteristics to give comparable and reproducible results of circuit breakers.

In practice, however, there are other parameters which shall be considered for the correct selection of circuit breakers in road vehicles, such as:

— continuous current;

— operating time;

— overload protection of one or more electrical/electronic devices;

— connection resistance;

— types of cables, e.g. different cross section, length, insulation, bundling;

— internal resistances (voltage drop) of the circuit breakers, contacts, cables and devices;

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