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Road vehicles — Vocabulary and characteristics for engineering of starting devices

Véhicules routiers — Vocabulaire et caractéristiques pour l'ingénierie des équipements d'allumage

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ISO copyright office
CP 401 • Ch. de Blandonnet 8
CH-1214 Vernier, Geneva
Phone: +41 22 749 01 11
Email: copyright@iso.org
Website: www.iso.org

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Foreword

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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.*

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.

Introduction

This document harmonizes key terms and their definitions in the form of basic technical words and simple explanations, because third parties involved in starter motor testing and start/stop systems are spreading to various regions. The purpose is to guarantee an efficient and effective communication throughout development projects within and among engineering organizations and related institutions.

In practice, many inefficiencies have been observed due to unclear or ambiguous usage of engineering terms and missing knowledge about application to various starter motor development and testing. This document is meant to preserve the essential knowledge of best practices, which rely on undocumented usage of terms. With these terms and definitions, starter motor engineers as well as newcomers are able to refer to this vocabulary framework when working together on starter motor development and testing projects in an international environment.

Road vehicles — Vocabulary and characteristics for engineering of starting devices

1 Scope

This document includes common definitions for terms and their interdependencies related to starting devices as well as describes their general and specific characteristics.

2 Normative references

There are no normative references in this document.

3 Terms and definitions

For the purposes of this document, the following terms and definitions 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/

3.1
armature
rotating assembly of the electric machine part of the starter motor

3.2
battery
electrical energy source connected to the starter motor

3.3
battery open circuit voltage
voltage at the *battery* (3.2) *terminals* (3.40) without electrical load

3.4
battery voltage
voltage between the *battery* (3.2) *terminals* (3.40)

3.5
cranking
condition in which the starter motor rotates the *internal combustion engine (ICE)* (3.17)

[SOURCE: ISO 20574:2019, 3.16, modified — "engine" has been replaced by internal combustion engine.]

3.6
cranking time
time period where the starter motor drives the *internal combustion engine (ICE)* (3.17) until a significant rotational frequency change, caused by the *first ignition* (3.13), can be observed

3.7
crankshaft
shaft of the *internal combustion engine (ICE)* (3.17), which is connected to the *ring gear* (3.31)