IEC 62846

Edition 1.0 2016-10

INTERNATIONAL STANDARD

NORME INTERNATIONALE

colour inside

Railway applications – Current collection systems – Requirements for and validation of measurements of the dynamic interaction between pantograph and overhead contact line

Applications ferroviaires – Systèmes de captage de courant – Exigences et validation des mesures de l'interaction dynamique entre le pantographe et la caténaire

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RAILWAY APPLICATIONS – CURRENT COLLECTION SYSTEMS – REQUIREMENTS FOR AND VALIDATION OF MEASUREMENTS OF THE DYNAMIC INTERACTION BETWEEN PANTOGRAPH AND OVERHEAD CONTACT LINE

FOREWORD

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This standard has been derived from EN 50317.

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

FDIS	Report on voting
9/2198/FDIS	9/2205/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 reader's attention is drawn to the fact that Annex A lists all of the “in-some-country” clauses on differing practices of a permanent nature relating to the subject of this standard.

The following differing practices of a less permanent nature exist in the countries indicated below.

– Subclause 3.20: t_{total} is the total measuring time (China).
– Subclause 9.5: The evaluation of the interaction includes counting the number of arcs longer than a predefined length (China).

The committee has decided that the contents of this publication will remain unchanged until the stability 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

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- withdrawn,
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- amended.

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RAILWAY APPLICATIONS – CURRENT COLLECTION SYSTEMS – REQUIREMENTS FOR AND VALIDATION OF MEASUREMENTS OF THE DYNAMIC INTERACTION BETWEEN PANTOGRAPH AND OVERHEAD CONTACT LINE

1 Scope

This International Standard specifies the functional requirements for output and accuracy of measurements of the dynamic interaction between pantograph and overhead contact line.

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.

IEC 62486:2010, *Railway applications – Current collection systems – Technical criteria for the interaction between pantograph and overhead line (to achieve free access)*

3 Terms and definitions

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

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

- IEC Electropedia: available at http://www.electropedia.org/
- ISO Online browsing platform: available at http://www.iso.org/obp

3.1
collector head
pantograph head
part of the pantograph supported by the frame which includes contact strips, horns and may include a suspension

[SOURCE: IEC 60494-1:2013, 3.2.3, modified – the term "pantograph head" has been added.]

3.2
contact point
point of mechanical contact between a contact strip and a contact wire

3.3
working area of the pantograph head
lateral and vertical range of possible contact points on the contact strips during normal operation

3.4
contact force
vertical force applied by the pantograph to the overhead contact line. The contact force is the sum of forces for all contact points of one pantograph