

SLOVENSKI STANDARD oSIST prEN IEC 63033-3:2018

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Avtomobilski multimedijski sistemi in oprema - Sistem za nadzor vožnje - 3. del: Merilne metode (TA 17)

Car multimedia systems and equipment - Drive monitor system Part 3 : Measurement methods (TA 17)

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43.060.50	Električna in elektronska oprema. Krmilni sistemi	Electrical and electronic equipment. Control systems

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Korea, Republic of	Mr Ock-Woo Nam			
OF INTEREST TO THE FOLLOWING COMMITTEES:	PROPOSED HORIZONTAL STANDARD:			
	Other TC/SCs are requested to indicate their interest, if any, in this CDV to the secretary.			
FUNCTIONS CONCERNED:				
Submitted for CENELEC parallel voting	Not submitted for CENELEC parallel voting			
SUBMITTED FOR CENELEC PARALLEL VOTING	NOT SUBMITTED FOR CENELEC PARALLEL VOTING			
SUBMITTED FOR CENELEC PARALLEL VOTING Attention IEC-CENELEC parallel voting The attention of IEC National Committees, members of CENELEC, is drawn to the fact that this Committee Draft for Vote (CDV) is submitted for parallel voting.	Not submitted for CENELEC parallel voting			

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TITLE:

Car multimedia systems and equipment - Drive monitoring system - Part 3 : Measurement methods (TA 17)

PROPOSED STABILITY DATE: 2022

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

the report on voting indicated in the above table.

50

The committee has decided that the contents of this document will remain unchanged until the 52 stability date indicated on the IEC website under "http://webstore.iec.ch" in the data related to 53 54 the specific document. At this date, the document will be

- 55 reconfirmed, •
- 56 withdrawn, •
- replaced by a revised edition, or 57 •
- 58 amended. •
- 59

The National Committees are requested to note that for this document the stability date 60 61 is 62 THIS TEXT IS INCLUDED FOR THE INFORMATION OF THE NATIONAL COMMITTEES AND WILL BE DELETED AT THE PUBLICATION STAGE. 63 64 65 66

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INTRODUCTION

This document specifies measurement methods for the drive monitoring system that is specified in IEC Technical Specification 63033-1. IEC/TS 63033-1 specifies the model for generating the surrounding visual image of a drive monitoring system. The system allows drivers to monitor the car's perimeter in real time by using "free eye point" technology. The "free eye point" technology allows drivers to dynamically change the viewing perspective, offering the most appropriate views according to the driving situation.

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75 CAR MULTIMEDIA SYSTEMS AND EQUIPMENT – 76 DRIVE MONITORING SYSTEM 77 78 Part 3: Measurement methods 79 80 81 82 1 Scope

This document specifies measurement methods for the drive monitoring system that is specified in IEC Technical Specification 63033-1.

85 2 Normative references

The following documents are referred to in the text in such a way that any 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.

- 90 IEC/TS 63033-1:2016, Car multimedia system and equipment Drive monitoring system Part 1:
 91 General
- 92
 93 ISO 16505: 2015, Road vehicles- Ergonomic and performance aspects of Camera Monitor
 94 Systems Requirements and test procedures
- 95
- 96 UN REGULATION NO. 46, Uniform provisions concerning the approval of devices for indirect 97 vision and of motor vehicles with regards to the installation of these devices.
- 98 SIST EN IEC 63033-3:2020
- 99 UN REGULATION NO. 125, Uniform provisions concerning the approval of motor vehicles
- 100 with regards to the forward field of vision of the motor vehicle driver 101

102 3 Terms, definitions and abbreviated terms

103 3.1 Terms and definitions

- 104 No terms and definitions are listed in this document.
- 105 ISO and IEC maintain terminological databases for use in standardization at the following106 addresses:
- 107 IEC Electropedia: available at http://www.electropedia.org/
- 108 ISO Online browsing platform: available at http://www.iso.org/obp

109 3.2 Abbreviated terms

- 110 FOV field of view
- 111 4 System model

112 4.1 General

A drive monitoring system shall generate multiple camera composite images and/or single camera images, using cameras which are mounted on the outside the car. The views to be generated by this system shall capture the fields of view specified in Clause 7. This system shall generate multiple views according to the fields of view to be secured. For measurement methods, it shall refer to ISO 16505 and UN REGULATION No. 46. However, the system may not necessarily fully comply with ISO 16505 and UN REGULATION No. 46.



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Figure 1 – System model of drive monitoring system

121 5 Camera image quality

122 5.1 Camera resolution

123 The resolution of the camera shall be 300K pixels or more.

124 5.2 Camera image quality tangards iten ai

The camera image quality shall comply with 6.7.1 to 6.7.7 of ISO 16505 and shall be measured as specified in 7.8.1 to 7.8.7 of ISO 16505. The monitor image quality shall comply with 6.7.1 to 6.7.7 of ISO 16505 and shall be measured as specified in 7.8.1~7.8.7 of ISO 16505 as well. In the measurement of camera image quality, the monitor mentioned above shall be used.

130 6 Camera calibration

131 6.1 General

132 Camera calibration shall be performed as specified in Annex C of IEC 63033-1.

133 6.2 Verification

Draw a line orthogonal to the circumference of 1.5 m of the car frame so that this line is captured within the camera image. This line is described in Figure 2, and can be seen on the captured camera image. The guideline described in Figure 3 on the outer circumference of 1.5 m of the car outer frame that is drawn on the composite video later shall match within an error of 10 cm.





https://standards.ite<mark>Figure 2 – Orthogonal Reference</mark>1-7692-46c5-b2c5-28bb698f90a2/sist-en-iec-63033-3-2020