



भारतीय मानक ब्यूरो

(उपभोक्ता मामले, खाद्य एवं सार्वजनिक वितरण मंत्रालय, भारत सरकार)

**BUREAU OF INDIAN STANDARDS**

(Ministry of Consumer Affairs, Food & Public Distribution, Govt. of India)

मानक भवन, 9 बहादुरशाह जफर मार्ग नई, दिल्ली-110002

Manak Bhavan, 9 Bahadur Shah Zafar Marg, New Delhi-110002

Phones: 23230131 / 23233375 / 23239402

Website: www.bis.org.in, www.bis.gov.in

## DRAFT INDIAN STANDARD IN WIDE CIRCULATION

Reference : ETD44/T-23

Date : 01 February 2024

**TECHNICAL COMMITTEE : Safety Of Machinery- Electrotechnical Aspects, ETD 44**

To,

All concerned

Dear Madam/Sir,

The following document has been prepared by the Safety Of Machinery- Electrotechnical Aspects Sectional Committee, ETD 44. Please [click here](#) to view the document.

**Document Number : ETD 44 (24767) WC**

**Title of the document : SAFETY OF MACHINERY SAFETY-RELATED SENSORS USED FOR THE PROTECTION OF PERSONS PART 3: SENSOR TECHNOLOGIES AND ALGORITHMS**

**Document Type : New Indian Standard**

*This document has following salient features which may require specific attention for your valuable comments:*

1) – analysis of sensor technologies of different wavelength ranges, measurement methods, and the sensing unit arrangement in an SRS, respectively the arrangement of SRSs in an SRSS; – representative physical properties of safety-related objects with due consideration of their material characteristics and the sensor technology/technologies used in an SRS/SRSS to achieve the detection capability and comparable results during verification and validation; – analysis of the interference of objects present in the surrounding on the safety related objects and thereby the influence on the dependability of the detection capability; – use of algorithms during design, development and maintenance to achieve appropriate detection capability and dependability of detection; – appropriate use of algorithms during the integration of SRS or SRSS by the integrator to improve execution of measurement information or provide decision information derived from measurement information.

Please examine the document and share your comments regarding further improvement in the document.

**Last date for sharing the comments is : 01 April 2024**

The comments should be shared in the prescribed template through this portal only; and the comments so received shall be taken up by the Sectional Committee for necessary action. For any other query, please write an email at [eetd@bis.gov.in](mailto:eetd@bis.gov.in) to the undersigned at Bureau of Indian Standard, Manak Bhawan, 9, Bahadur Shah Zafar Marg, New Delhi.

In case no comments are received, we would presume your approval of the documents. However, in case we receive any comments on the document, the same shall be put up to the Sectional Committee for necessary action.

Thanking You,

**Yours faithfully,  
A R Unnikrishnan  
Head (Electrotechnical Department)  
Email: [eetd@bis.gov.in](mailto:eetd@bis.gov.in)**



## व्यापक परिचालन में मसौदा(दे)

हमारा सन्दर्भ : ETD44/T-23

दिनांक : 01-02-2024

**तकनीकी समिति : Safety Of Machinery- Electrotechnical Aspects Sectional Committee, ETD 44**

प्राप्तकर्ता : रूचि रखने वाले सभी निकाय

महोदय/या,

निम्नलिखित मसौदा तैयार किया गया है :

प्रलेख संख्या : ETD 44 (24767) WC

शीर्षक :

कृपया इस/इन मानक(को)/संशोधन(नो) के मसौदे(दो) का अवलोकन करें और अपनी सम्मतियाँ यह बताते हुए भेजें कि यदि ये मानक(को) के संशोधन(नो) के रूप में प्रकाशित हो तो इन पर अमल करने में आपके व्यवसाय अथवा कारोबार में क्या कठिनाइयां आ सकती हैं।

**सम्मतियाँ भेजने की अंतिम तिथि : 01 April 2024**

सम्मतियाँ, यदि कोई हों तो, कृपया यहाँ क्लिक करके ऑनलाइन पोर्टल के माध्यम से ऊपर दी गयी अंतिम तिथि तक दर्ज कराएं।

यह/ये प्रलेख भारतीय मानक ब्यूरो की वेबसाइट [www.bis.gov.in](http://www.bis.gov.in) पर भी उपलब्ध है/हैं।

धन्यवाद।

भवदीय/भवदिया,  
विभाग प्रमुख का नाम : A R Unnikrishnan  
(Electrotechnical Department)  
ई-मेल : [eetd@bis.gov.in](mailto:eetd@bis.gov.in)