BS EN ISO 25119-1:2023+A1:2023



BSI Standards Publication

Tractors and machinery for agriculture and forestry — Safety-related parts of control systems

Part 1: General principles for design and development

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Full document details: BS EN ISO 25119-1:2023+A1:2023

National foreword

This British Standard is the UK implementation of EN ISO 25119-1:2023+A1:2023. It is identical to ISO 25119-1:2018 incorporating amendment 1:2020. It supersedes BS EN ISO 25119-1:2018, which is withdrawn.

The start and finish of text introduced or altered by amendment is indicated in the text by tags. Tags indicating changes to CEN/CENELEC text carry the number of the CEN/CENELEC amendment. For example, text altered by CEN/CENELEC amendment A1 is indicated by ⟩A1⟨.

The UK participation in its preparation was entrusted to Technical Committee AGE/6, Agricultural tractors and forestry machinery.

A list of organizations represented on this committee can be obtained on request to its committee manager.

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UK Government is responsible for legislation. For information on legislation and policies relating to that legislation, consult the relevant pages of www.gov.uk.

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English Version

Tractors and machinery for agriculture and forestry - Safety-related parts of control systems - Part 1: General principles for design and development (ISO 25119-1:2018)

Tracteurs et matériels agricoles et forestiers - Parties des systèmes de commande relatives à la sécurité - Partie 1: Principes généraux pour la conception et le développement (ISO 25119-1:2018)

Traktoren und Maschinen für die Land- und Forstwirtschaft - Sicherheitsbezogene Teile von Steuerungen - Teil 1: Allgemeine Gestaltungs- und Entwicklungsleitsätze (ISO 25119-1:2018)

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European foreword

The text of ISO 25119-1:2018 has been prepared by Technical Committee ISO/TC 23 "Tractors and machinery for agriculture and forestry" of the International Organization for Standardization (ISO) and has been taken over as EN ISO 25119-1:2023 by Technical Committee CEN/TC 144 "Tractors and machinery for agriculture and forestry" the secretariat of which is held by AFNOR.

This European Standard shall be given the status of a national standard, either by publication of an identical text or by endorsement, at the latest by March 2024, and conflicting national standards shall be withdrawn at the latest by March 2024.

Attention is drawn to the possibility that some of the elements of this document may be the subject of patent rights. CEN shall not be held responsible for identifying any or all such patent rights.

This document has been prepared under a Standardization Request given to CEN by the European Commission and the European Free Trade Association, and supports essential requirements of EU Directive(s) / Regulation(s).

For the relationship with EU Directive(s) / Regulation(s), see informative Annex ZA, which is an integral part of this document.

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Endorsement notice

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European foreword to amendment A1

The text of ISO 25119-1:2018/Amd 1:2020 has been prepared by Technical Committee ISO/TC 23 "Tractors and machinery for agriculture and forestry" of the International Organization for Standardization (ISO) and has been taken over as EN ISO 25119-1:2023/A1:2023 by Technical Committee CEN/TC 144 "Tractors and machinery for agriculture and forestry" the secretariat of which is held by AFNOR.

This Amendment to the European Standard EN ISO 25119-1:2023 shall be given the status of a national standard, either by publication of an identical text or by endorsement, at the latest by March 2024, and conflicting national standards shall be withdrawn at the latest by March 2024.

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Annex ZA
(informative)

Relationship between this European Standard and the essential requirements of Directive 2006/42/EC aimed to be covered

This European Standard has been prepared under a Commission's standardization request "M/396 Mandate to CEN and CENELEC for Standardisation in the field of machinery" to provide one voluntary means of conforming to essential requirements of Directive 2006/42/EC of the European Parliament and of the Council of 17 May 2006 on machinery, and amending Directive 95/16/EC (recast).

Once this standard is cited in the Official Journal of the European Union under that Directive, compliance with the normative clauses of this standard given in Table ZA.1 confers, within the limits of the scope of this standard, a presumption of conformity with the corresponding essential requirements of that Directive, and associated EFTA regulations.

Table ZA.1— Correspondence between this European Standard and Annex I of Directive 2006/42/EC

The relevant Essential Requirements of Directive 2006/42/EC	Clause(s)/sub-clause(s) of this EN	Remarks/Notes
1.1.2. Principles of safety integration	-----	
1.1.2(a)	6, 7, 8, 9	
1.1.2(c)	6, 7, 8, 9	
1.1.2(d)		NOT COVERED
1.1.2(e)		NOT COVERED
1.1.3. Materials and products		NOT COVERED
1.1.4. Lighting		NOT COVERED
1.1.5. Design of machinery to facilitate its handling		NOT COVERED
1.1.6. Ergonomics		NOT COVERED
1.1.7. Operating positions		NOT COVERED
1.1.8. Seating		NOT COVERED
1.2. CONTROL SYSTEMS	-----	
1.2.1. Safety and reliability of control systems	6, 7, 8, 9	
1.2.2. Control devices		NOT COVERED
1.2.3. Starting		NOT COVERED
1.2.4. Stopping	-----	

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1.2.4.1 Normal Stop		NOT COVERED
1.2.4.2. Operational stop		NOT COVERED
1.2.4.3. Emergency stop		NOT COVERED
1.2.4.4. Assembly of machinery		NOT COVERED
1.2.5. Selection of control or operating modes		NOT COVERED
1.2.6. Failure of the power supply	6, 7, 8, 9	
1.3. PROTECTION AGAINST MECHANICAL HAZARDS	----	
1.3.1. Risk of loss of stability		NOT COVERED
1.3.2. Risk of break-up during operation		NOT COVERED
1.3.3. Risks due to falling or ejected objects		NOT COVERED
1.3.4. Risks due to surfaces, edges or angles		NOT COVERED
1.3.5. Risks related to combined machinery		NOT COVERED
1.3.6. Risks related to variations in operating conditions		NOT COVERED
1.3.7. Risks related to moving parts		NOT COVERED
1.3.8. Choice of protection against risks arising from moving parts		NOT COVERED
1.3.9. Risks of uncontrolled movements		NOT COVERED
1.4. REQUIRED CHARACTERISTICS OF GUARDS AND PROTECTIVE DEVICES	----	
1.4.1. General requirements		NOT COVERED
1.4.2. Special requirements for guards		NOT COVERED
1.4.3. Special requirements for protective devices		NOT COVERED
1.5. RISKS DUE TO OTHER HAZARDS	----	
1.5.1. Electricity supply		NOT COVERED
1.5.2. Static electricity		NOT COVERED
1.5.3. Energy supply other than electricity		NOT COVERED
1.5.4. Errors of fitting		NOT COVERED

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1.5.5. Extreme temperatures		NOT COVERED
1.5.6. Fire		NOT COVERED
1.5.7. Explosion		NOT COVERED
1.5.8. Noise		NOT COVERED
1.5.9. Vibrations		NOT COVERED
1.5.10. Radiation		NOT COVERED
1.5.11. External radiation		NOT COVERED
1.5.12. Laser radiation		NOT COVERED
1.5.13. Emissions of hazardous materials and substances		NOT COVERED
1.5.14. Risk of being trapped in a machine		NOT COVERED
1.5.15. Risk of slipping, tripping or falling		NOT COVERED
1.5.16. Lightning		NOT COVERED
1.6. MAINTENANCE	-----	
1.6.1. Machinery maintenance		NOT COVERED
1.6.2. Access to operating positions and servicing points		NOT COVERED
1.6.3. Isolation of energy sources		NOT COVERED
1.6.4. Operator intervention		NOT COVERED
1.6.5. Cleaning of internal parts		NOT COVERED
1.7. INFORMATION	----	
1.7.1. Information and warnings on the machinery	8.4.3, 8.5	
1.7.1.1. Information and information devices	8.4.3, 8.5	
1.7.1.2. Warning devices		NOT COVERED
1.7.2. Warning of residual risks		NOT COVERED
1.7.3. Marking of machinery		NOT COVERED
1.7.4. Instructions		NOT COVERED
2.4. MACHINERY FOR PESTICIDE APPLICATION	----	
2.4.2. General		NOT COVERED
2.4.3. Controls and monitoring		NOT COVERED
2.4.4. Filling and emptying		NOT COVERED
2.4.5. Application of pesticides	----	

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2.4.5.1. Application rate		NOT COVERED
2.4.5.2. Distribution, deposition and drift of pesticide		NOT COVERED
2.4.5.3. Tests		NOT COVERED
2.4.5.4. Losses during stoppage		NOT COVERED
2.4.6. Maintenance	----	
2.4.6.1. Cleaning		NOT COVERED
2.4.6.2. Servicing		NOT COVERED
2.4.7. Inspections		NOT COVERED
2.4.8. Marking of nozzles, strainers and filters		NOT COVERED
2.4.9. Indication of pesticide in use		NOT COVERED
2.4.10. Instructions		NOT COVERED
3.2. WORK POSITIONS	---	
3.2.1. Driving position		NOT COVERED
3.2.2. Seating		NOT COVERED
3.2.3. Positions for other persons		NOT COVERED
3.3. CONTROL SYSTEMS	---	
3.3.1. Control devices		NOT COVERED
3.3.2. Starting/moving		NOT COVERED
3.3.3. Travelling function		NOT COVERED
3.3.4. Movement of pedestrian-controlled machinery		NOT COVERED
3.3.5. Control circuit failure		NOT COVERED
3.4. PROTECTION AGAINST MECHANICAL HAZARDS	---	
3.4.1. Uncontrolled movements		NOT COVERED
3.4.2. Moving transmission parts		NOT COVERED
3.4.3. Roll-over and tip-over		NOT COVERED
3.4.4. Falling objects		NOT COVERED
3.4.5. Means of access		NOT COVERED
3.4.6. Towing devices		NOT COVERED
3.4.7. Transmission of power between self-propelled machinery (or tractor) and recipient machinery		NOT COVERED
3.5. PROTECTION AGAINST OTHER	----	

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HAZARDS		
3.5.1. Batteries		NOT COVERED
3.5.2. Fire		NOT COVERED
3.5.3. Emissions of hazardous substances		NOT COVERED
3.6. INFORMATION AND INDICATIONS	----	
3.6.1. Signs, signals and warnings		NOT COVERED
3.6.2. Marking		NOT COVERED
3.6.3. Instructions	----	
3.6.3.1. Vibrations		NOT COVERED
3.6.3.2. Multiple uses		NOT COVERED

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Table ZA.2 — Applicable Standards to confer presumption of conformity as described in this Annex ZA

Column 1 Reference in Clause 2	Column 2 International Standard Edition	Column 3 Title	Column 4 Corresponding European Standard Edition
ISO 25119-2:2019	ISO 25119-2:2019	Tractors and machinery for agriculture and forestry — Safety-related parts of control systems — Part 2: Concept phase	EN ISO 25119-2:2023
ISO 25119-3:2018 ISO 25119-3:2018/A1:2020	ISO 25119-3:2018 ISO 25119-3:2018/A1:2020	Tractors and machinery for agriculture and forestry — Safety-related parts of control systems — Part 3: Series development, hardware and software	EN ISO 25119-3:2023 EN ISO 25119-3:2023/A1:2023
ISO 25119-4:2018 ISO 25119-4:2018/A1:2020	ISO 25119-4:2018 ISO 25119-4:2018/A1:2020	Tractors and machinery for agriculture and forestry — Safety-related parts of control systems Part 4: production, operation, modification and supporting processes	EN ISO 25119-4:2023 EN ISO 25119-4:2023/A1:2023

The documents listed in the Column 1 of table ZA.2, in whole or in part, are normatively referenced in this document, i.e. are indispensable for its application. The achievement of the presumption of conformity is subject to the application of the edition of Standards as listed in Column 4 or, if no European Standard Edition exists, the International Standard Edition given in Column 2 of table ZA.2.

WARNING 1 — Presumption of conformity stays valid only as long as a reference to this European Standard is maintained in the list published in the Official Journal of the European Union. Users of this standard should consult frequently the latest list published in the Official Journal of the European Union.

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