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TECHNICAL SPECIFICATION

**Safety of machinery – Electrical equipment of machines –
Part 34: Requirements for machine tools**

INTERNATIONAL
ELECTROTECHNICAL
COMMISSION

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INTERNATIONAL ELECTROTECHNICAL COMMISSION

SAFETY OF MACHINERY – ELECTRICAL EQUIPMENT OF MACHINES –

Part 34 : Requirements for machine tools

FOREWORD

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- the required support cannot be obtained for the publication of an International Standard, despite repeated efforts, or
- the subject is still under technical development or where, for any other reason, there is the future but no immediate possibility of an agreement on an International Standard.

Technical specifications are subject to review within three years of publication to decide whether they can be transformed into International Standards.

IEC TS 60204-34, which is a technical specification, has been prepared by IEC technical committee 44: Safety of machinery – Electrotechnical aspects.

The text of this technical specification is based on the following documents:

Enquiry draft	Report on voting
44/735/DTS	44/748/RVC

Full information on the voting for the approval of this technical specification 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.

This part of IEC 60204 is intended to be used in conjunction with IEC 60204-1:—1.

This part supplements or modifies the corresponding clauses in IEC 60204-1.

The numbering system is based on IEC 60204-31:2013. Where a particular clause or subclause of Part 1 is not mentioned in this Part 34, that clause or subclause applies as far as is reasonable. Where this part states "addition", "modification" or "replacement", the relevant text, notes, figures, and tables in Part 1 are to be adapted accordingly.

Annexes which are additional to those in part 1 are lettered AA, BB, CC, DD, EE and FF.

A list of all parts in the IEC 60204 series, published under the general title *Safety of machinery – Electrical equipment of machines*, can be found on the IEC website.

A bilingual version of this publication may be issued at a later date.

¹ Stage at the time of publication: IEC/FDIS 60204-1:2016.

SAFETY OF MACHINERY – ELECTRICAL EQUIPMENT OF MACHINES –

Part 34 : Requirements for machine tools

1 Scope

This clause of IEC 60204-1 is applicable except as follows:

Replacement:

This part of IEC 60204 applies to electrical, electronic and programmable electronic equipment and systems of machine tools not portable by hand while working, including a group of machines working together in a co-ordinated manner.

In this part of IEC 60204, machine tools means all machines for the working of metal, wood, plastics and stone, operating by forming or removal of material. The following list includes examples of machine tools but not limited to:

- Turning machines (i.e. manually controlled turning machines without numerical control, manually controlled turning machines with limited numerically controlled capability, numerically controlled turning machines and turning centres, single- or multi-spindle automatic turning machines);
- Milling machines(including boring machines);
- Machining centres;
- Planing machines;
- Drilling machines;
- Grinding machines;
- Laser processing machines;
- Electro Discharge Machines(EDM) (except their power circuit for discharge);
- Sawing machines for cold metal;
- Guillotine shears;
- Hydraulic press brakes;
- Mechanical (or hydraulic, pneumatic) presses.

Power circuits where electrical energy is directly used as a working tool are excluded from this part of IEC 60204.

In addition to this document, the applicable C-standard for the machines listed in the examples can be referred for more information.

2 Normative references

This clause of IEC 60204-1 is applicable except as follows:

Additional references:

IEC 60204-1:—, *Safety of machinery – Electrical equipment of machines – Part 1: General requirements*

IEC 60825-1, *Safety of laser products – Part 1: Equipment classification and requirements*

IEC 60825-4, *Safety of laser products – Part 4: Laser guards*

ISO 14119, *Safety of machinery – Interlocking devices associated with guards – Principles for design and selection*