

ANSI/ISA-S82.02.04-1996 (IEC 1010-2-032)

Approved May 31, 1996

Standard

Safety Requirements for Electrical Equipment for Measurement, Control, and Laboratory Use

Identical to IEC 1010-2-032:
Particular requirements for hand-held current
clamps for electrical measurement and test



ANSI/ISA-S82.02.04-1996 (IEC 1010-2-032), Safety Requirements for Electrical Equipment for Measurement, Control, and Laboratory Use

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Preface

This preface as well as all footnotes and annexes are included for informational purposes and is not part of ANSI/ISA-S82.02.04-1996 (IEC 1010-2-032).

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Foreword

- 1) The IEC (International Electrotechnical Commission) is a worldwide organization for standardization comprising all national electrotechnical committees (IEC National Committees). The object of the IEC is to promote international cooperation on all questions concerning standardization in the electrical and electronic fields. To this end and in addition to other activities, the IEC publishes International Standards. Their preparation is entrusted to technical committees; any IEC National Committee interested in the subject dealt with may participate in this preparatory work. International, governmental, and non-governmental organizations liaising with the IEC also participate in this preparation. The IEC collaborates closely with the International Organization for Standardization (ISO) in accordance with conditions determined by agreement between the two organizations.
- 2) The formal decisions or agreements of the IEC on technical matters, prepared by technical committees on which all the National Committees having a special interest therein are represented, express, as nearly as possible, an international consensus of opinion on the subjects dealt with.
- 3) They have the form of recommendations for international use published in the form of standards, technical reports, or guides and they are accepted by the National Committees in that sense.
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International Standard 1010-2-0301 has been prepared by IEC technical committee No. 66: Safety of measuring, control, and laboratory equipment.

It has the status of a group safety publication in accordance with IEC Guide 104.

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

DIS	Report on Voting
66(CO)52	66(CO)56

Full information on the voting for the approval of this standard can be found in the Voting Report indicated in the above table.

This Part 2 is intended to be used in conjunction with IEC 1010-1. It was established on the basis of the first edition (1990) and its Amendment 1 (1991). Consideration may be given to future editions of, or amendments to, IEC 1010-1.

This Part 2 supplements or modifies the corresponding clauses in IEC 1010-1 so as to convert that publication into the IEC standard: *Safety requirements for hand-held current clamps for electrical measurement and test.*

Where a particular subclause of Part 1 is not mentioned in this Part 2, that subclause applies as far as is reasonable. Where this Part 2 states “addition,” “modification,” or “replacement,” the relevant requirement, test specification, or note in Part 1 should be adapted accordingly.

In this standard, the following print types are used:

- . requirements: in roman type;
- . NOTES: in small roman type;
- . *compliance: in italic type;*
- . terms used throughout this standard that have been defined in Clause 3:

SMALL ROMAN CAPITALS

1 Scope and object

This clause of Part 1 is applicable, except as follows:

1.1 Scope

Replace the text by the following:

This International Standard applies to hand-held and hand-manipulated CURRENT CLAMPS. These manipulated CURRENT CLAMPS are for use in the measurement of current without interruption of the current path of the circuit in which it is measured. They may be stand-alone manipulated CURRENT CLAMPS that are themselves within the scope of Part 1 or accessories to other equipment within the scope of Part 1.

This standard does not apply to current transformers or current transducers intended for fixed installations.

1.4 Environmental conditions

Replace the seventh dash by the following:

- primary input circuits with transient overvoltages according to INSTALLATION CATEGORIES (OVERVOLTAGE CATEGORIES) I, II, and IV ([see Annex J](#)).

2 Normative references

This clause of Part 1 is applicable with the following addition to the list of IEC Standards:

1010-2-031: 1993, *Safety requirements for electrical equipment for measurement, control, and laboratory use - Part 2-031: Particular requirements for hand-held probe assemblies for electrical measurement and test.*