



INTERNATIONAL
ELECTROTECHNICAL
COMMISSION

BASIC SAFETY PUBLICATIONS

IEC. Making electrotechnology work for you.



BASIC SAFETY PUBLICATIONS

Safety publications – tools for industry

Industry uses International Standards to help create products and services. In this sense, standards help industry become more efficient by saving time and money. Standards serve other purposes as well, but their main use is as a tool for industry. Standards therefore need to fit into a global, coherent context.

IEC horizontal publications (see *definitions*) can cover a variety of subjects and they apply to a broad range of product committees. In general, horizontal publications deal with fundamental principles, concepts, terminology or technical characteristics that are relevant to a number of technical committees. The goal of horizontal publications is to ensure the consistency of IEC publications in areas common to a number of technical committees. They avoid duplication of work and contradictory requirements.

This brochure deals with safety publications* which, because safety is a fundamental principle, are horizontal in nature. Given that electrical currents usually flow through electrical and electronic equipment and systems, they carry an inherent risk. Safety is thus an integral part of the thinking involving the standards for such equipment and systems.

* Another IEC brochure deals with electromagnetic compatibility.



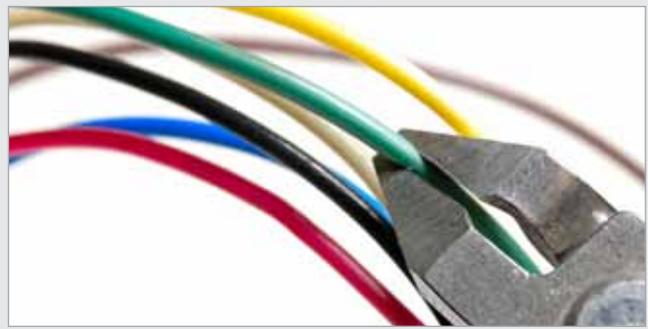
Need to know

The experts who prepare IEC International Standards relating to products and systems are professional and conscientious and know they have to ensure the quality, accuracy and completeness of their work. When preparing standards for equipment or systems, experts need to know which safety aspects must be included in their work. Often, they either need to refer to the relevant IEC publication in its entirety, or to appropriate sections, paragraphs and clauses in the text they are preparing. This brochure is destined to help technical committee and subcommittee experts save time by providing a handy guide listing all IEC safety publications. If experts cannot find the information they need in existing basic or group safety publications, they can work with the committee responsible for the horizontal or group safety function to develop what they need.

Basic, group & product safety standards

Some IEC publications apply to entire aspects of safety that cover many products. These are known as basic safety publications. An example is fire hazard testing. Other publications apply to a specific group of products within the scope of two or more product technical committees. These are known as group safety publications. An example is an aspect of laser radiation pertaining to human safety. A third category applies only to a particular kind of product. These are called product safety standards. An example is the safety of microwave ovens.

If an existing group safety publication already applies to a product for which experts are preparing a standard, then most of the work is done. The experts preparing the product standard often only need to make reference to the existing group safety publication. If no group safety publication exists, but a basic safety publication applies, then some of the work is already done and experts refer to the basic safety publication. Note that if a relevant basic safety publication exists, experts are strongly recommended to use it and any decision not to do so should be approved by the IEC SMB (Standardization Management Board).



Three important documents

- IEC Guide 104, *The preparation of safety publications and the use of basic safety publications and group safety publications*
- IEC Guide 108, *Guidelines for ensuring the coherency of IEC publications - Application of horizontal standards.*
- ISO/IEC Guide 51, *Safety aspects - Guidelines for their inclusion in standards*

Procedures are given in IEC Guide 104 for developing basic safety publications in consultation with the relevant product committees. The IEC website contains up-to-date lists of safety publications. The SMB permanently oversees the process and SMB members and National Committees have specific responsibilities to aid the committees concerned.

ACOS

ACOS (the IEC's Advisory Committee on Safety) provides overall guidance to IEC TCs (technical committees) and SCs (subcommittees) on questions of safety and a forum in which to discuss difficult issues involving several technical committees or differences in opinion among them.

The list of basic safety publications and of group safety publications changes from time to time as the IEC keeps abreast of technological development. New publications appear and older ones are updated. The lists can be obtained from the ACOS homepage on the IEC website: <http://www.iec.ch/acos> under the tab Safety Functions.

Definitions*

Basic safety publication: publication on a specific safety-related matter, applicable to many electrotechnical products.

Group safety publication: publication covering all safety aspects of a specific group of products within the scope of two or more product TCs.

Horizontal standard: standard on fundamental principles, concepts, terminology or technical characteristics, relevant to a number of TCs and of crucial importance to ensure the coherence of the corpus of standardization documents.

Horizontal safety function: task assigned to a TC to prepare one or more basic safety publications.

Group safety function: task assigned to a product TC to prepare one or more group safety publications.

Product committee: a TC with a scope that covers a specific product or group of related products.

Product publication: publication covering a specific product or group of related products.

Publication: a published IEC document that is a standard (including any amendments), a technical specification, a technical report, a guide, a publicly available specification, an industry technical agreement, or a technology trend assessment.

IEC-PAS: (publicly available specification), an intermediate specification, published prior to the development of a full International Standard, or "dual logo" publication published in collaboration with an external organization. A PAS is a technical specification not fulfilling the requirements for a standard, but made available to the public.

* Note: when preparing IEC publications, experts should refer to the definitions given in IEC Guides 104 and 108 and ISO/IEC Guide 51.



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