SLOVENSKI STANDARD
SIST-TP CLC/TR 62102:2005

01-november-2005

Električna varnost – Klasifikacija vmesnikov za opremo, ki bo povezana v telekomunikacijska omrežja (IEC/TR 62102:2001)

Electrical safety - Classification of interfaces for equipment to be connected to information and communications technology networks

Elektrische Sicherheit - Klassifizierung der Schnittstellen für den Anschluss von Geräten an Informations- und Kommunikationsnetze

Sécurité électrique - Classification des interfaces pour les matériels destinés à être connectés à des réseaux de traitement de l'information et de communication

Ta slovenski standard je istoveten z: **CLC/TR 62102:2005**

ICS:

35.200	Vmesniška in povezovalna oprema	Interface and interconnection equipment

SIST-TP CLC/TR 62102:2005 **en**

TECHNICAL REPORT

RAPPORT TECHNIQUE

TECHNISCHER BERICHT

CLC/TR 62102

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English version

Electrical safety – Classification of interfaces for equipment to be connected to information and communications technology networks

(IEC/TR 62102:2001)

Sécurité électrique – Classification des interfaces pour les matériels destinés à être connectés à des réseaux de traitement de l'information et de communication (CEI/TR 62012:2001)

Elektrische Sicherheit – Klassifizierung der Schnittstellen für den Anschluss von Geräten an Informations- und Kommunikationsnetze (IEC 62102:2001)

This Technical Report was approved by CENELEC on 2004-12-07.

CENELEC members are the national electrotechnical committees of Austria, Belgium, Cyprus, Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Norway, Poland, Portugal, Slovakia, Slovenia, Spain, Sweden, Switzerland and United Kingdom.

CENELEC

European Committee for Electrotechnical Standardization
Comité Européen de Normalisation Electrotechnique
Europäisches Komitee für Elektrotechnische Normung

Central Secretariat: rue de Stassart 35, B - 1050 Brussels

Ref. No. CLC/TR 62102:2005 E

Foreword

The text of the Technical Report IEC/TR 62102:2001, prepared by the former IEC TC 74, transformed into IEC TC 108, Safety of electronic equipment within the field of audio/video, information technology and communication technology, was submitted to the formal vote and was approved by CENELEC as CLC/TR 62102 on 2004-12-07.

Annex ZA has been added by CENELEC.

Endorsement notice

The text of the Technical Report IEC/TR 62102:2001 was approved by CENELEC as a Technical Report without any modification.

Annex ZA
(normative)

Normative references to international publications with their corresponding European publications

The following referenced documents are indispensable for the application of this document. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

NOTE Where an International Publication has been modified by common modifications, indicated by (mod), the relevant EN/HD applies.

Publication	Year	Title	EN/HD	Year
IEC Guide 112	- [1)]	Guide on the safety of multimedia equipment	-	-
IEC 60065	- [1)]	Audio, video and similar electronic apparatus - Safety requirements	EN 60065	2002 [2)]
IEC 60364 (mod)	Series	Electrical installations of buildings	HD 384/ HD 60364	Series
IEC 60664-1	- [1)]	Insulation coordination for equipment within low-voltage systems Part 1: Principles, requirements and tests	EN 60664-1	2003 [2)]
IEC 60950	- [1)]	Safety of information technology equipment	EN 60950	Series
IEC 61312-1	- [1)]	Protection against lightning electromagnetic impulse Part 1: General principles	-	-
IEC62151	- [1)]	Safety of equipment electrically connected to a telecommunications network	-	-
ISO/IEC 8802-3	- [1)]	Information technology -- Telecommunications and information exchange between systems -- Local and metropolitan area networks -- Specific requirements Part 3: Carrier sense multiple access with collision detection (CSMA/CD) access method and physical layer specifications	-	-
ITU-T Recommendation K.20	- [1)]	Resistibility of telecommunication equipment installed in a telecommunications centre to overvoltages and overcurrents		
ITU-T Recommendation K.21	- [1)]	Resistibility of telecommunication equipment installed in costumer premises to overvoltages and overcurrents		
ITU-T Recommendation K.27	- [1)]	Bonding configurations and earthing inside a telecommunication building		

[1)] Undated reference.

[2)] Valid edition at date of issue.

Publication	Year	Title	EN/HD	Year
ITU-T Recommendation K.31	- [1)]	Bonding configurations and earthing of telecommunication installations inside a subscriber's building		

TECHNICAL REPORT

IEC TR 62102

First edition
2001-03

Electrical safety – Classification of interfaces for equipment to be connected to information and communications technology networks

Sécurité électrique – Classification des interfaces pour les matériels destinés à être connectés à des réseaux de traitement de l'information et de communication

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Commission Electrotechnique Internationale
International Electrotechnical Commission
Международная Электротехническая Комиссия

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CONTENTS

INTERNATIONAL ELECTROTECHNICAL COMMISSION

ELECTRICAL SAFETY – CLASSIFICATION OF INTERFACES FOR EQUIPMENT TO BE CONNECTED TO INFORMATION AND COMMUNICATIONS TECHNOLOGY NETWORKS

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 co-operation 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 express, as nearly as possible, an international consensus of opinion on the relevant subjects since each technical committee has representation from all interested National Committees.

3) The documents produced have the form of recommendations for international use and are published in the form of standards, technical specifications, technical reports or guides and they are accepted by the National Committees in that sense.

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5) The IEC provides no marking procedure to indicate its approval and cannot be rendered responsible for any equipment declared to be in conformity with one of its standards.

6) Attention is drawn to the possibility that some of the elements of this technical report may be the subject of patent rights. The IEC shall not be held responsible for identifying any or all such patent rights.

The main task of IEC technical committees is to prepare International Standards. However, a technical committee may propose the publication of a technical report when it has collected data of a different kind from that which is normally published as an International Standard, for example "state of the art".

IEC 62102 which is a technical report, has been prepared by technical committee 74: Safety and energy efficiency of IT equipment.

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

Enquiry draft	Report on voting
74/568/CDV	74/580/RVC

Full information on the voting for the approval of this technical report 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 3.

The committee has decided that the contents of this publication will remain unchanged until 2002-11. At this date, the publication will be:

- reconfirmed;
- withdrawn;
- replaced by a revised edition, or
- amended.

This document, which is purely informative, is not to be regarded as an International Standard.

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

INTRODUCTION

This technical report is a guide to the determination of the interface requirements for equipment in terms of safety. It lists a number of interfaces and indicates the safety category of each listed interface. This technical report does not contain sufficient detail for conformance testing purposes, except when used in conjunction with product standards such as IEC 60950.

The equipment safety standard IEC 60950 specifies the requirements for categories of circuits as **SELV circuits**, **TNV circuits** and **hazardous voltage circuits** (among others). For stand-alone equipment it is a relatively simple matter to determine the different categories of circuits. However, an equipment which has data port interfaces is intended to be connected to other equipment, either locally or via a network. In this case, the safety categories of the interfaces which will be connected together have to be compatible with each other. Furthermore, the category of the interface of the remote equipment may be unknown. This is the case in systems where telecommunication equipment and data processing equipment are connected together via different types of interfaces and networks.

To overcome this situation it is necessary to classify the interfaces of equipment in such configurations according to the application and to select the safety category for the interfaces of the equipment and for the type of the network. Similarly, the interfaces have to be classified for protection against damage of the equipment and of the network. Aspects of protection are dealt with in the ITU-T K series of Recommendations.