

# TECHNICAL REPORT

# IEC TR 62225

First edition  
2001-11

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## Guidance on terms for connectors and mechanical structures in electronic equipment

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## INTERNATIONAL ELECTROTECHNICAL COMMISSION

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### GUIDANCE ON TERMS FOR CONNECTORS AND MECHANICAL STRUCTURES IN ELECTRONIC EQUIPMENT

#### 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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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 62225, which is a technical report, has been prepared by technical committee 48: Electromechanical components and mechanical structures for electronic equipment.

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

|               |                  |
|---------------|------------------|
| Enquiry draft | Report on voting |
| 48/433/DTR    | 48/436/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.

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

The committee has decided that the contents of this publication will remain unchanged until 2003. At this date, the publication will be

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- withdrawn;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

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**Withdrawn**

## GUIDANCE ON TERMS FOR CONNECTORS AND MECHANICAL STRUCTURES IN ELECTRONIC EQUIPMENT

### 1 Scope

The content of this list of terms is based on the terminology which is primarily used in the IEC publications under the responsibility of IEC TC 48. This technical report is not meant to be considered as a vocabulary nor as a glossary of terms in the sense of ISO/DIS 1087-1 and is not formatted in the same way.

This technical report offers project leaders the listed terms as a preferred selection for use in new publications. By applying these preferred terms, the clause containing terms and definitions that form part of most standards can be shortened significantly.

The listed terms are collected from standards, already published, and projects which have reached the CDV stage.

The terms that have been published in IEC 60050-581 are listed "for information". Modifications are allowed if necessary, in order to better suit the purpose of new publications. The listing also includes terms published in other chapter(s) of the IEV, when the term(s) have been used in TC 48 documents.

NOTE The terms as published by the IEV are not always in conformance with ISO/IEC Directives Part 2 – 2000, C.1.5.3. In this document, words like 'a' or 'the' have been deleted wherever possible, without indicating that the IEV was "modified".

At the end of their maintenance cycle, it is recommended to revise published documents where applicable using these preferred terms.

For easy use, the terms are given in alphabetical order, with the title, description and additional information about the source, status and recommendations:

- Description: where applicable, a note is added to clarify.
- Source: the publication or project in which the term has been used.
- Status: the following status types (in alphabetical order) have been used:
  - Deprecated** an IEV term, which has been replaced by a better term.
  - Draft** the term forms part of a document, which is currently in preparation.
  - Modified** the listed term deviates from a published term.
  - Obsolete** the published term is no longer in use.
  - Published** the term has been published in an IEC document.
  - Superseded** the term has been superseded by another published term.
  - Unique** fully new term that has not been used in any document.
- Apply: recommendation to the author of a new or a revised standard.

## 2 Reference documents

IEC 60050-151, *International Electrotechnical Vocabulary – Part 151: Electrical and magnetic devices*

IEC 60050-581, *International Electrotechnical Vocabulary – Chapter 581: Electromechanical components for electronic equipment*

IEC 60050-826, *International Electrotechnical Vocabulary – Chapter 826: Electrical installations of buildings*

IEC 60068-1, *Environmental testing – Part 1: General and guidance*

IEC 60309-1, *Plugs, socket-outlets and couplers for industrial purposes – Part 1: General requirements*

IEC 60352-2, *Solderless connections – Part 2: Solderless crimped connections – General requirements, test methods and practical guidance*

IEC 60352-3, *Solderless connections – Part 3: Solderless accessible insulation displacement connections – General requirements, test methods and practical guidance*

IEC 60352-4, *Solderless connections – Part 4: Solderless non-accessible insulation displacement connections – General requirements, test methods and practical guidance*

IEC 60352-7, *Solderless connections – Part 7: Spring clamp connections – General requirements, test methods and practical guidance*<sup>1</sup>

IEC 60512-3, *Electromechanical components for electronic equipment – Basic testing procedures and measuring methods – Part 3: Current-carrying capacity tests*

IEC 60512-4, *Electromechanical components for electronic equipment; basic testing procedures and measuring methods – Part 4: Dynamic stress tests*

IEC 60664-1, *Insulation coordination for equipment within low-voltage systems – Part 1: Principles, requirements and tests*

IEC 60917-1, *Modular order for the development of mechanical structures for electronic equipment practices – Part 1: Generic standard*

IEC 60917-2, *Modular order for the development of mechanical structures for electronic equipment practices – Part 2: Sectional specification – Interface co-ordination dimensions for the 25 mm equipment practice*

IEC 60917-2-2, *Modular order for the development of mechanical structures for electronic equipment practices – Part 2: Sectional specification – Interface co-ordination dimensions for the 25 mm equipment practice – Section 2: Detail specification – Dimensions for subracks, chassis, backplanes, front panels and plug-in units*

IEC 60999-1, *Connecting devices – Electrical copper conductors – Safety requirements for screw-type and screwless-type clamping units – Part 1: General requirements and particular requirements for clamping units for conductors from 0,2 mm<sup>2</sup> up to 35 mm<sup>2</sup> (included)*

IEC 61076-1, *Connectors with assessed quality, for use in d.c., low frequency analogue and in digital high speed data applications – Part 1: Generic specification*

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<sup>1</sup> To be published.

IEC 61076-4-101, *Connectors for electronic equipment – Part 4-101: Printed board connectors with assessed quality – Detail specification for two-part connector modules having a basic grid of 2,0 mm for printed boards and backplanes in accordance with IEC 60917*

IEC 61076-4-104, *Connectors for use in d.c., low frequency analogue and digital high speed data applications – Part 4-104: Printed board connectors with assessed quality – Detail specification for two-part modular connectors, basic grid of 2,0 mm, with terminations on a multiple grid of 0,5 mm*

IEC 61076-4-108, *Connectors for electronic equipment – Part 4-108: Printed board connectors with assessed quality – Detail specification for cable-to-board connectors, with a modular pitch of 25 mm and integrated shielding function, applicable for transverse packing density of 15 mm, having a basic grid of 2,5 mm, in accordance with IEC 60917*<sup>1</sup>

IEC 61984, *Connectors – Safety requirements and tests*

### 3 Terms and definitions

#### Numerical

##### **180° polarisation**

housing parts of the fixed and free connector have a 180° polarisation to prevent incorrect insertion

Source: IEC 61076-4-108

Status: draft

Apply: no, use 'polarization'

NOTE The term 'polarization' includes 180° polarization.

##### **above-chassis mounted**

component with its mounting flange in front of the mounting surface when looking at the mating face or front side of the component

Source: IEC 581-04-02

Status: deprecated

Apply: no, use 'front mounted'

##### **accessible insulation displacement connection**

insulation displacement (ID) connection in which it is possible to access test points for carrying out mechanical tests and electrical measurements without deactivation of any design feature intended to establish and/or maintain the ID connection

Source: IEC 60352-3 and IEC 60352-4 (modified)

Status: published

Apply: yes

##### **accessory**

any associated item which does not form part of a basic component

Source: IEC 581-05-01

Status: published

Apply: yes

##### **adaptor**

intermediate device to provide for attachments such as special accessories, special mounting means or special interconnecting means

Source: IEC 581-05-02

Status: published

Apply: yes

<sup>1</sup> To be published.

**alternative insert position**

orientation achieved by rotating insert in circular connectors

Source: IEC 581-03-32

Status: published

Apply: yes

**aperture dimension**

special co-ordination dimension for a useable space between features (structural parts)

NOTE An actual inside dimension of an aperture can only increase.

Source: IEC 60917-1 and IEC 60917-2 (modified)

Status: published

Apply: yes

**apparent diameter of a stranded conductor**

diameter of the circumscribing circle of the bundle of strands

Source: IEC 581-03-51

Status: published

Apply: yes

**B**

**back plane**

interconnection plane in the base of a mechanical structure

Source: IEC 581-06-41

Status: published

Apply: no, use 'backplane'

**backplane**

mounting plane of connectors and printed board for the electrical interlink

Source: IEC 60917-1/A1

Status: published

Apply: yes

**back-mounted**

a component with its mounting flange behind the mounting surface when looking at the mating face or front side of the component

Source: IEC 581-04-01

Status: published

Apply: yes

**barrier seal**

seal provided through the connector between housing and insert and contacts to inhibit the ingress of contaminants

Source: IEC 581-03-14

Status: published

Apply: yes

**base pitch (p)**

smallest distance between adjacent grid lines

NOTE Used in the equipment practices.

Source: IEC 60917-1 (modified)

Status: published

Apply: yes

**basic insulation**

insulation applied to live parts to provide protection against electric shock

Source: IEC 60664-1 (modified)

Status: published

Apply: yes

**basic test schedule**

schedule of minimum type tests

Source: IEC 61076-1

Status: published

Apply: yes

**bayonet coupling**

quick coupling device for mating connectors utilizing projections riding in ramps and providing jacking and locking features with limited rotation

Source: IEV 581-07-16

Status: published

Apply: yes

**beam**

specially shaped metallic part of an insulation displacement termination on each side of the connection slot or the strain relief slot

Source: IEV 581-02-27

Status: published

Apply: yes

**below-chassis mounted**

component with its mounting flange behind the mounting surface when looking at the mating face or front side of the component

Source: IEV 581-04-01

Status: deprecated

Apply: no, use 'back-mounted'

**bifurcated contact**

flat contact with a lengthwise slot, the two arms of which apply contact force in the same direction

Source: IEV 581-02-02

Status: published

Apply: yes

**blade contact**

solid contact with a rectangular cross-section, usually with a chamfered mating edge

Source: IEV 581-02-03

Status: published

Apply: yes

**board-mounted connector**

connector suitable for being permanently attached to a printed board

Source: IEV 581-06-03

Status: obsolete

Apply: no, use 'fixed board connector'

**boot**

accessory usually of a flexible material, designed to be placed around the terminations of a component as a protective housing

Source: IEV 581-05-03

Status: published

Apply: yes

**bound connection**

electrical connection between a wire and a sharp-cornered post in which the wire is laid parallel to the length of the post and adjacent to its wider face

NOTE The wire is secured to the post by tightly wrapping several turns of a separated solid wire around the post and the wire to be secured; each turn of the wrapping wire contacts the bound connection producing deformation in it and locks on at least two corners of the post.

Source: IEV 581-03-02 (modified)

Status: published

Apply: yes

**bound twin-post connection**

hybrid type of connection formed when two rectangular sharp-cornered posts are positioned with their wider faces in contact and secured by tightly wrapping several turns of solid wire around them

Source: IEV 581-03-08

Status: published

Apply: yes

**break-away connector**

connector designed to separate when a specified force is applied to the cable, without damage to the cable or the connector

Source: IEC 581-06-24

Status: published

Apply: yes

**breaking capacity**

value of current which the connector with breaking capacity can make and brake under specified conditions

Source: IEC 61984

Status: published

Apply: yes

**butting connector**

connector in which connection is achieved between non-penetrating contacts and maintained by axial pressure

Source: IEC 581-06-04

Status: published

Apply: yes

**cabinet**

free-standing and self-supporting enclosure for housing electrical and/or electronic equipment

NOTE It is usually fitted with doors and/or side panels, which may or may not be removable.

Source: IEC 60917-1 (modified)

Status: published

Apply: yes

**cabinet panel**

design part of an enclosure as protection against incident touch and environmental influences

Source: IEC 60917/A1

Status: published

Apply: yes

**cable adaptor**

part of a connector or an accessory consisting of a rigid housing for attachment to the connector body

NOTE It may incorporate provision for a cable clamp or seal for terminating screens and provide shielding to electrical interference; it may be straight or angled.

Source: IEC 581-09-01 (modified)

Status: published

Apply: no, use 'cable outlet'

**cable clamp**

accessory or part of a component which grips the cable or wire to provide strain relief and absorb mechanical stress which would otherwise be transmitted to the termination

Source: IEC 581-09-03 (modified)

Status: published

Apply: yes

**cable outlet**

part of a connector or an accessory consisting of a rigid housing for attachment to the connector body

NOTE It may incorporate provision for a cable clamp or seal for terminating screens and provide shielding to electrical interference; it may be straight or angled.

Source: IEC 581-09-01 (modified)

Status: published

Apply: yes

**cable screen clamp**

cable clamp to terminate the cable screen

Source: IEV 581-09-04

Status: published

Apply: yes

**cable seal**

device designed to seal a jacketed cable to a component

Source: IEV 581-08-15

Status: published

Apply: yes

**cable shielding clamp**

cable clamp to terminate the cable screen

Source: IEV 581-09-04

Status: published

Apply: no, use 'cable screen clamp'

**cable support sleeve**

flexible accessory or a part of a component placed around the cable to minimize flexing of the cable at the point of entry into the component

Source: IEV 581-07-34

Status: published

Apply: yes

**case**

table, bench or wall-mounting enclosure in which electrical and/or electronic equipment can be housed

Source: IEC 60917-1

Status: published

Apply: yes

**centre shield**

metal screen located centrally in a socket to provide electrical screening between opposite contacts

Source: IEV 581-07-31

Status: published

Apply: yes

**chassis**

mechanical structure designed specifically to support associated electrical and electronic components

Source: IEC 60917-1

Status: published

Apply: yes

**chess pattern**

contact arrangement where the loaded and the unloaded positions alternate in rows and columns, like fields on a chess-board.

Source: IEC 61076-4-101

Status: published

Apply: yes

**circular connector**

connector which is basically cylindrical and has a mating face with a basically circular periphery

Source: IEV 581-06-05

Status: published

Apply: yes

**clamping unit**

part(s) of the terminal necessary for the mechanical clamping and the electrical connection of the conductor(s), including the parts which are necessary to ensure the correct contact pressure

Source: IEC 61984 and IEC 60999-1

Status: published

Apply: yes

**clearance**

shortest distance in air between two conductive parts

Source: IEC 60664-1

Status: published

Apply: yes

**climatic category**

short form indication of the basic requirements which an electromechanical component should meet

Source: IEC 60068-1

Status: published

Apply: yes

**clip**

resilient device which deflects on mating to produce a connection

Source: IEC 581-02-24

Status: published

Apply: yes

**clip connection**

connection made by a clip

Source: IEC 581-03-37

Status: published

Apply: yes

**clip post**

termination to accept a clip connection

Source: IEC 581-02-25

Status: published

Apply: yes

**closed crimp barrel**

crimp barrel with a closed shape before crimping

Source: IEC 581-03-58

Status: published

Apply: yes

**coding devices**

accessories allowing the user to make specific pairs of connectors by providing them with matching coding devices

Source: IEC 61076-4-101 (modified)

Status: published

Apply: yes

**coding key**

device which engages with a keyway which, when mounted, prevents the improper mating (engagement) of the connector halves at a distance less than the specified minimum contact range

Source: IEC 61076-4-104

Status: published

Apply: yes

**compatible connectors**

two connectors are compatible, when they are intermountable, and/or intermateable or interchangeable

Source: IEC 581-09-05 (modified)

Status: published

Apply: yes, see also IEC 61076-1/A2

**compliant press-in termination**

press-in termination having a compliant press-in zone

Source: IEC 581-03-41

Status: published

Apply: yes

**concentric contact**

assembly of two contacts arranged coaxially enabling the view of engaging face connection of coaxial, shielded or twisted pair cables

NOTE This definition, rather than that of IEC 581-02-04, should be used.

Source: IEC 61076-6

Status: draft

Apply: yes

**concentric contact**

set of coaxial contacts providing independent circuits through a single mechanical assembly

NOTE The definition given in IEC 61076-6 should be used rather than the one given in IEC 581-02-04.

Source: IEC 581-02-04

Status: published

Apply: no, use 'concentric contact'

**conductor barrel**

section of a terminal end or splice which accommodates the conductor

Source: IEC 581-03-35

Status: published

Apply: yes

**conductor pull-out force**

force required to destroy a termination by separating a conductor from its terminal end by exerting an axial pull

Source: IEC 581-03-16

Status: published

Apply: yes

**conductor tensile force**

force required to destroy a termination by separating a conductor from its terminal end by exerting an axial pull

Source: IEC 581-03-16

Status: published

Apply: no, use 'conductor pull-out force'

**conductor tensile strength**

in preparation

**conduit adaptor**

accessory to secure a connector to a conduit

Source: IEC 581-09-02

Status: published

Apply: yes

**connection**

physical interface between conductors and/or contacts to provide an electrical path

Source: IEC 581-03-01

Status: published

Apply: yes

**connection slot**

specially shaped opening of an insulation displacement termination suitable to displace the insulation of a wire and to ensure a gas-tight connection between the termination and the conductor(s) of the wire

Source: IEC 60352-3, IEC 60352-4, IEC 581-02-28 (modified)

Apply: yes

Status: published

**connector**

component which terminates conductors for the purpose of providing connection and disconnection to a suitable mating component

Source: IEC 581-06-01

Status: published

Apply: yes

**connector adaptor**

fixed or free component to permit electrical connection(s) between two or more connectors where direct connection is mechanically impossible

Source: IEV 581-06-02 (modified) Status: published

Apply: yes

**connector body**

connector less its contacts

Source: IEV 581-07-10 Status: published

Apply: yes

**connector for class II equipment**

connector where the protection against indirect contact is realized by double or reinforced insulation

NOTE Class II according to IEC 61140

Source: IEC 61968 Status: draft

Apply: yes

**connector front**

side of a connector which is the mating face

Source: IEV 581-08-01 Status: published

Apply: yes

**connector housing**

part of a connector into which the insert and contacts are assembled

Source: IEV 581-07-11 Status: published

Apply: yes

**connector insert**

insulating element designed to support and position contacts in a connector housing

Source: IEV 581-07-12 Status: published

Apply: yes

**connector interface**

two surfaces of mating connectors which face each other when mated

Source: IEV 581-08-10 Status: published

Apply: yes

**connector mated set**

particular combination of mating connectors

Source: IEV 581-06-38 Status: published

Apply: yes

**connector mating and unmating force**

force required to engage fully or separate a pair of mating components including the effect of a coupling, locking or similar device

Source: IEV 581-08-08 Status: deprecated

Apply: no, use 'engaging and separating force'

**connector module**

part containing all features of a complete connector which can be mounted in lengthwise series to form a connector with a larger number of contact positions

Source: IEC 61076-4-104 Status: published

Apply: yes

**connector pair**

particular combination of mating connectors

Source: IEV 581-06-38 Status: deprecated

Apply: no, use 'connector mated set'

**connector rear**

wiring side of a connector

Source: IEV 581-08-02

Status: published

Apply: yes

**connector-shell**

part of a connector into which the insert and contacts are assembled

Source: IEV 581-07-11

Status: deprecated

Apply: no, use 'connector housing'

**connector shield**

cable outlet specifically designed to terminate the cable braid and provide shielding to electromagnetic interference

Source: IEV 581-07-13

Status: published

Apply: yes

**connector style**

particular connector within a type, e.g. rectangular, flange-mounting

Source: IEV 581-08-04

Status: published

Apply: yes

**connector sub-family**

group of connectors recognizable by their basic shape or intended application, e.g.: circular connectors, printed board connectors, etc.

Source: IEC 61076-1 (modified)

Status: published

Apply: yes

**connector type**

connector within a particular sub-family, e.g. edge-socket connector, a mated set comprising a board-mounted connector and its counterpart, etc.

Source: IEV 581-08-05

Status: published

Apply: yes

**connector variant**

variation within a connector type and style or within a group of related connectors, e.g. number of contacts, polarization, terminations, etc.

Source: IEV 581-08-06

Status: published

Apply: yes

**connector with breaking capacity**

connector specially designed to be engaged or disengaged in normal use when live or under load

NOTE The abbreviation CBC is often used.

Source: IEC 61984 (modified)

Status: published

Apply: yes

**console**

table-mounted or floor-standing enclosure having horizontal, vertical and/or sloping faces to accommodate control, information and monitoring equipment

Source: IEC 60917-1

Status: published

Apply: yes

**contact**

conductive element in a component which mates with a corresponding element to provide an electrical path

Source: IEV 581-02-01

Status: published

Apply: yes

**contact active area**

part of the contact which allows current to pass between the contact and another element; a contact comprises a dynamic active zone and a static active zone (termination)

Source: IEC 61076-6

Status: draft

Apply: No, use 'contact area'

**contact area**

area in contact between two mated contacts, two conductors or a conductor and a contact, which provides an electrical path

Source: IEC 581-02-16

Status: published

Apply: yes

**contact arrangement**

number, spacing and configuration of contacts in a component

Source: IEC 581-08-03

Status: published

Apply: yes

**contact barrier seal**

seal provided at the interface to prevent the ingress of moisture or contaminants across a set of connectors when mated

Source: IEC 581-08-16

Status: deprecated

Apply: no, use 'interfacial seal'

**contact engaging or separating force**

force required to fully insert or withdraw a set of mating components without the effect of a coupling, locking or similar device

Source: IEC 581-08-09

Status: deprecated

Apply: no, use 'insertion and withdrawal force'

**contact extraction force**

axial force required to extract a removal contact from a component

Source: IEC 581-03-18

Status: published

Apply: yes

**contact float**

permitted free movement of a contact in a component

Source: IEC 581-02-17

Status: published

Apply: yes

**contact force**

normal force (90°) which exists between engaged contact surfaces

Source: IEC 581-03-17

Status: published

Apply: yes

**contact inspection hole**

hole provided in the conductor barrel to permit visual inspection of conductor position

Source: IEC 581-07-07

Status: deprecated

Apply: no, use 'crimp inspection hole'

**contact lead-in**

chamfered or flared portion of a female contact or insert to facilitate insertion of a male contact

Source: IEC 581-07-09

Status: published

Apply: yes

**contact level**

group of contacts which engage/separate simultaneously, within the limits required by a secure engaging sequence

Source: IEC 61076-4-101

Status: published

Apply: yes

**contact levels**

contacts may be provided with different mating lengths, which feature different points of mating per specified contact length

Source: IEC 61076-4-104

Status: published

Apply: no, use 'contact level'

**contact range**

minimum to maximum distance between the reference planes of the fixed and free connectors, within which the specified contact resistance is met

Source: IEC 61076-4-104

Status: published

Apply: yes

**contact resistance**

the electrical resistance of a mated set of contacts under specified conditions

Source: IEC 581-03-11

Status: published

Apply: yes

**contact retainer**

a device either on the contact or in the connector insert to retain the contact (in the insulation)

Source: IEC 581-08-13

Status: published

Apply: yes

**contact sequence**

sequence in which contacts with a different mating length are mating, with the purpose to provide stepped insertion forces and/or stepped electrical continuity

NOTE e.g. first make/last break.

Source: IEC 61076-4-104 (modified)

Status: published

Apply: yes

**contact size**

designation used to differentiate one contact from another

NOTE It may be denoted by one of the following systems:

a) numbering system: assigned numbers used to denote the size of the contact and its related conductor accommodation,

b) current rating system: the related current-carrying capacity is used to denote the size of the contact,

c) cross-sectional area system: reference is made to the cross-sectional area of the maximum conductor accommodation to denote the size of the contact.

Source: IEC 581-07-08 (modified)

Status: published

Apply: yes

**contact wire range**

sizes of conductors accommodated by a particular conductor barrel (see also contact size)

Source: IEC 581-07-14

Status: published

Apply: yes

**conventional wrapped connection**

solderless connection achieved by wrapping a solid conductor around a wrap post without any contact of the wire insulation to the post

Source: IEC 581-03-45

Status: published

Apply: yes

**co-ordination dimension**

reference dimension used to co-ordinate mechanical interfaces

NOTE This is not a manufacturing dimension with a tolerance.

Source: IEC 60917-1 (modified)

Status: published

Apply: yes

**coupling ring**

cylindrical device used for coupling and uncoupling mating connectors

Source: IEC 581-07-20

Status: published

Apply: yes

**coupling torque**

force needed to rotate a coupling ring or jackscrew to fully engage a mating set of connectors  
 Source: IEV 581-08-20 Status: published  
 Apply: yes

**creepage distance**

shortest distance along the surface of the insulating material between two conductive parts  
 Source: IEV 151-03-37 Status: published  
 Apply: yes

**crimp**

connection made by crimping  
 Source: IEV 581-03-13 Status: obsolete  
 Apply: no, use 'crimped connection'

**crimp anvil**

part of a crimping tool which supports the conductor barrel or ferrule during crimping  
 Source: IEV 581-05-06 Status: published  
 Apply: yes

**crimp barrel**

conductor barrel designed to accommodate one or more conductors and to be crimped by means of a crimping tool  
 Source: IEV 581-03-56 Status: published  
 Apply: yes

**crimp connection**

connection made by crimping  
 Source: IEV 581-03-03 Status: superseded  
 Apply: no, use 'crimped connection'

**crimp contact**

contact having a conductor barrel designed to be crimped  
 Source: IEV 581-02-05 Status: published  
 Apply: yes

**crimp indenter**

part of a crimping tool which intends or compresses the conductor barrel or ferrule  
 Source: IEV 581-05-07 Status: published  
 Apply: yes

**crimp inspection hole**

a hole provided in the conductor barrel to permit visual inspection of conductor position  
 Source: IEV 581-07-07 Status: published  
 Apply: yes

**crimped connection**

solderless connection made by crimping  
 Source: IEV 581-03-03 (modified) Status: published  
 Apply: yes

**crimping**

method of permanently attaching a termination to a conductor by pressure deformation or by reshaping the barrel around the conductor to establish good electrical and mechanical connection  
 Source: IEV 581-03-14 Status: published  
 Apply: yes

**crimping die**

part of a crimping tool which forms the crimp(s) and usually incorporates the crimp anvil(s), the crimp indenter(s) and the positioner

Source: IEV 581-05-19 (modified) and IEC 60352-2 Status: published

Apply: yes

**crimping tool**

mechanical device used to make a crimp

Source: IEV 581-05-13

Status: published

Apply: yes

**crimping zone**

part of a crimp barrel where the crimped connection is achieved by pressure deformation or reshaping the barrel around the conductor

Source: IEV 581-03-66

Status: published

Apply: yes

**cycle of mechanical operation**

one insertion and one withdrawal of the connector halves

Source: IEC 61984

Status: published

Apply: yes

**D****dip-solder contact**

contact with a termination intended to be bath-soldered

Source: IEV 581-02-06

Status: published

Apply: yes

**door**

hinged cabinet panel, typically incorporating latching and/or locking devices

Source: IEC 60917-1/A1

Status: published

Apply: yes

**double insulation**

insulation comprising both basic insulation and supplementary insulation.

Source: IEC 60664-1

Status: published

Apply: yes

**dust cover**

cover used in storage and transit

Source: IEV 581-05-05

Status: published

Apply: yes

**E****earthing connector**

connector designed to provide a low resistance connection to earth

Source: IEV 581-06-06

Status: published

Apply: yes

**edge-board connector**

connector into which the edge of a printed board is inserted to make contact directly to edge-board contacts

Source: IEV 581-06-07

Status: deprecated

Apply: no, use 'edge-socket connector'

**edge-socket connector**

connector into which the edge of a printed board is inserted to make contact directly to edge-board contacts

Source: IEV 581-06-07

Status: published

Apply: yes

**effective post length**

length of contact between the press-in section of a press-in termination and the metal plating of the plated-through hole in a printed board in which the press-in termination is inserted

Source: IEV 581-03-62 (modified)

Status: published

Apply: no, use 'effective press-in length'

**effective press-in length**

length of contact between the press-in zone of a press-in termination and the metal plating of the plated-through hole in a printed board in which the press-in termination is inserted

Source: IEV 581-03-62

Status: published

Apply: yes

**effective wrapping length**

portion of a wrap post suitable and available for the application of the wrapped connection for which the requirements are fixed

Source: IEV 581-03-60

Status: published

Apply: yes

**electrical engagement length**

distance a contact travels on the surface of its mating contact during engagement or separation

Source: IEV 581-03-15

Status: published

Apply: yes

**end tail**

final portion of the last turn of wire in a wrapped connection which extends beyond the last corner of contact

Source: IEV 581-03-54

Status: published

Apply: yes

**engagement indicators**

marks which indicate when a connector is fully engaged

Source: IEV 581-08-07

Status: published

Apply: yes

**engaging sequence**

distinct order in the engaging/separating process of contacts belonging to different contact levels

Source: IEC 61076-4-101

Status: published

Apply: yes

**engaging or separating force**

force required to engage fully or separate a pair of mating components including the effect of a coupling, locking or similar device

Source: IEV 581-08-08

Status: published

Apply: yes

**engaging range**

minimum to maximum distance between the reference planes of the fixed and free connectors, within which reliable contact making is guaranteed

Source: IEC 61076-4-108

Status: draft

Apply: no, use 'contact range'

**environment resistant connector**

connector provided with means for protection against moisture, temperature or contaminants

Source: IEV 581-06-08

Status: published

Apply: yes

**equipment practice**

mechanical structure involved in housing and mounting of electronic and electromechanical systems

NOTE It provides for compatibility between mechanical parts, electrical interconnections and electronic components.

Source: IEC 60917-1 (modified)

Status: published

Apply: yes

**explosion-containing component**

component which is capable of containing an internal explosion without causing an explosion in a surrounding specified explosive environment

Source: IEV 581-01-01

Status: published

Apply: yes

**explosion-proof component**

component which is capable of normal operation within a specified explosive environment and will not cause an explosion when it is operated, mated or unmated while under load

Source: IEV 581-01-02

Status: published

Apply: yes

**extraction tool**

device for extracting removable contacts from a component

Source: IEV 581-05-14

Status: published

Apply: yes

F

**female contact**

contact intended to make electrical engagement on its inner surface and which will accept entry of a male contact

Source: IEV 581-02-07

Status: published

Apply: yes

**female concentric contact**

concentric contact where the outer contact is female, the central contact(s) may be male or female

Source: IEC 61076-6

Status: draft

Apply: yes

**female triaxial contact**

triaxial contact where the outer contact is female, the central contact(s) may be male or female

Source: IEC 61076-6

Status: draft

Apply: yes

**ferrule**

accessory in the form of a short tube to provide cable support or termination for a cable screen.

Source: IEV 581-07-21

Status: published

Apply: yes

**filler plug**

accessory used to fill grommet cavities in a connector

Source: IEV 581-07-27

Status: published

Apply: yes

**filter contact**

contact with filter to discriminate against certain frequencies

Source: IEV 581-02-08

Status: published

Apply: yes

**fireproof connector**

connector capable of withstanding flame of a specified temperature for a specified time

Source: IEV 581-06-09

Status: published

Apply: yes

**first make/last break contacts**

contacts which provide different contact levels and sequencing

NOTE So that during connector module engaging (insertion), at least one contact of the higher level shall connect before any contact of a lower contact level; whilst during connector module disengaging (withdrawal), at least one contact of the higher level will not disconnect before any contact of a lower contact level.

Source: IEC 61076-4-104 (modified)

Status: published

Apply: yes

**first possible contact point**

depth dimension of the first point on the female contact, which can possibly be touched by the incoming male contact

Source: IEC 61076-4-101

Status: published

Apply: yes

**first reliable contact point**

depth dimension of the female contact from where reliable electrical measurements with the incoming male contact can be taken

Source: IEC 61076-4-101 (modified)

Status: published

Apply: yes, in modified form

**fixed connector**

connector for attachment to a rigid surface

Source: IEV 581-06-10

Status: published

Apply: yes

**fixed board connector**

connector mounted on a mother board or backplane, for engagement with a free cable connector and/or a free board connector

Source: IEV 581-06-39

Status: published

Apply: yes

**fixing studs**

posts, which form a part of the plastic housing of the connector, which fit into corresponding holes in the printed board to provide mechanical attachment to the board

NOTE Which, for example, may be deformed by applying a heated toolhead.

Source: IEC 61076-4-104 (modified)

Status: published

Apply: yes

**float mounting**

mounting method permitting movement to facilitate alignment of two mating components

Source: IEV 581-04-07

Status: published

Apply: yes

**float mounting connector**

fixed connector with mounting means permitting movement to facilitate alignment with the mating connector

Source: IEV 581-06-11

Status: published

Apply: yes

**flow-solder contact**

contact with a termination intended to be bath-soldered

Source: IEV 581-02-06

Status: deprecated

Apply: no, use 'dip-solder contact'

**free connector**

connector for attachment to the free end of a wire or cable

Source: IEV 581-06-12

Status: published

Apply: yes

**free board connector**

connector mounted on a printed board which can be separated from a mother board or back-plane

Source: IEV 581-06-40

Status: published

Apply: yes

**free cable connector**

connector for attachment to a free end of the wire or cable

Source: IEV 581-06-12

Status: published

Apply: yes

**free coupler connector**

connector that mates with a free connector in a cable-to-cable application

Source: IEV 581-06-13

Status: published

Apply: yes

**front-mounted**

component with its mounting flange in front of the mounting surface when looking at the mating face or front side of the component

Source: IEV 581-04-02

Status: published

Apply: yes

**front panel**

panel in general allocated to the vertical mounting area of racks and cabinets

Source: IEC 60917-1/A1 (modified)

Status: published

Apply: yes

**front-release contact**

removable contact in which release is effected from the mating face

Source: IEV 581-07-01

Status: published

Apply: yes

**full cycle crimp mechanism**

feature of a crimping tool that prevents the tool from returning to the open position before the crimping operation has been completed

Source: IEV 581-03-28 (modified)

Status: published

Apply: yes

**full test schedule**

test schedule which includes type, routine, and sampling tests

Source: IEC 61076-1

Status: published

Apply: yes

**functional insulation**

insulation between conductive parts which is necessary only for the proper functioning of the equipment

Source: IEC 60664-1

Status: published

Apply: yes

G

**gas-tight area**

part of the contact area that is not affected by gases under specified conditions

Source: IEC 581-03-64

Status: published

Apply: yes

**gasket seating seal**

seal provided between the housing to prevent the ingress of moisture and contaminants into the interior of connectors when mated

Source: IEC 581-08-18

Status: deprecated

Apply: no, use 'housing seal'

**grid**

right angular arrangement of theoretical lines of equal dimensions

Source: IEC 60917-1/A1

Status: published

Apply: yes

**grommet**

part of a component or an accessory used to support and protect the wires or cable at the point of entry. It may also prevent the ingress of moisture or contaminants

Source: IEC 581-07-22

Status: published

Apply: yes

**grommet ferrule**

part of a component or an accessory used to compress the grommet and/or reduce the transmission of torque to the grommet

Source: IEC 581-07-24

Status: published

Apply: yes, but 'grommet follower' may also be used

**grommet follower**

part of a component or an accessory used to compress the grommet and/or reduce the transmission of torque to the grommet

Source: IEC 581-07-24

Status: published

Apply: yes, but 'grommet ferrule' may also be used

**grommet nut**

part of a component or an accessory used to retain the grommet or grommet follower

Source: IEC 581-07-25 (modified)

Status: published

Apply: yes

**grommet wire range**

range of diameters of wire insulation accommodated by a grommet

Source: IEC 581-07-23

Status: published

Apply: yes

**grounding connector**

connector designed to provide a low resistance connection to earth

Source: IEC 581-06-06

Status: deprecated

Apply: no, use 'earthing connector'

**grounding row**

contact row of a connector, always connected to zero volts, and used only to contact optional shielding frames

Source: IEC 61076-4-101 (modified)

Status: published

Apply: yes

**grounding rows**

contact rows z and f of the fixed board connector, always being connected to zero volts, and only being used to contact the optional shielding frames

Source: IEC 61076-4-101 (modified)

Status: published

Apply: no, use 'grounding row'

**guide pin**

pin, rod or projection extending beyond the mating face of a component designed to guide the mating of the component to ensure proper alignment of the contacts

Source: IEC 581-07-26

Status: published

Apply: yes

**guiding block**

specially shaped part of a component, which guides or inserts the wire(s) into the slot(s).

Source: IEC 581-02-26

Status: published

Apply: yes

**H****hermaphroditic connector**

connector which mates with an identical connector

Source: IEC 581-06-14

Status: published

Apply: yes

**hermaphroditic contact**

contact which is intended to mate with an identical contact

Source: IEC 581-07-03

Status: published

Apply: yes

**hermetic connector**

connector having a hermetic seal

Source: IEC 581-06-15

Status: published

Apply: yes

**hermetic seal**

seal for which the specified rate of leakage is several orders smaller than that of a barrier seal

Source: IEC 581-03-19 (modified)

Status: published

Apply: yes

**hoop stress**

tension in the wire induced by the wrapping operation and maintained by the wire being locked on the corners of the post

Source: IEC 581-03-50

Status: published

Apply: yes

**housing seal**

seal provided between the housing to prevent the ingress of moisture and contaminants into the interior of connectors when mated

Source: IEC 581-08-18

Status: published

Apply: yes

**I****impulse withstand voltage**

highest peak value of impulse voltage of prescribed form and polarity which does not cause breakdown of the insulation under specified conditions

Source: IEC 60664-1

Status: published

Apply: yes

**insertion tool**

device used to insert contacts into a component

Source: IEV 581-05-15

Status: published

Apply: yes

**insertion or withdrawal force**

force required to fully insert or withdraw a set of mating components without the effect of a coupling, locking or similar device

Source: IEV 581-08-09

Status: published

Apply: yes

**insulation barrel**

part of a terminal end which accommodates but does not secure the cable insulation

Source: IEV 581-02-20

Status: deprecated

Apply: no, use 'insulation support'

**insulation barrier**

raised or recessed configuration of the insulator to increase creepage distance between conducting surfaces

Source: IEV 581-02-18

Status: published

Apply: yes

**insulation coordination**

mutual correlation of insulation characteristics of electrical equipment taking into account the expected micro-environment and other influencing stresses

Source: IEC 60664-1

Status: published

Apply: yes

**insulation displacement connection**

solderless electrical connection made by inserting a single wire into a precisely controlled slot in a termination such that the sides of the slot displace the insulation and deform the conductor of a solid wire or strands of stranded wire to produce a gas-tight connection

NOTE Abbreviation IDC is often used.

Source: IEC 60352-3, IEC 60352-4 and IEV 581-03-43 (modified)

Status: published

Apply: yes

**insulation displacement termination**

termination designed to accept a wire for the purpose of establishing an insulation displacement connection

Source: IEV 581-03-47

Status: published

Apply: yes

**insulation grip**

part of a terminal end in which the cable insulation is secured

Source: IEV 581-02-19

Status: published

Apply: yes

**insulation piercing connection**

solderless connection made by suitable piercing elements, which pierce the insulation and provide contact by deforming or penetrating the conductor.

Source: IEV 581-03-42

Status: published

Apply: yes

**insulation piercing termination**

termination to accept different types of insulated conductors for the purpose of establishing an insulation piercing connection

Source: IEV 581-03-63

Status: published

Apply: yes

**insulation piercing zone**

portion of the contact designed and intended to effect the piercing of the insulation and provide contact with the conductor

Source: IEC 581-03-53

Status: published

Apply: yes

**insulation support**

part of a terminal end which accommodates but does not secure the cable insulation

Source: IEC 581-02-20

Status: published

Apply: yes

**intended use**

application conditions of connectors which are included within the permissible rated values and intended environmental conditions and characteristics, assigned by the detail specification (DS) or the manufacturer

Source: IEC 61984

Status: published

Apply: yes

**interchangeable**

a component is interchangeable when all elements guaranteeing compliance of electrical, mechanical and climatic performance of mated connectors when individual connector halves are from different sources

Source: IEC 61076-1/A2

Status: published

Apply: yes

**interchangeable**

a component is interchangeable when it meets the original performance specifications and is intermountable

NOTE In the case of connectors, interchangeability applies only to connector mated sets, since individual connectors are not necessarily intermateable.

Source: IEC 581-04-03 (modified)

Status: published

Apply: no, use 'interchangeable', sourced from IEC 61076-1/A2

**interfacial seal**

seal provided at the interface to prevent the ingress of moisture or contaminants across a set of connectors when mated

Source: IEC 581-08-16

Status: published

Apply: yes

**interlock**

device, either electrical or mechanical, which prevents the contacts of a connector from becoming live before it is in proper engagement with its counterpart, and which either prevents the connector from being withdrawn while its contacts are live or makes the contacts dead before separation

Source: IEC 60309-1(modified) and IEC 61984

Status: published

Apply: yes

**intermateable**

two components are intermateable when they feature identical dimensions for electrical and dimensional interfaces

Source: IEC 61076-1/A2 (modified)

Status: published

Apply: yes

**intermateable connectors**

two connectors are intermateable when they are capable of being connected electrically and mechanically but without regard to their performance and intermountability

Source: IEC 581-04-04

Status: published

Apply: no, use 'intermateable'

**intermediate test schedule**

full test schedule from which entire groups of tests, and/or those tests and/or conditionings that are not necessary, have been omitted

Source: IEC 61076-1

Status: published

Apply: yes

**intermountable**

two components are intermountable when their overall dimensions, dimensions on printed board or panel cut-out, and cable termination are identical

Source: IEC 61076-1/A2

Status: published

Apply: yes

**intermountable**

two components are intermountable when their mechanical mounting parameters are identical without regard to intermateability or interchangeability

Source: IEC 581-04-05

Status: published

Apply: No, use 'intermountable', sourced from IEC 61076-1/A2

**internal insulation**

part of basic insulation providing the required clearance and creepage distances on the inside of a conducting housing or enclosure

Source: IEC 61984

Status: published

Apply: yes

J

**jack**

connector to mate with a telephone plug

Source: IEC 581-06-34

Status: published

Apply: yes

**jack-screw system**

a device comprising a set of captive screws and nuts used to couple and uncouple mating components. It may also provide a polarization facility

Source: IEC 581-08-11

Status: published

Apply: yes

**jam-nut mounting**

method of mounting a component which has a shoulder and a captivating device, through a single hole in a panel

Source: IEC 581-04-06

Status: deprecated

Apply: no, use 'single hole mounting'

K

**key**

projection which engages with a keyway to guide a component during mating

Source: IEC 581-02-21

Status: published

Apply: yes

**keyway**

slot or groove in which a key engages

Source: IEC 581-02-22

Status: published

Apply: yes

## L

**lanyard disconnect connector**

quick-disconnect connector designed to separate when a specified force is applied to the coupling device through a lanyard, without damage to the connector

Source: IEV 581-06-28

Status: published

Apply: yes

**live**

live component, connector or contact, connected to its mating component during normal use under mechanical tension, during which a voltage is applied

Source: IEC 61984 (modified)

Status: published

Apply: yes

**load**

a component is under load when during normal use a current is flowing through the connection

Source: IEC 61984

Status: published

Apply: yes

**location pegs**

posts, protruding from the connector housing, fitting into corresponding holes in the printed board or the backplane, preventing a wrong assembly and giving an accurate position and additional attachment

Source: IEC 61076-4-101 (modified)

Status: published

Apply: yes

**locator of a crimping tool**

a device for positioning a terminal end in a crimping tool

Source: IEV 581-05-08

Status: published

Apply: yes

**locking device**

a feature incorporated in certain components to provide mechanical retention of their mating part

Source: IEV 581-03-27

Status: published

Apply: yes

**lower limiting temperature**

minimum temperature of a connector as defined by the climatic category, assigned by the manufacturer in which a connector is intended to operate

NOTE The abbreviation LLT is often used.

Source: IEC 61984

Status: published

Apply: yes

**lower shield**

part of a socket for electrical and mechanical connection to the tube or shield

NOTE It usually performs also the function of a saddle. In certain cases it is used for the conduction of heat (see also skirt).

Source: IEV 581-07-33 (modified)

Status: published

Apply: yes

## M

**macro-environment**

environment of the room or other location in which the equipment is installed or used

Source: IEC 60664-1

Status: published

Apply: yes

**main contact**

specific contact of a switch to which the external load circuit is connected

Source: IEV 581-02-09

Status: published

Apply: yes

**male contact**

contact intended to make electrical engagement on its outer surface and which will enter a female contact

Source: IEV 581-02-10

Status: published

Apply: yes

**male concentric contact**

concentric contact where the outer contact is male, the central contact(s) may be male or female

Source: IEC 61076-6 (modified)

Status: draft

Apply: yes

**male triaxial contact**

triaxial contact where the outer contact is male, the central contact(s) may be male or female

Source: IEC 61076-6 (modified)

Status: draft

Apply: yes

**micro-environment**

immediate environment of the insulation which particularly influences the dimensioning of the creepage distances

Source: IEC 60664-1

Status: published

Apply: yes

**modified wrapped connection**

solderless connection achieved by wrapping a solid conductor around a wrap post with the wire insulation wrapped around at least three corners of the post

Source: IEV 581-03-44

Status: published

Apply: yes

**modular order**

set of rules which establishes a relationship between co-ordination dimensions and the base pitch, multiple pitches and mounting pitches

NOTE To be used in equipment practices.

Source: IEC 60917-1 (modified)

Status: published

Apply: yes

**module**

three-dimensional structure where all sides are multiples of whole numbers of the pitch, complying with the modular order

NOTE 1 It could also be used in a two-dimensional grid.

NOTE 2 A one-dimensional module is often called unit (U) in some documentation.

Source: IEC 60917-1 (modified)

Status: published

Apply: yes

**mother-daughter board connector**

board-mounted connector designed for interconnection of printed boards

Source: IEV 581-06-16

Status: obsolete

Apply: no, use 'fixed board connector' or 'free board connector'

**mounting code**

special marks on the connector housings

NOTE They simplify the correct installation of fixed male connectors or male connector bodies and contact equipment in the case of fixed cable connectors.

Source: IEC 61076-4-108 (modified)

Status: draft

Apply: yes

**mounting flange**

a projection from a component for the purpose of attaching the component to a rigid surface

Source: IEC 581-02-23

Status: published

Apply:

**mounting frame**

in general a frame design of profiles for the mounting of electronic and electrical devices. Fixed or movable location within cabinets

Source: IEC 60917-1/A1

Status: published

Apply: yes

**mounting pitch (mp)**

pitch used to arrange parts or assemblies in a given space

NOTE The nominal value of a mounting pitch is achieved by using a base pitch or multiple pitch, multiplied with a specified factor.

Source: IEC 60917-1 (modified)

Status: published

Apply: yes

**mounting pitch (mp1)**

mounting pitch for cabinets/racks and subracks,  $mp1 = 25$  mm

Source: IEC 60917-2-2

Status: published

Apply: yes

**mounting pitch (mp2)**

mounting pitch for subracks and plug-in units,  $mp2 = 5$  mm

Source: IEC 60917-2-2

Status: published

Apply: yes

**mounting pitch (mp3)**

mounting pitch for subracks and plug-in units,  $mp3 = 2,5$  mm

Source: IEC 60917-2-2

Status: published

Apply: yes

**mounting pitch (mp4)**

backplane grid and mounting pitch for internal co-ordination of the subrack and plug-in units,  $mp4 = 0,5$  mm

Source: IEC 60917-2-2 (modified)

Status: published

Apply: yes

**mounting plate**

plate for mounting electronic and electrical devices

NOTE Located for example within cabinets.

Source: IEC 60917-1/A1 (modified)

Status: published

Apply: yes

**mounting section**

compartment of an enclosure for the assembly of interior parts

Source: IEC 60917-1/A1

Status: published

Apply: yes

**multimodule**

connector module with a multiple length of the smallest module

Source: IEC 61076-4-104

Status: published

Apply: yes

**multiple pitch (*M<sub>p</sub>*)**

integer multiple of the base pitch

Source: IEC 60917-1

Status: published

Apply: yes

**multipurpose centre**

area in the connector module, locating most of the mechanical utilities, for example, the extended guiding, the centering, the location pegs, the wall stiffeners, the cavities for the coding devices, and the polarization

NOTE The abbreviation MPC may be used.

Source: IEC 61076-4-101 (modified)

Status: published

Apply: yes

**N**

***n***

multiplier having integer values of range continuing 1, 2, 3, .....

Source: IEC 60917-1

Status: published

Apply: yes

**non-accessible insulation displacement connection**

insulation displacement (ID) connection in which it is not possible to access test points for carrying out mechanical tests and some electrical measurements without deactivation of any design feature intended to establish and/or maintain the ID connection, mainly where the ID connection is enclosed in a component

Source: IEC 60352-3 and IEC 60352-4 (modified)

Status: published

Apply: yes

**non-reusable insulation displacement termination**

insulation displacement termination that can be terminated only once

Source: IEC 581-03-49 (modified)

Status: published

Apply: yes

**non-rewirable**

interconnecting component from which a cable or wire (bundle) cannot be separated without making the component permanently useless

Source:

Status: unique

Apply: yes

**non-rewirable connector**

a connector so constructed that the flexible cable cannot be separated from the connector without making it permanently useless

Source: IEC 60309-1 (modified) and IEC 61984

Status: published

Apply: yes

**O**

**odd in 'a' chess pattern**

connector, having loaded contacts on odd positions in row a, in a contact arrangement where the loaded and the unloaded positions alternate in rows and columns, like fields on a chess-board.

Source: IEC 61076-4-101 (modified)

Status: published

Apply: yes

**open crimp barrel**

crimp barrel with an open shape before crimping, e.g. U- or V-shape

Source: IEC 60352-2 and IEC 581-03-57 (modified) Status: published

Apply: yes

**orientation**

system providing alternative polarization to prevent cross-mating of similar components when, for instance, used on the same equipment

Source: IEC 581-03-30

Status: published

Apply: yes

**outlet nut**

accessory which secures the cable outlet to the body of the connector

Source: IEC 581-07-38

Status: published

Apply: yes

**overvoltage**

voltage having a peak value exceeding the corresponding peak value of maximum steady-state voltage at normal operating conditions

Source: IEC 60664-1 (modified)

Status: published

Apply: yes

**overvoltage category**

numeral defining a transient overvoltage condition

Source: IEC 60664-1

Status: published

Apply: yes

**panel cut-out**

a hole or group of holes cut in a panel or chassis for the purpose of mounting a component

Source: IEC 581-03-36

Status: published

Apply: yes

**panel seal**

seal provided between a component and a panel

Source: IEC 581-03-20

Status: published

Apply: yes

**peripheral seal**

seal at the periphery of an insert designed to prevent the ingress of moisture or contaminants on the perimeter of a component

Source: IEC 581-08-17

Status: published

Apply: yes

**pin contact**

contact intended to make electrical engagement on its outer surface and which will enter a female contact

Source: IEC 581-02-10

Status: deprecated

Apply: no, use 'male contact'

**pitch**

one division step of a regular subdivided coordinate

Source: IEC 60917-1/A1

Status: published

Apply: yes

**pitch dimension**

co-ordination dimension for the height, width and depth of cabinets and racks used to determine the mechanical interfaces in the case of suite arrangement or of stacking of cabinets and racks

Source: IEC 60917-2

Status: unique

Apply: yes

**plug connector**

connector for attachment to the free end of a wire or cable

Source: IEC 581-06-12

Status: deprecated

Apply: no, use 'free cable connector' or 'free connector'

**plug-in unit**

unit which plugs into a rack and is supported by guides

NOTE These units can be of various types, ranging from a printed board with components inserted, to a frame or box-type unit designed with a plug-in connection.

Source: IEC 60917-1 (modified)

Status: published

Apply: yes

**plug-in unit guide**

device to guide, locate and support plug-in units and printed boards in subracks, with components inserted

Source: IEC 60917-1 (modified)

Status: published

Apply: yes

**polarization**

features on mating components to prevent incorrect mating

Source: IEC 581-03-31

Status: published

Apply: yes

**pollution**

any addition of foreign matter, solid, liquid, or gas, that can result in reduction of electrical strength or surface resistivity of the insulation

Source: IEC 60664-1(modified)

Status: published

Apply: yes

**pollution degree**

numeral characterizing the expected pollution of the micro-environment

Source: IEC 60664-1

Status: published

Apply: yes

**positioner of a crimping tool**

locator with additional features which control the depth of the crimp

Source: IEC 581-05-09

Status: published

Apply: yes

**post-insulated connection**

connection which is insulated after it has been completed

Source: IEC 581-03-04

Status: published

Apply: yes

**potting**

sealing of components and associated conductors with a compound to exclude contaminants

Source: IEC 581-05-12

Status: published

Apply: yes

**potting-form**

an accessory used as a mould into which potting compound is placed

Source: IEC 581-05-10

Status: deprecated

Apply: no, use 'potting mould'

**potting mould**

accessory used as a mould into which potting compound is placed

Source: IEV 581-05-10

Status: published

Apply: yes

**pre-insulated connection**

connection formed with an insulated terminal end or insulated cable splice by crimping through the insulation

Source: IEV 581-03-05

Status: published

Apply: yes

**pre-insulated crimp barrel**

crimp barrel with a permanent layer of insulation, which provides total electrical integrity after being deformed by the crimp, and through which the crimp is made

Source: IEV 581-03-59 and IEC 60352-2 (modified) Status: published

Apply: yes

**pre-insulated terminal end**

terminal end having a barrel with a permanent layer of insulation through which a crimp is made

Source: IEV 581-03-24

Status: published

Apply: yes

**press-in connection**

solderless connection made by inserting a press-in termination into a plated-through hole of a printed board

Source: IEV 581-03-46

Status: published

Apply: yes

**press-in shoulders**

flanges on both sides of a press-in contact, supporting the mechanical forces to press the contact into the printed board or backplane

Source: IEC 61076-4-101 (modified)

Status: published

Apply: yes

**press-in post**

termination having a specially shaped section suitable to provide for a press-in connection

Source: IEV 581-03-39

Status: published

Apply: yes

**press-in termination**

termination having a specially shaped section suitable to provide for a press-in connection

Source: IEV 581-03-39

Status: published

Apply: yes

**press-in zone**

the specially shaped section of a press-in termination which is suitable to provide for the press-in connection

Source: IEV 581-03-52

Status: published

Apply: yes

**pressure-sleeve**

tubular elastomeric sleeve forming part of a pressure-sleeve cable clamp

NOTE The purpose of the pressure-sleeve is three-fold:

- 1) It converts some of the axial force imparted by the outlet-nut to inward radial force, thereby achieving electrical contact pressure between the cable braid and a ferrule inserted beneath the braid.
- 2) It exerts an axial thrust against the flange of the ferrule thereby achieving electrical contact pressure between the ferrule and the connector body.
- 3) It provides mechanical anchorage and sealing between the cable and the connector body by the action of the combined inward and outward radial pressures.

Source: IEV 581-07-28

Status: published

Apply: yes

**pressurized connector**

connector employing a seal capable of fulfilling specified gas-tightness requirements

Source: IEV 581-06-22

Status: deprecated

Apply: no, use 'sealed connector'

**printed board connector**

connector specifically designed to facilitate connections to printed boards

Source: IEV 581-06-17

Status: published

Apply: yes

**protective conductor**

conductor required by some measures for protection against electric shock for electrically connecting any of the following parts:

- exposed conductive parts,
- extraneous conductive parts,
- main earthing terminal,
- earth electrode,
- earthed point of the source or artificial neutral

Source: IEV 826-04-05

Status: published

Apply: yes

**protective cover**

accessory to cover a component for mechanical, environmental and/or electrical protection

NOTE Normally fitted with a means for attachment to the equipment or cable.

Source: IEV 581-05-04 (modified)

Status: published

Apply: yes

**pull-off connector**

connector equipped with a pull-off coupling

Source: IEV 581-06-29

Status: published

Apply: yes

**pull-off coupling**

coupling in which unlocking is achieved by an axial pull on the coupling ring

Source: IEV 581-07-15

Status: published

Apply: yes

**push-on contact**

contact with which a connection is achieved by axial force, separation being restricted by friction

Source: IEV 581-07-04

Status: published

Apply: yes

**push-pull connector**

connector having a push-pull coupling

Source: IEV 581-06-30

Status: published

Apply: yes

**push-pull coupling**

quick axial coupling device with self-locking and unlocking features; unlocking is achieved by an axial pull on the coupling ring

Source: IEV 581-07-17

Status: published

Apply: yes

## Q

**quick disconnect connector**

connector fitted with a coupling device which permits relatively rapid unmating

Source: IEV 581-06-18

Status: published

Apply: yes

**quick-disconnect coupling**

type of coupling device which permits relatively rapid uncoupling

Source: IEV 581-07-18

Status: published

Apply: yes

## R

**rack**

free-standing or fixed structure for housing electrical and electronic equipment

Source: IEC 60917-1

Status: published

Apply: yes

**rack-and-panel connector**

one of two mating fixed connectors intended to provide a connection between a unit and its mounting rack

NOTE It is usually provided with an alignment device to ensure correct mating. It normally has no coupling device and is mated by the movement between the unit and the rack (does not apply to the printed boards).

Source: IEV 581-06-19 (modified)

Status: published

Apply: yes

**rated current**

current value, assigned by the manufacturer, which the connector can carry continuously (without interruption) and simultaneously through all its contacts, wired with the largest specified conductor, preferably at an ambient temperature of 40 °C without the upper temperature being exceeded

NOTE If other ambient temperature values are used for the definition of rated current, the manufacturer should state in the technical documentation the ambient temperature on which the rating is based, with reference, if appropriate, to the derating curve defined in IEC 60512, test 5b.

Source: IEC 61984

Status: published

Apply: yes

**rated impulse voltage**

voltage value assigned by the manufacturer to the connector characterizing the specified withstand capability of its insulation against transient overvoltages

Source: IEC 60664-1 (modified)

Status: published

Apply: yes

**rated insulation voltage**

r.m.s. voltage assigned by the manufacturer to the equipment or a part of it, characterizing the specified (long term) withstand capability of its insulation

Source: IEC 60664-1 (modified)

Status: published

Apply: yes

**rated voltage**

value of voltage, assigned by the manufacturer to a component, device, or equipment and to which operation and performance characteristics are referred

Source: IEC 61984 (modified) and IEC 60664-1

Status: published

Apply: yes

**rear-mounted**

component with its mounting flange behind the mounting surface when looking at the mating face or front side of the component

Source: IEV 581-04-01

Status: deprecated

Apply: No, use 'back-mounted'

**rear plug-up**

connecting of the free connector to termination posts of the fixed board connector, which protrude from the backplane or the printed board

Source: IEC 61076-4-104

Status: published

Apply: yes

**rear plug-up contact**

termination post, usually being pressed-in into the backplane and provided at the rear of the backplane with a contact area, to which a free connector (cable connector) can be connected

Source: IEC 61076-4-108 (modified) and IEC 61076-4-101 (modified)

Apply: yes

Status: published

**rear-release contact**

removable contact in which release is effected from the rear

Source: IEV 581-07-02

Status: published

Apply: yes

**rear shroud**

connector housing, mounted at the rear side of a backplane or printed board, using protruding termination posts to form a fixed board connector thus providing rear plug-up connection

Source: IEC 61076-4-104

Status: published

Apply: yes

**receptacle**

connector for attachment to a rigid surface

Source: IEV 581-06-10

Status: deprecated

Apply: no, use 'fixed connector'

**rectangular connector**

connector which is basically rectangular and has a basically rectangular mating face

Source: IEV 581-06-20

Status: published

Apply: yes

**reference corner**

corner of the wrap post at which the uninsulated wire makes its first indentation and from which the number of wrapped turns is counted

Source: IEV 581-03-38 (modified)

Status: published

Apply: yes

**reference plane**

theoretical plane without thickness or tolerances

NOTE Used to define spaces in mechanical structures.

Source: IEC 60917-1 (modified) and IEC 60917-2 (modified)

Apply: yes

Status: published

**reinforced insulation**

single insulation system applied to live parts, which provides a degree of protection against electric shock, equivalent to double insulation under the conditions specified in the relevant IEC standard

Source: IEC 60664-1 (modified)

Status: published

Apply: yes