

## **IEC NORMAS PUBLICADAS**

**As normas ISO/IEC já estão relacionadas em normas ISO Publicadas**

### **IEC/TC 1 - Terminology**

IEC 60050-114 ed1.0 - International Electrotechnical Vocabulary - Part 114: Electrochemistry

IEC 60050-161-am3 ed1.0 - Amendment 3 - International Electrotechnical Vocabulary - Part 161: Electromagnetic compatibility

IEC 60050-395 ed1.0 - International Electrotechnical Vocabulary - Part 395: Nuclear instrumentation: Physical phenomena, basic concepts, instruments, systems, equipment and detectors

IEC 60050-651 - International Electrotechnical Vocabulary - Part 651: Live working.

IEC 60050-732-am1 ed1.0 - Amendment 1 - International Electrotechnical Vocabulary - Part 732: Computer network technology.

IEC 60050-851-am1 ed2.0 - Amendment 1 - International Electrotechnical Vocabulary - Part 851: Electric welding.

### **IEC/TC 2 - Rotating machinery**

IEC 60034-8 ed3.1 Consol. with am1 - Rotating electrical machines - Part 8: Terminal markings and direction of rotation.

IEC 60034-8-am1 ed3.0 - Amendment 1 - Rotating electrical machines - Part 8: Terminal markings and direction of rotation.

IEC 60034-18-41 ed1.0 - Rotating electrical machines - Part 18-41: Partial discharge free electrical insulation systems (Type I) used in rotating electrical machines fed from voltage converters - Qualification and quality control tests

IEC 60034-30-1 ed1.0 - Rotating electrical machines - Part 30-1: Efficiency classes of line operated AC motors (IE code).

### **IEC/TC 9 - Electrical equipment and systems for railways**

IEC 61375-3-4 ed1.0 - Electronic railway equipment - Train communication network (TCN) - Part 3-4: Ethernet Consist Network (ECN).

### **IEC/TC 14 - Power transformers**

IEC 60214-1 ed2.0 - Tap-changers - Part 1: Performance requirements and test methods.

## **IEC/TC 15 - Solid electrical insulating materials**

IEC 60464-2 ed2.1 Consol. with am1 Varnishes used for electrical insulation - Part 2: Methods of test.

IEC 60464-3-1 ed2.1 Consol. with am1 - Varnishes used for electrical insulation - Part 3: Specifications for individual materials - Sheet 1: Ambient curing finishing varnishes

IEC 60464-3-2 ed2.1 Consol. with am1 - Varnishes used for electrical insulation - Part 3: Specifications for individual materials - Sheet 2: Hot curing impregnating varnishes

## **IEC/TC 17 - Switchgear and controlgear**

IEC 62271-SER ed1.0 - High-voltage switchgear and controlgear - ALL PARTS.

## **IEC/TC 18 - Electrical installations of ships and of mobile and fixed offshore units**

IEC 60092-360 ed1.0 - Electrical installations in ships - Part 360: Insulating and sheathing materials for shipboard and offshore units, power, control, instrumentation and telecommunication cables

## **IEC/TC 20 - Electric cables**

IEC 60502-2 ed3.0 - Power cables with extruded insulation and their accessories for rated voltages from 1 kV ( $U_m = 1,2$  kV) up to 30 kV ( $U_m = 36$  kV) - Part 2: Cables for rated voltages from 6 kV ( $U_m = 7,2$  kV) up to 30 kV ( $U_m = 36$  kV)

## **IEC/TC 26 - Electric welding**

IEC 60974-10 ed3.0 - Arc welding equipment - Part 10: Electromagnetic compatibility (EMC) requirements.

## **IEC/TC 29 - Electroacoustics**

IEC 61260-1 ed1.0 - Electroacoustics - Octave-band and fractional-octave-band filters - Part 1: Specifications.

## **IEC/TC 31 - Equipment for explosive atmospheres**

IEC 60079-29-3 - Explosive atmospheres - Part 29-3: Gas detectors - Guidance on functional safety of fixed gas detection systems.

### **IEC/TC 33 - Power capacitors and their applications**

IEC 60831-1 ed3.0 - Shunt power capacitors of the self-healing type for a.c. systems having a rated voltage up to and including 1 000 V - Part 1: General - Performance, testing and rating - Safety requirements - Guide for installation and operation

IEC 60831-2 ed3.0 - Shunt power capacitors of the self-healing type for a.c. systems having a rated voltage up to and including 1 000 V - Part 2: Ageing test, self-healing test and destruction test

IEC 60871-1 ed4.0 - Shunt capacitors for a.c. power systems having a rated voltage above 1 000 V - Part 1: General.

IEC 60871-4 ed2.0 - Shunt capacitors for AC power systems having a rated voltage above 1 000 V - Part 4: Internal fuses

### **IEC/TC 34 - Lamps and related equipment**

IEC 60061-DB-12M - Lamp caps and holders together with gauges for the control of interchangeability and safety - 12-month subscription to online database comprising all parts of IEC 60061.

IEC 60061-1-am50 ed3.0 - Amendment 50 - Lamp caps and holders together with gauges for the control of interchangeability and safety - Part 1: Lamp caps

IEC 60061-2-am47 ed3.0 - Amendment 47 - Lamp caps and holders together with gauges for the control of interchangeability and safety - Part 2: Lampholders.

IEC 60061-3-am48 ed3.0 - Amendment 48 - Lamp caps and holders together with gauges for the control of interchangeability and safety - Part 3: Gauges.

IEC 60598-1 ed8.0 - Luminaires - Part 1: General requirements and tests.

### **IEC/TC 40 - Capacitors and resistors for electronic equipment**

IEC 60115-2 ed3.0 - Fixed resistors for use in electronic equipment - Part 2: Sectional specification: Leaded fixed low power film resistors.

### **IEC/TC 46 - Cables, wires, waveguides, R.F. connectors, R.F. and microwave passive components and accessories**

IEC 61169-45 ed1.0 - Radio-frequency connectors - Part 45: Sectional specification for SQMA series quick lock RF coaxial connectors

IEC 61169-49 ed1.0 - Radio-frequency connectors - Part 49: Sectional specification for SMAA series R.F. connectors.

IEC 61196-9 - Coaxial communication cables - Part 9: Sectional specification for RF flexible cables.

## **IEC/TC 48 - Electrical connectors and mechanical structures for electrical and electronic equipment**

IEC 61076-2-109 ed1.0 - Connectors for electronic equipment - Product requirements - Part 2-109: Circular connectors - Detail specification for connectors with M 12 x 1 screw-locking, for data transmission frequencies up to 500 MHz

## **IEC/TC 49 - Piezoelectric, dielectric and electrostatic devices and associated materials for frequency control, selection and detection**

IEC 61837-2 ed2.1 Consol. with am1 - Surface mounted piezoelectric devices for frequency control and selection - Standard outlines and terminal lead connections - Part 2: Ceramic enclosures

IEC 61837-2-am1 ed2.0 - Amendment 1 - Surface mounted piezoelectric devices for frequency control and selection - Standard outlines and terminal lead connections - Part 2: Ceramic enclosures

## **IEC/TC 55 - Winding wires**

IEC 60317-51 ed2.0 - Specifications for particular types of winding wires - Part 51: Solderable polyurethane enamelled round copper wire, class 180.

IEC 60317-52 ed2.0 - Specifications for particular types of winding wires - Part 52: Aromatic polyamide (aramid) tape wrapped round copper wire, temperature index 220

IEC 60317-53 ed2.0 - Specifications for particular types of winding wires - Part 53: Aromatic polyamide (aramid) tape wrapped rectangular copper wire, temperature index 220

## **IEC/TC 56 - Dependability**

IEC 60300-1 ed3.0 - Dependability management - Part 1: Guidance for management and application.

## **IEC/TC 57 - Power systems management and associated information exchange**

IEC 61970-453 ed2.0 - Energy management system application program interface (EMS-API) - Part 453: Diagram layout profile.

## **IEC/TC 59 - Performance of household and similar electrical appliances**

IEC 60704-2-1 ed3.0 - Household and similar electrical appliances - Test code for the determination of airborne acoustical noise - Part 2-1: Particular requirements for vacuum cleaners

## **IEC/TC 61 - Safety of household and similar electrical appliances**

IEC 60335-2-6 ed6.0 - Household and similar electrical appliances - Safety - Part 2-6: Particular requirements for stationary cooking ranges, hobs, ovens and similar appliances

## **IEC/TC 62 - Electrical equipment in medical practice**

IEC 60601-1-SER ed1.0 - Medical electrical equipment - ALL PARTS.

IEC 60601-1-2 ed4.0 - Medical electrical equipment - Part 1-2: General requirements for basic safety and essential performance - Collateral Standard: Electromagnetic disturbances - Requirements and tests

IEC 60601-2-36 ed2.0 - Medical electrical equipment - Part 2-36: Particular requirements for the basic safety and essential performance of equipment for extracorporeally induced lithotripsy

IEC 61331-1 ed2.0 - Protective devices against diagnostic medical X-radiation - Part 1: Determination of attenuation properties of materials.

IEC 61331-2 ed2.0 - Protective devices against diagnostic medical X-radiation - Part 2: Translucent protective plates.

IEC 61331-3 ed2.0 - Protective devices against diagnostic medical X-radiation - Part 3: Protective clothing, eyewear and protective patient shields.

## **IEC/TC 64 - Electrical installations and protection against electric shock**

IEC 60364-7-753 ed2.0 - Low-voltage electrical installations - Part 7-753: Requirements for special installations or locations - Heating cables and embedded heating systems

## **IEC/TC 65 - Industrial-process measurement, control and automation**

IEC 60770-3 ed2.0 - Transmitters for use in industrial-process control systems - Part 3: Methods for performance evaluation of intelligent transmitters.

IEC 61158-1 ed1.0 - Industrial communication networks - Fieldbus specifications - Part 1: Overview and guidance for the IEC 61158 and IEC 61784 series

## **IEC/TC 69 - Electric road vehicles and electric industrial trucks**

IEC 61851-23 ed1.0 - Electric vehicle conductive charging system - Part 23: DC electric vehicle charging station.

IEC 61851-24 ed1.0 - Electric vehicle conductive charging system - Part 24: Digital communication between a d.c. EV charging station and an electric vehicle for control of d.c. charging

## **IEC/TC 72 - Automatic electrical controls**

IEC 60730-2-22 ed1.0 - Automatic electrical controls - Part 2-22: Particular requirements for thermal motor protectors.

## **IEC/TC 76 - Optical radiation safety and laser equipment**

IEC 60825-1 ed3.0 - Safety of laser products - Part 1: Equipment classification and requirements

## **IEC/TC 77 - Electromagnetic compatibility**

IEC 61000-3-2 ed4.0 - Electromagnetic compatibility (EMC) - Part 3-2: Limits - Limits for harmonic current emissions (equipment input current  $\leq 16$  A per phase)

IEC 61000-4-5 ed3.0 - Electromagnetic compatibility (EMC) - Part 4-5: Testing and measurement techniques - Surge immunity test

IEC 61000-4-19 ed1.0 - Electromagnetic compatibility (EMC) - Part 4-19: Testing and measurement techniques - Test for immunity to conducted, differential mode disturbances and signalling in the frequency range 2 kHz to 150 kHz at a.c. power ports

## **IEC/TC 82 - Solar photovoltaic energy systems**

IEC 60904-SER ed1.0 - Photovoltaic devices - ALL PARTS.

IEC 60904-8 ed3.0 - Photovoltaic devices - Part 8: Measurement of spectral responsivity of a photovoltaic (PV) device.

## **IEC/TC 85 - Measuring equipment for electrical and electromagnetic quantities**

IEC 61557-15 ed1.0 - Electrical safety in low voltage distribution systems up to 1 000 V a.c. and 1 500 V d.c. - Equipment for testing, measuring or monitoring of protective measures - Part 15: Functional safety requirements for insulation monitoring devices in IT systems and equipment for insulation fault location in IT systems

## **IEC/TC 86 - Fibre optics**

IEC 60793-1-51 ed2.0 - Optical fibres - Part 1-51: Measurement methods and test procedures - Dry heat.

IEC 60793-1-52 ed2.0 - Optical fibres - Part 1-52: Measurement methods and test procedures - Change of temperature tests.

IEC 60793-1-53 ed2.0 - Optical fibres - Part 1-53: Measurement methods and test procedures - Water immersion tests.

IEC 60794-1-20 ed1.0 - Optical fibre cables - Part 1-20: Generic specification - Basic optical cable test procedures - General and definitions.

IEC 60794-1-24 ed1.0 - Optical fibre cables - Part 1-24: Generic specification - Basic optical cable test procedures - Electrical test methods

IEC 60794-5-10 ed1.0 - Optical fibre cables - Part 5-10: Family specification - Outdoor microduct optical fibre cables, microducts and protected microducts for installation by blowing

IEC 60794-5-20 ed1.0 - Optical fibre cables - Part 5-20: Family specification - Outdoor microduct fibre units, microducts and protected microducts for installation by blowing

IEC 61280-2-12 ed1.0 Fibre optic communication subsystem test procedures - Part 2-12: Digital systems - Measuring eye diagrams and Q-factor using a software triggering technique for transmission signal quality assessment

IEC 61290-10-5 ed1.0 - Optical amplifiers - Test methods - Part 10-5: Multichannel parameters - Distributed Raman amplifier gain and noise figure.

IEC 61300-2-35 ed2.0 - Fibre optic interconnecting devices and passive components - Basic test and measurement procedures - Part 2-35: Tests - Cable nutation.

IEC 61300-2-42 ed3.0 - Fibre optic interconnecting devices and passive components - Basic test and measurement procedures - Part 2-42: Tests - Static side load for strain relief

IEC 61300-3-21 ed2.0 - Fibre optic interconnecting devices and passive components - Basic test and measurement procedures - Part 3-21: Examinations and measurements - Switching time

IEC 61300-3-29 - Fibre optic interconnecting devices and passive components - Basic test and measurement procedures - Part 3-29: Examinations and measurements - Spectral transfer characteristics of DWDM devices

IEC 61300-3-52 ed1.0 - Fibre optic interconnecting devices and passive components - Basic test and measurement procedures - Part 3-52: Examinations and measurements - Guide hole and alignment pin deformation constant, CD for 8 degree angled PC rectangular ferrule, single mode fibres

IEC 61753-1-3 ed1.0 - Fibre optic interconnecting devices and passive components - Performance standard - Part 1-3: General and guidance for single-mode fibre optic connector and cable assembly for industrial environment, Category I

IEC 61753-041-2 ed1.0 - Fibre optic interconnecting devices and passive components - Performance standard - Part 041-2: Non-connectorized single-mode OTDR reflecting device for category C - Controlled environment

IEC 61753-053-2 ed1.0 - Fibre optic interconnecting devices and passive components - Performance standard - Part 053-2: Non-connectorized single-mode fibre, electrically controlled, variable optical attenuator for category C - Controlled environments

IEC 61753-071-2 ed1.0 - Fibre optic interconnecting devices and passive components - Performance standard - Part 071-2: Non-connectorized single-mode fibre optic 1 × 2 and 2 × 2 spatial switches for category C - Controlled environments

IEC 61753-081-2 ed2.0 - Fibre optic interconnecting devices and passive components - Performance standard - Part 081-2: Non-connectorized single-mode fibre optic middle-scale 1 x N DWDM devices for category C - Controlled environments

IEC 61754-30 ed1.0 - Fibre optic interconnecting devices and passive components - Fibre optic connector interfaces - Part 30: Type CLIK connector series

IEC 61978-1 ed3.0 - Fibre optic interconnecting devices and passive components - Fibre optic passive chromatic dispersion compensators - Part 1: Generic specification

### **IEC/TC 88 - Wind turbines**

IEC 61400-SER ed1.0 - Wind turbine generator systems - ALL PARTS.

IEC 61400-1 ed3.1 Consol. with am1 - Wind turbines - Part 1: Design requirements.

IEC 61400-23 ed1.0 - Wind turbines - Part 23: Full-scale structural testing of rotor blades.

### **IEC/TC 89 - Fire hazard testing**

IEC 60695-2-11 ed2.0 - Fire hazard testing - Part 2-11: Glowing/hot-wire based test methods - Glow-wire flammability test method for end-products (GWEPT)

IEC 60695-2-12 ed2.1 Consol. with am1 - Fire hazard testing - Part 2-12: Glowing/hot-wire based test methods - Glow-wire flammability index (GWFI) test method for materials

IEC 60695-2-12-am1 ed2.0 - Amendment 1 - Fire hazard testing - Part 2-12: Glowing/hot-wire based test methods - Glow-wire flammability index (GWFI) test method for materials

IEC 60695-2-13 ed2.1 Consol. with am1 - Fire hazard testing - Part 2-13: Glowing/hot-wire based test methods - Glow-wire ignition temperature (GWIT) test method for materials

IEC 60695-2-13-am1 ed2.0 - Amendment 1 - Fire hazard testing - Part 2-13: Glowing/hot-wire based test methods - Glow-wire ignition temperature (GWIT) test method for materials

IEC 60695-9-2 ed1.0 - Fire hazard testing - Part 9-2: Surface spread of flame - Summary and relevance of test methods.

IEC 60695-10-2 ed3.0 - Fire hazard testing - Part 10-2: Abnormal heat - Ball pressure test method.

## **IEC/TC 91- Electronics assembly technology**

IEC 61190-1-2 ed3.0 - Attachment materials for electronic assembly - Part 1-2: Requirements for soldering pastes for high-quality interconnects in electronics assembly

## **IEC/TC 95 - Measuring relays and protection equipment**

IEC 60255-121 ed1.0 - Measuring relays and protection equipment - Part 121: Functional requirements for distance protection.

## **IEC/TC 96 - Transformers, reactors, power supply units, and combinations thereof**

IEC 61558-2-10 ed1.0 - Safety of transformers, reactors, power supply units and combinations thereof - Part 2-10: Particular requirements and tests for separating transformers with high insulation level and separating transformers with output voltages exceeding 1 000 V

## **IEC/TC 99 - System engineering and erection of electrical power installations in systems with nominal voltages above 1 kV a.c. and 1,5 kV d.c., particularly concerning safety aspects**

IEC 61936-1 ed2.1 Consol. with am1 - Power installations exceeding 1 kV a.c. - Part 1: Common rules.

IEC 61936-1-am1 ed2.0 - Amendment 1 - Power installations exceeding 1 kV a.c. - Part 1: Common rules.

## **IEC/TC 100 - Audio, video and multimedia systems and equipment**

IEC 60958-SER ed1.0 - Digital audio interface - ALL PARTS.

IEC 60728-1 ed5.0 - Cable networks for television signals, sound signals and interactive services - Part 1: System performance of forward paths.

IEC 60728-1-1 ed2.0 - Cable networks for television signals, sound signals and interactive services - Part 1-1: RF cabling for two way home networks.

IEC 60728-1-2 ed2.0 - Cable networks for television signals, sound signals and interactive services - Part 1-2: Performance requirements for signals delivered at the system outlet in operation

IEC 60728-10 ed3.0 - Cable networks for television signals, sound signals and interactive services - Part 10: System performance of return paths

IEC 60728-14 ed1.0 - Cable networks for television signals, sound signals and interactive services - Part 14: Optical transmission systems using RFoG technology

IEC 60958-1 ed3.1 Consol. with am1 - Digital audio interface - Part 1: General

IEC 60958-1-am1 ed3.0 - Amendment 1 - Digital audio interface - Part 1: General

IEC 61883-8 ed1.1 Consol. with am1 - Consumer audio/video equipment - Digital interface - Part 8: Transmission of ITU-R BT.601 style digital video data.

IEC 61883-8-am1 ed1.0 - Ammendement 1 - Consumer audio/video equipment - Digital interface - Part 8: Transmission of ITU-R BT.601 style digital video data

IEC 61937-6 ed2.1 Consol. with am1 - Digital audio - Interface for non-linear PCM encoded audio bitstreams applying IEC 60958 - Part 6: Non-linear PCM bitstreams according to the MPEG-2 AAC and MPEG-4 AAC formats

IEC 61937-6-am1 ed2.0 - Amendment 1 - Digital audio - Interface for non-linear PCM encoded audio bitstreams applying IEC 60958 - Part 6: Non-linear PCM bitstreams according to the MPEG-2 AAC and MPEG-4 AAC formats

IEC 61966-12-2 ed1.0 - Multimedia systems and equipment - Colour measurement and management - Part 12-2: Simple metadata format for identification of colour gamut

#### **IEC/TC 104 - Environmental conditions, classification and methods of test**

IEC 60721-2-9 ed1.0 - Classification of environmental conditions - Part 2-9: Environmental conditions appearing in nature - Measured shock and vibration data - Storage, transportation and in-use

#### **IEC/TC 112 - Evaluation and qualification of electrical insulating materials and systems**

IEC 61858-1 ed1.0 - Electrical insulation systems - Thermal evaluation of modifications to an established electrical insulation system (EIS) - Part 1: Wire-wound winding EIS

IEC 61858-2 ed1.0 - Electrical insulation systems - Thermal evaluation of modifications to an established electrical insulation system (EIS) - Part 2: Form-wound EIS

#### **IEC/TC 121 - Switchgear and controlgear and their assemblies for low voltage**

IEC 60947-4-3 ed2.0 - Low-voltage switchgear and controlgear - Part 4-3: Contactors and motor-starters - AC semiconductor controllers and contactors for non-motor loads

#### **CISPR - International special committee on radio interference**

CISPR 16-SER ed1.0 - Specification for radio disturbance and immunity measuring apparatus and methods - ALL PARTS



