

## **IEC PUBLICADAS**

### **MAIO E JUNHO**

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

IEC 60050-171:2019 - International Electrotechnical Vocabulary (IEV) - Part 171: Digital technology - Fundamental concepts

#### **IEC/TC 4 - Hydraulic turbines**

IEC 60193:2019 - Hydraulic turbines, storage pumps and pump-turbines - Model acceptance tests

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

IEC 62590:2019 PRV - Railway applications - Fixed installations - Electronic power converters for substations

IEC 62597:2019 PRV - Magnetic field levels generated by electronic and electrical apparatus in the railway environment with respect to human exposure – Measurement procedures

#### **IEC/TC 10 - Fluids for electrotechnical applications**

IEC 60480:2019 - Specifications for the re-use of sulphur hexafluoride (SF6) and its mixtures in electrical equipment

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

IEC 60076-11:2018/COR1:2019 - Corrigendum 1 - Power transformers - Part 11: Dry-type transformers

IEC 60076-22-3:2019 - Power transformers - Part 22-3: Power transformer and reactor fittings - Insulating liquid to air heat exchangers

IEC 60076-22-4:2019 - Power transformers - Part 22-4: Power transformer and reactor fittings - Insulating liquid to water heat exchangers

#### **IEC/TC 17 - High-voltage switchgear and controlgear**

IEC 62271-109:2019 - High-voltage switchgear and controlgear - Part 109: Alternating-current series capacitor by-pass switches

IEC TS 62271-304:2019 - High-voltage switchgear and controlgear - Part 304: Classification of indoor enclosed switchgear and controlgear for rated voltages above 1 kV up to and including 52 kV related to the use in special service conditions with respect to condensation and pollution

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

IEC 61892-1:2019 - Mobile and fixed offshore units - Electrical installations - Part 1: General requirements and conditions

IEC 61892-2:2019 - Mobile and fixed offshore units - Electrical installations - Part 2: System design

IEC/IEEE 80005-1:2019 - Utility connections in port - Part 1: High voltage shore connection (HVSC) systems - General requirements

IEC 61892-3:2019 - Mobile and fixed offshore units - Electrical installations - Part 3: Equipment

IEC 61892-4:2019 - Mobile and fixed offshore units - Electrical installations - Part 4: Cables

IEC 61892-5:2019 - Mobile and fixed offshore units - Electrical installations - Part 5: Mobile units

IEC 61892-6:2019 - Mobile and fixed offshore units - Electrical installations - Part 6: Installation

IEC 61892-7:2019 - Mobile and fixed offshore units - Electrical installations - Part 7: Hazardous areas

## **IEC/TC 22 – Power electronic systems and equipment**

IEC 62909-2:2019 - Bi-directional grid-connected power converters - Part 2: Interface of GCPC and distributed energy resources

IEC 60633:2019 - High-voltage direct current (HVDC) transmission – Vocabulary

## **IEC/TC 23 - Electrical accessories**

IEC 60898-3:2019 - Electrical accessories - Circuit-breakers for overcurrent protection for household and similar installations - Part 3: Circuit-breakers for DC operation

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

IEC 62990-1:2019 PRV - Workplace atmospheres - Part 1: Gas detectors – Performance requirements of detectors for toxic gases

IEC 60079:2019 SER - Explosive atmospheres - ALL PARTS

IEC 60079-0:2017/ISH1:2019 - Interpretation Sheet 1 - Explosive atmospheres - Part 0: Equipment - General requirements

IEC 60079-11:2011/ISH4:2019 - Interpretation Sheet 4 - Explosive atmospheres - Part 11: Equipment protection by intrinsic safety "i"

IEC 60079-29-1:2016/ISH1:2019 - Interpretation Sheet 1 - Explosive atmospheres - Part 29-1: Gas detectors - Performance requirements of detectors for flammable gases

IEC 60079-29-1:2016/ISH2:2019 - Interpretation Sheet 2 - Explosive atmospheres - Part 29-1: Gas detectors - Performance requirements of detectors for flammable gases

IEC 60079-31:2019 PRV - Explosive atmospheres - Part 31: Equipment dust ignition protection by enclosure "t"

IEC TS 60079-42:2019 - Explosive atmospheres - Part 42: Electrical safety devices for the control of potential ignition sources for Ex-Equipment

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

IEC 60809:2014/AMD3:2019 - Amendment 1 - Lamps for road vehicles - Dimensional, electrical and luminous requirements

IEC 60810:2017/AMD1:2019 - Amendment 1 - Lamps, light sources and LED packages for road vehicles - Performance requirements

IEC 61167:2018/COR1:2019 - Corrigendum 1 - Metal halide lamps - Performance specification

IEC 60061:2019 DB - 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 60061-1:1969/AMD58:2018/COR1:2019 - Corrigendum 1 - Amendment 58 - Lamp caps and holders together with gauges for the control of interchangeability and safety - Part 1: Lamps caps

### **IEC/TC 35 - Primary cells and batteries**

IEC 62281:2019 - Safety of primary and secondary lithium cells and batteries during transport

IEC 60086-4:2019 - Primary batteries - Part 4: Safety of lithium batteries

### **IEC/TC 36 - Insulators**

IEC 61952-1:2019 - Insulators for overhead lines - Composite line post insulators for AC systems with a nominal voltage greater than 1 000 V - Part 1: definitions, end fittings and designations

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

IEC 60539-2:2019 PRV - Directly heated negative temperature coefficient thermistors - Part 2: Sectional specification - Surface mount negative temperature coefficient thermistors

IEC 60384-17:2019 - Fixed capacitors for use in electronic equipment - Part 17: Sectional specification - Fixed metallized polypropylene film dielectric AC and pulse capacitors

### **IEC/TC 45 - Nuclear instrumentation**

IEC 61563:2019 PRV - Radiation protection instrumentation – Equipment for measuring the activity concentration of gamma-emitting radionuclides in foodstuffs

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

IEC 62047-31:2019 - Semiconductor devices - Micro-electromechanical devices - Part 31: Four-point bending test method for interfacial adhesion energy of layered MEMS materials

## **IEC/TC 47 – Semiconductor devices**

IEC 62228-3:2019 - Integrated circuits - EMC evaluation of transceivers - Part 3: CAN transceivers

IEC 62047-33:2019 - Semiconductor devices - Micro-electromechanical devices - Part 33: MEMS piezoresistive pressure-sensitive device

IEC 62047-34:2019 - Semiconductor devices - Micro-electromechanical devices - Part 34: Test methods for MEMS piezoresistive pressure-sensitive device on wafer

IEC 62047-36:2019 - Semiconductor devices – Micro-electromechanical devices – Part 36: Environmental and dielectric withstand test methods for MEMS piezoelectric thin films

IEC 60747-9:2019 PRV - Semiconductor devices - Part 9: Discrete devices - Insulated-gate bipolar transistors (IGBTs)

IEC 60749-17:2019 - Semiconductor devices - Mechanical and climatic test methods - Part 17: Neutron irradiation

IEC 60749-18:2019 - Semiconductor devices - Mechanical and climatic test methods - Part 18: Ionizing radiation (total dose)

IEC 60749-20-1:2019 PRV - Semiconductor devices - Mechanical and climatic test methods - Part 20-1: Handling, packing, labelling and shipping of surface-mount devices sensitive to the combined effect of moisture and soldering heat

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

IEC 61076-3-124:2019 - Connectors for electrical and electronic equipment - Product requirements – Part 3-124: Rectangular connectors – Detail specification for 10-way, shielded, free and fixed connectors for I/O and data transmission with frequencies up to 500 MHz

IEC 60512-99-002:2019 - Connectors for electrical and electronic equipment - Tests and measurements - Part 99-002: Endurance test schedules - Test 99b: Test schedule for unmating under electrical load

## **IEC/TC 51 - Magnetic components, ferrite and magnetic powder materials**

IEC 63093-4:2019 - Ferrite cores - Guidelines on dimensions and the limits of surface irregularities - Part 4: RM-cores

IEC 63093-12:2019 - Ferrite cores - Guidelines on dimensions and the limits of surface irregularities - Part 12: Ring-cores

IEC 63093-14:2019 - Ferrite cores - Guidelines on dimensions and the limits of surface irregularities - Part 14: EFD-cores

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

IEC TS 61850-2:2019 - Communication networks and systems for power utility automation - Part 2: Glossary

IEC TR 62357-2:2019 - Power systems management and associated information exchange - Part 2: Use Cases and role model

IEC 61968-4:2019 - Application integration at electric utilities - System interfaces for distribution management - Part 4: Interfaces for records and asset management

IEC 61968-5:2019 PRV - Application integration at electric utilities - System interfaces for distribution management – Part 5: Distributed energy optimization

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

IEC 60704-2-14:2013/AMD1:2019 - Amendment 1 - Household and similar electrical appliances - Test code for the determination of airborne acoustical noise - Part 2-14: Particular requirements for refrigerators, frozen-food storage cabinets and food freezers

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

IEC 60335-2-11:2019 - Household and similar electrical appliances - Safety - Part 2-11: Particular requirements for tumble dryers

IEC 60335-2-14:2016+AMD1:2019 CSV - Household and similar electrical appliances - Safety - Part 2-14: Particular requirements for kitchen machines

IEC 60335-2-14:2016/AMD1:2019 - Amendment 1 - Household and similar electrical appliances - Safety - Part 2-14: Particular requirements for kitchen machines

IEC 60335-2-17:2012+AMD1:2015+AMD2:2019 CSV - Household and similar electrical appliances - Safety - Part 2-17: Particular requirements for blankets, pads, clothing and similar flexible heating appliances

IEC 60335-2-23:2016+AMD1:2019 CSV - Household and similar electrical appliances - Safety - Part 2-23: Particular requirements for appliances for skin or hair care

IEC 60335-2-23:2016/AMD1:2019 - Amendment 1 - Household and similar electrical appliances - Safety - Part 2-23: Particular requirements for appliances for skin or hair care

IEC 60335-2-29:2016+AMD1:2019 CSV - Household and similar electrical appliances - Safety - Part 2-29: Particular requirements for battery chargers

IEC 60335-2-29:2016/AMD1:2019 - Amendment 1 - Household and similar electrical appliances - Safety - Part 2-29: Particular requirements for battery chargers

IEC 60335-2-51:2019 - Household and similar electrical appliances - Safety - Part 2-51: Particular requirements for stationary circulation pumps for heating and service water installations

IEC 60335-2-54:2008/AMD2:2019 - Amendment 2 - Household and similar electrical appliances - Safety - Part 2-54: Particular requirements for surface-cleaning appliances for household use employing liquids or steam

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

IEC TR 61948-4:2019 - Nuclear medicine instrumentation - Routine tests - Part 4: Radionuclide calibrators

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

IEC 61784-1:2019 - Industrial communication networks - Profiles Part 1: Fieldbus profiles

IEC 61784-2:2019 - Industrial communication networks - Profiles - Part 2: Additional fieldbus profiles for real-time networks based on ISO/IEC/IEEE 8802-3

IEC 62881:2018/COR1:2019 - Corrigendum 1 - Cause and effect matrix

IEC 61207-2:2019 PRV - Expression of performance of gas analyzers – Part 2: Measuring oxygen in gas utilizing high-temperature electrochemical sensors

IEC 61207-3:2019 PRV - Gas analyzers – Expression of performance – Part 3: Paramagnetic oxygen analysers

IEC 61131-10:2019 - Programmable controllers – Part 10: PLC open XML exchange format

IEC 61158-1:2019 - Industrial communication networks - Fieldbus specifications - Part 1: Overview and guidance for the IEC 61158 and IEC 61784 series

IEC 61158-3-2:2014/AMD1:2019 - Amendment 1 - Industrial communication networks - Fieldbus specifications - Part 3 - 2: Data-link layer service definition - Type 2 elements

IEC 61158-3-4:2019 - Industrial communication networks - Fieldbus specifications - Part 3-4: Data-link layer service definition - Type 4 elements

IEC 61158-3-12:2019 - Industrial communication networks - Fieldbus specifications - Part 3-12: Data-link layer service definition - Type 12 elements

IEC 61158-3-19:2019 - Industrial communication networks - Fieldbus specifications - Part 3-19: Data-link layer service definition - Type 19 elements

IEC 61158-3-21:2019 - Industrial communication networks - Fieldbus specifications - Part 3-21: Data-link layer service definition - Type 21 elements

IEC 61158-3-25:2019 - Industrial communication networks - Fieldbus specifications - Part 3-25:  
Data-link layer service definition - Type X elements

IEC 61158-4-2:2019 - Industrial communication networks - Fieldbus specifications - Part 4-2:  
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IEC 61158-4-3:2019 - Industrial communication networks - Fieldbus specifications - Part 4-3:  
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IEC 61158-4-4:2019 - Industrial communication networks - Fieldbus specifications - Part 4-4:  
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IEC 61158-5-26:2019 - Industrial communication networks - Fieldbus specifications - Part 5-26: Application layer service definition - Type 26 elements

### **IEC/TC 66 - Safety of measuring, control and laboratory equipment**

IEC 61010-1:2010/AMD1:2016/COR1:2019 - Corrigendum 1 - Amendment 1 - Safety requirements for electrical equipment for measurement, control, and laboratory use - Part 1: General requirements

IEC 61010-2-011:2019 - Safety requirements for electrical equipment for measurement, control, and laboratory use - Part 2-011: Particular requirements for refrigerating equipment

IEC 61010-2-012:2019 - Safety requirements for electrical equipment for measurement, control, and laboratory use - Part 2-012: Particular requirements for climatic and environmental testing and other temperature conditioning equipment

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

IEC 63119-1:2019 PRV - Information exchange for electric vehicle charging roaming service - Part 1:General

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

IEC 60730-2-6/AMD1:2019 PRV - Automatic electrical controls - Part 2-6: Particular requirements for automatic electrical pressure sensing controls including mechanical requirements

IEC 60730-2-14:2017/AMD1:2019 - Amendment 1 - Automatic electrical controls - Part 2-14: Particular requirements for electric actuators

### **IEC/TC 80 - Live working**

IEC 61097-4/AMD2:2019 PRV - Amendment 2 - Global maritime distress and safety system (GMDSS) - Part 4: Inmarsat-C ship earth station and Inmarsat enhanced group call (EGC) equipment - Operational and performance requirements, methods of testing and required test results

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

IEC 62892:2019 - Extended thermal cycling of PV modules - Test procedure

### **IEC/TC 86 – Fibre optics**

IEC 61754-7-3:2019 - Fibre optic interconnecting devices and passive components - Fibre optic connector interfaces - Part 7-3: Type MPO connector family - Two fibre rows 16 fibre wide

IEC 62148-21:2019 - Fibre optic active components and devices – Package and interface standards – Part 21: Design guide of electrical interface of PIC packages using silicon fine-pitch ball grid array (S-FBGA) and silicon fine-pitch land grid array (S-FLGA)



IEC 61754-7-3:2019 - Fibre optic interconnecting devices and passive components - Fibre optic connector interfaces - Part 7-3: Type MPO connector family - Two fibre rows 16 fibre wide

IEC 61300-2-46:2019 - Fibre optic interconnecting devices and passive components - Basic test and measurement procedures - Part 2-46: Tests - Damp heat, cyclic

IEC 61300-3-54:2019 PRV - Fibre optic interconnecting devices and passive components - Basic test and measurement procedures - Part 3-54: Examinations and measurements - Angular misalignment between ferrule bore axis and ferrule axis for cylindrical ferrules

IEC 6131:2019 - Calibration of fibre-optic power meters

IEC 60793-1-40:2019 - Optical fibres - Part 1-40: Attenuation measurement methods

IEC 60794-2-11:2019 - Optical fibre cables - Part 2-11: Indoor cables - Detailed specification for simplex and duplex cables for use in premises cabling

IEC 60794-2-21:2019 - Optical fibre cables - Part 2-21: Indoor cables - Detailed specification for multi-fibre optical distribution cables for use in premises cabling

IEC 60794-2-30:2019 - Optical fibre cables - Part 2-30: Indoor cables - Family specification for optical fibre ribbon cables for use in terminated cable assemblies

IEC 60794-2-31:2019 - Optical fibre cables - Part 2-31: Indoor cables - Detailed specification for optical fibre ribbon cables for use in premises cabling

### **IEC/TC 88 - Wind energy generation systems**

IEC 61400-3-1:2019 - Wind energy generation systems - Part 3-1: Design requirements for fixed offshore wind turbines

IEC TS 61400-3-2:2019 - Wind energy generation systems - Part 3-2: Design requirements for floating offshore wind turbines

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

IEC TR 62878-2-7:2019 - Device embedding assembly technology - Part 2-7: Guidelines - Accelerated stress testing of passive embedded circuit boards

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

IEC 60068-2-67/AMD1:2019 PRV - Amendment 1 - Environmental testing - Part 2-67: Tests - Test Cy: Damp heat, steady state, accelerated test primarily intended for components

IEC 60068-2-85:2019 PRV - Environmental testing – Part 2-85: Tests – Test Fj: Vibration - Long time history replication

IEC 60068-3-3:2019 PRV - Environmental testing - Part 3-3: Supporting documentation and guidance - Seismic test methods for equipment

## **IEC/TC 106 – Methods for the assessment of electric, magnetic and electromagnetic fields associated with human exposure**

IEC TR 62669:2019 - Case studies supporting IEC 62232 - Determination of RF field strength, power density and SAR in the vicinity of radiocommunication base stations for the purpose of evaluating human exposure

IEC 62311:2019 - Assessment of electronic and electrical equipment related to human exposure restrictions for electromagnetic fields (0 Hz to 300 GHz)

## **IEC/TC 107 - Process management for avionics**

IEC 62668-2:2019 PRV - Process management for avionics - Counterfeit prevention - Part 2: Managing electronic components from non-franchised sources

## **IEC/TC 110 - Electronic displays**

IEC 62341-5-2:2019 - Organic light emitting diode (OLED) displays - Part 5-2: Mechanical endurance test methods

IEC 61747-40-1:2019 - Liquid crystal display devices - Part 40-1: Mechanical testing of display cover glass for mobile devices – Guidelines

IEC TR 62595-1-3:2019 - Display lighting unit – Part 1-3: Lighting units with arbitrary shapes

IEC TS 62341-6-5:2019 - Organic light emitting diode (OLED) displays - Part 6-5: Measuring methods of dynamic range properties

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

IEC 62631-3-4:2019 - Dielectric and resistive properties of solid insulating materials - Part 3-4: Determination of resistive properties (DC methods) - Volume resistance and volume resistivity at elevated temperatures

## **IEC/TC 114 - Marine energy - Wave, tidal and other water current converters**

IEC TS 62600-1:2011/AMD1:2019 -Amendment 1 - Marine energy - Wave, tidal and other water current converters - Part 1: Terminology

IEC 62629-12-2:2019 - 3D display devices - Part 12-2: Measuring methods for stereoscopic displays using glasses - Motion blur

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

IEC 61439-3:2012/COR2:2019 - Corrigendum 2 - Low-voltage switchgear and controlgear assemblies - Part 3: Distribution boards intended to be operated by ordinary persons (DBO)

IEC 62026-2/AMD1:2019 PRV - Amendment 1 - Low-voltage switchgear and controlgear - Controller-device interfaces (CDIs) - Part 2: Actuator sensor interface (AS-i)

