1.0:2019
IEC 80601-2-78 Ed.
1.0:2019
IEC 80601-2-77 Ed.
2.0:2019
IEC 80601-2-60 Ed.
IEC 63009 Ed.

13 環境・健康予防・安全

規格番号 原文標題 邦訳標題(参考訳) 概要(英語) 制定

IEC 83009 Ed. 1.0:2019
Ultrasound - Physiotherapy systems - Field specifications and methods of measurement in the frequency range 20 kHz to 500 kHz
超音波-地学療法システム-20 kHz～500kHzの規格要項における測定方法及び測定条件
IEC 80601-2-78:2019 applies to the ultrasonic equipment designed for physiotherapy containing an ultrasonic transducer generating ultrasound in the frequency range 20 kHz to 500 kHz. This document only relates to ultrasonic physiotherapy equipment employing a single plane non-focusing circular transducer per treatment head producing static beams perpendicular to the face of the treatment head. This document specifies methods of measurement and characterization of the output of ultrasonic physiotherapy equipment based on reference testing, methods, characteristics to be specified by manufacturers of ultrasonic physiotherapy equipment, methods of measurement and characterization of the output of ultrasonic physiotherapy equipment based on routine testing, and methods and criteria for aspects of the output of ultrasonic physiotherapy equipment, as well as related issues. The specified equipment is intended to be used for rehabilitation, assessment, compensation or alleviation of impairments to support or perform physiotherapy.

IEC 80601-2-77:2019 applies to robotic-operated surgical systems, referred to as ROBOTICALLY ASSISTED SURGICAL SYSTEMS (RASS), and robotically assisted surgical equipment, referred to as ROBOTICALLY ASSISTED SURGICAL EQUIPMENT (RASE), as relevant. This edition applies to the general requirements for the design and manufacture of ME EQUIPMENT and ME SYSTEMS, as relevant, and does not apply to ultra-high-frequency (above 1 MHz) medical devices as defined in IEC 80601-2-40:2015, or medical devices intended to be used for imaging, as defined in IEC 80601-2-41:2015, or medical devices intended to be used for diagnostics, as defined in IEC 80601-2-42:2015.

IEC 80601-2-60:2019 applies to the basic safety and essential performance of dental equipment.

IEC 63009:2019 is applicable to ultrasonic equipment designed for physiotherapy containing an ultrasonic transducer generating ultrasound in the frequency range 20 kHz to 500 kHz. This document only relates to ultrasonic physiotherapy equipment employing a single plane non-focusing circular transducer per treatment head producing static beams perpendicular to the face of the treatment head. This document specifies methods of measurement and characterization of the output of ultrasonic physiotherapy equipment based on reference testing, methods, characteristics to be specified by manufacturers of ultrasonic physiotherapy equipment, methods of measurement and characterization of the output of ultrasonic physiotherapy equipment based on routine testing, and methods and criteria for aspects of the output of ultrasonic physiotherapy equipment, as well as related issues. The specified equipment is intended to be used for rehabilitation, assessment, compensation or alleviation of impairments to support or perform physiotherapy.

13 環境・健康予防・安全

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IEC 63009:2019 is applicable to ultrasonic equipment designed for physiotherapy containing an ultrasonic transducer generating ultrasound in the frequency range 20 kHz to 500 kHz. This document only relates to ultrasonic physiotherapy equipment employing a single plane non-focusing circular transducer per treatment head producing static beams perpendicular to the face of the treatment head. This document specifies methods of measurement and characterization of the output of ultrasonic physiotherapy equipment based on reference testing, methods, characteristics to be specified by manufacturers of ultrasonic physiotherapy equipment, methods of measurement and characterization of the output of ultrasonic physiotherapy equipment based on routine testing, and methods and criteria for aspects of the output of ultrasonic physiotherapy equipment, as well as related issues. The specified equipment is intended to be used for rehabilitation, assessment, compensation or alleviation of impairments to support or perform physiotherapy.

IEC 80601-2-78:2019 applies to the general requirements for basic safety and essential performance of MEDICAL ROBOTS that physically interact with a PATIENT with an IMPAIRMENT to support or perform physiotherapy, rehabilitation, assessment, compensation or alleviation related to the PATIENT’S MOVEMENT and motion functions, as intended by the MANUFACTURER. IEC 80601-2-78:2019 does not apply to external implant devices (use ISO 22523), diagnostic imaging equipment (e.g. MRI, use IEC 60601-2-33), or medical devices of diagnostic value and methods of use of ultrasonic physiotherapy equipment; methods of measurement and characterization of the output of ultrasonic physiotherapy equipment based on routine testing, and methods and criteria for aspects of the output of ultrasonic physiotherapy equipment, as well as related issues. The specified equipment is intended to be used for rehabilitation, assessment, compensation or alleviation of impairments to support or perform physiotherapy.
規格番号 原文標題 邦訳標題(参考訳) 概要(英語) 制定

IEC 62676-2-31 Ed. 1.0:2019

阀門室

IEC 62676-2-32 Ed. 1.0:2019

Valve halls

IEC TR 62757 Ed. 1.1:2019

 Amendment 1 - Fire prevention measures on converters for high-voltage direct current (HVDC) systems, static var compensators (SVC) and flexible AC transmission systems (FACTS) and their valve halls

IEC TR 62757 Ed. 1.1:2019

高電圧直流(HVDC)システム, 静止型無効電力補償装置(SVC)及びフレキシブル交流伝送システム(FACTS)用コンバータ及びそのバルブホールに対する防火対策

IEC 60839-11-31:2019

Fire prevention measures on converters for high-voltage direct current (HVDC) systems, static var compensators (SVC) and flexible AC transmission systems (FACTS) and their valve halls

IEC 60839-11-31:2019

阀門室

IEC 60068-2-67 Ed. 1.1:2019

Environmental testing - Part 2-67: Tests - Test Cy: Damp heat, steady state, accelerated test primarily intended for components

IEC 60068-2-67 Ed. 1.1:2019

環境試験 - 第2-67部: 試験 - 事象:耐湿,定常状態で主に構成部品を対象とした加速試験

IEC 60068-2-65 Ed. 1.0:2019

Environmental testing - Part 2-65: Tests - Test Fj: Vibration - Long time history replication

IEC 60068-2-65 Ed. 1.0:2019

環境試験 - 第2-65部: 試験 - 事象: 振動 - 長時間履歴応答

19 試験

規格番号 原文標題 邦訳標題(参考訳) 概要(英語) 制定

IEC 60068-2-67 Ed. 1.1:2019

Environmental testing - Part 2-67: Tests - Test Cy: Damp heat, steady state, accelerated test primarily intended for components

IEC 60068-2-67 Ed. 1.1:2019

環境試験 - 第2-67部: 試験 - 事象: 耐湿,定常状態で主に構成部品を対象とした加速試験

IEC 60068-2-65 Ed. 1.0:2019

Environmental testing - Part 2-65: Tests - Test Fj: Vibration - Long time history replication

IEC 60068-2-65 Ed. 1.0:2019

環境試験 - 第2-65部: 試験 - 事象: 振動 - 長時間履歴応答

IEC 60068-2-31:2019

IEC 60068-2-32:2019

IEC 60839-11-31:2019

IEC 62676-2-31:2019
IEC 61010-2-322 Ed. 4.0/2019

Safety requirements for electrical equipment for measurement, control and laboratory use – Part 2-322: Particular requirements for hand-held and hand-manipulated current sensors for electrical test and measurement.

IEC 61010-2-322:2019 is available as IEC 61010-2-322:2019 RLV which contains the International Standard and its Redline version, showing all changes of the technical content compared to the previous edition IEC 61010-2-322:2019. This specifies safety requirements for hand-held and hand-manipulated current sensors described below. These current sensors are for measuring, detecting or injecting current, or indicating current waveforms on circuits without physically opening the current path of the circuit being measured. They can be stand-alone current sensors or accessories to other equipment or parts of combined equipment.

IEC 61010-2-322:2019 RLV contains both the official IEC International Standard and its Redline version. The Redline version is not an official document. It is available in English only and provides you with a quick and easy way to compare all the changes between the official IEC International Standard and its previous edition. IEC 61010-2-322:2019 specifies safety requirements for hand-held and hand-manipulated current sensors described below. These current sensors are for measuring, detecting or injecting current, or indicating current waveforms on circuits without physically opening the current path of the circuit being measured. They can be stand-alone current sensors or accessories to other equipment or parts of combined equipment.

This edition constitutes a technical revision. This edition includes the following significant technical changes with respect to the previous edition: It has been indicated that current sensors used as fixed equipment are not within the scope of this document. Fork-style current sensors have been added. Requirements from Part 2-323 applicable to clamp multimeters that have a primary purpose of measuring voltage on live mains have been included in the new normative Annex EE. Clearances and creepage distances for measuring circuit terminals exceeding 1 000 V a.c. or 1 414 V d.c. and for wet locations have been specified. Reduced creepage distances are allowed to be according to material group I for all insulating materials.

26 生産工学

IEC 62841-3-4 Ed. 4.0/2019 RLV (Redline version)

Safety requirements for electrical equipment for measurement, control and laboratory use – Part 2-322: Particular requirements for hand-held and hand-manipulated current sensors for electrical test and measurement.

IEC 62841-3-4:2016+A1:2019 applies to transportable bench grinders that can be equipped with one or two accessories as follows: type 1 grinding wheels in accordance with ISO 603-4:1999 with a diameter not exceeding 310 mm and a thickness not exceeding 55 mm; wire brushes with a diameter not exceeding 310 mm and a thickness not exceeding 55 mm; polishing wheels with a diameter not exceeding 310 mm and with a peripheral speed of any accessory between 10 m/s and 50 m/s. The attention of National Committees is drawn to the fact that equipment manufacturers and testing organizations may need a transitional period following publication of a new, amended or revised IEC publication in which to make products in accordance with this new requirement and to equip themselves for conducting new or revised tests. It is the recommendation of the committee that the content of this publication be adopted for implementation nationally not earlier than 36 months from the date of publication. This publication is to be read in conjunction with IEC 62841-1:2014. The contents of the corrigendum of December 2016 have been included in this copy. This consolidated version consists of the first edition (2014) and its amendment 1 (2019). Therefore, no need to order amendment 1 in addition to this publication. Keywords: Bench Grinder, Hand-held tool, Transportable tool.
IEC 61400-24 Ed. 1.0:2019

Wind energy generation systems - Part 24: Lightning protection

IEC 61400-24:2019 applies to lightning protection of wind turbine generators and wind power systems. It refers to guidelines for small wind turbines in areas. This document defines the lightning environment for wind turbines and risk assessment for wind turbines in that environment. It defines requirements for protection of blades, other structural components and electrical and control systems against both direct and indirect effects of lightning. Test methods to validate compliance are included. Guidance on the use of applicable lightning protection, industrial electrical and EMC standards including earthing is provided. This second edition cancels and replaces the first edition, published in 2010. This edition includes the following significant technical changes with respect to the previous edition: it is restructured with a main normative part, while informative information is placed in annexes.

29 電気工学

IEC TS 63228:2019 summarises present perspectives on the performance evaluation of emerging PV technologies, specifically OPV, DSC and PSC devices. These devices present some challenges for accurate measurement, under the existing IEC 60904 series of standards, which were developed in the context of silicon wafer solar cells. These devices encompass methodologies for characterising PV cells, including measurement of light-induced degradation (LID) in a crystalline silicon PV cell is determined by comparing maximum output power at Standard Test Conditions (STC) before, and after, exposure to simulated sunlight. The magnitude of LID is a crystalline silicon PV cell is determined by comparing maximum output power at Standard Test Conditions (STC) before, and after, exposure to simulated sunlight at a specified temperature and irradiance. Test conditions are rounded to determine the effects of temperature and irradiance on the LID. The purpose of this document is to provide standardized PV cell measurement procedures, with extension to arrays discussed in informative Annexes.

IEC TS 63202-1 Ed. 1.0:2019

Photovoltaic cells - Part 1: Measurement of light-induced degradation of crystalline silicon photovoltaic cells

IEC TS 63202-1:2019 describes procedures for measuring the light-induced degradation (LID) of crystalline silicon photovoltaic (PV) cells in simulated sunlight. The magnitude of LID in a crystalline silicon PV cell is determined by comparing maximum output power at Standard Test Conditions (STC) before, and after, exposure to simulated sunlight at a specified temperature and irradiance. The purpose of this document is to provide standardized PV cell measurement procedures, with extension to arrays discussed in informative Annexes.

IEC/TR 63228:2019

Measurement protocols for photovoltaic devices based on organic, dye-sensitized or perovskite materials

IEC TR 63228:2019 summarises present perspectives on the performance evaluation of emerging PV technologies, specifically OPV, DSC and PSC devices. These devices present some challenges for accurate measurement, under the existing IEC 60904 series of standards, which were developed in the context of silicon wafer solar cells. These challenges can be different for different devices, but in general they arise due to one or more of the following: instability in performance over time; unusual spectral responsivity; small device size; difficulty in measuring temperature; a transient response to external stimulus; optical interference effects; and a non-linear current response to irradiance. These challenges can lead to the cell output in laboratory testing being significantly different to the output that would be observed in a real application. The primary focus of the report is to present perspectives on the performance evaluation of emerging PV technologies, specifically OPV, DSC and PSC devices. The report also references existing published standards that seek to accommodate OPV, DSC or PSC devices.
Rotating electrical machines — Part 18-3: Volume source supplying water-moderated nuclear reactor systems

IEC 60034-18-3:2019 covers rotating electrical machines fed from voltage converters — Quality and control tests

IEC 61482-1-1:2019 specifies test method procedures to determine the arc rating of flame resistant clothing materials and of protective clothing using an open arc. The arc rating is a measure of the performance of a material or a protective clothing assembly in a constrained arc test. The arc rating is used to determine the suitability of materials or clothing assemblies for use in the arc flash hazard. The arc rating is defined as the maximum available arc energy that a material or protective clothing assembly can withstand without sustaining damage that could result in the ignition of the material or clothing assembly.
Compliance 1 – Low-voltage surge protective devices – Part 2: Surge protective devices connected to the dc side of photovoltaic installations – Selection and application principles

IEC 61810-10 Ed. 1.0:2019 specifies general requirements for, with functional and safety aspects, applies to electromagnetic elementary relays (non-specified time all-or-nothing relays) with high relay requirements like breaking or short-circuit capabilities and similar for incorporation into low-voltage equipment. These relays may have a specific design to extinguish the electric arc between contacts (e.g. by magnetic blow-out) or use an insulation coordination not covered by IEC 61810-1 (e.g. by gas filled contact chambers); or require safety distances not covered by IEC 61810-1 (e.g. for higher load). It defines additional requirements for high-capacity relays with generic performance intended for use in applications in smart grids, electric vehicles and other applications where, for example, battery charge/discharge switching is used, such as electrical energy storage (EES) systems, solar photovoltaic energy systems, electric vehicles (EV) and electric industrial trucks/electric vehicles and equipment secondary safety and batteries, used vehicles. Compliance with the requirements of this standard is verified by the type tests indicated.

Amendment 1 – Low-voltage switchgear and controller – Controller-device interface (CDI) – Part 2: Actuator sensor interface (AS-i)

IEC 60269-2:2008+A1:2019 specifies a method for communication between a single control device and an switching element, and establishes a system for the interchangeability of components with specified communication interfaces. The complete system is called “Actuator Sensor Interface (AS-I)”. This second edition of IEC 60269-2 cancels and replaces the first edition published in 2000. It constitutes a technical revision. The main changes with respect to the previous edition are listed below: doubling the number of slaves from 31 to 63 by introduction of sub-addresses; introduction of AS-I safety system. This consolidated version consists of the second edition (2000) and its amendment 1 (2019). Therefore, no need to order amendment in addition to this publication.

Amendment 1 – Low-voltage switchgear and controller – Controller-device interface (CDI) – Part 2: Actuator sensor interface (AS-i)

IEC 62271-214:2019 specifies requirements for internal arc classification of metal-enclosed pole-mounted switchgear installations used for alternating current with rated voltages above 1 kV and up to and including 52 kV as specified in IEC 62271-1. The main changes with respect to IEC 62271-1 are as follows: introduction of AS-I communication interfaces. The complete system is called “Actuator Sensor Interface (AS-I)”. This second edition of IEC 62271-1 adds a new technical revision. The main changes with respect to the previous edition are listed below: doubling the number of slaves from 31 to 63 by introduction of sub-addresses; introduction of AS-I safety system. This consolidated version consists of the second edition (2019) and its amendment 1 (2019). Therefore, no need to order amendment in addition to this publication.

Workplace atmospheres – Part 1: Gas detectors – Performance requirements of detectors for toxic gases

IEC 69390-1:2019 specifies general requirements for design, function and performance, and describes the test methods that apply to portable, transportable, and fixed equipment for the detection and concentration measurement of toxic gases and vapours in workplaces atmospheres and other industrial and commercial applications. This document is applicable to continuously sensing equipment whose primary purpose is to provide an indication, alarm and/or other output function the purpose of which is to indicate the presence of a toxic gas or vapour in the atmosphere and in some cases to initiate automatic or manual protective action(s). It is applicable to equipment in which the sensor generates an electrical signal when gas is present. This document applies to two types of equipment: Type HM (Health Monitoring) “occupational exposure” equipment, for occupational exposure measurement; the performance requirements are focused on uncertainty of measurement of gas concentrations in the region of Occupational Exposure Limit Values (OELVs). The upper limits of measurement will be defined by the producer in accordance with IEC 61321 Type SM (Safety Monitoring) “general gas detection” equipment for general gas detection applications (e.g. safety warning, leak detection), the performance requirements are focused on alarm signalling. The upper limit of measurement will be defined by the producer in accordance with IEC 61321 Type SM (Safety Monitoring) “general gas detection” equipment for general gas detection applications (e.g. safety warning, leak detection), the performance requirements are focused on alarm signalling.
IEC TR 63037:2019 is available as IEC 63037:2019 RLV which contains the International Standard and its Redline version, showing all changes of the technical content compared to the previous edition: IEC TR 63037:2016. This document provides guidance to controller-integrated lamp designers for the development of products suitable to operate with future phase-cut dimmers. It describes the possible voltage signals and the expected response of the controller-integrated lamps. This document describes the expected response of controller during all operation states of a phase-cut lighting system and provides a complete understanding of the requirements for phase-cut dimmers. The response of a phase-cut dimmer is described in IEC 60669-2-1. This document specifies the system performance aspects and test procedures for the control by mains voltage phase-cut dimming of the brightness of mains operated electronic lighting equipment intended to be controlled by mains voltage phase-cut dimmers, such as LED integrated lamps and light sources with external controller. Safety requirements are not covered by this document, but by respective product standards. This second edition cancels and replaces the first edition published in 2016. This edition constitutes a technical revision. The edition includes the following significant technical changes with respect to the previous edition: emission of audible noise; ghosting caused by issues that are not related to the power supply of the dimmer or synchronization; stability of phase angle waveform (for the dimmer); including symmetry and stability tests; flicker of light loads; repetitive ring up voltage; dimming range; and number of switching cycles have been added.

IEC 81346-2:2019 establishes classification schemes with defined object classes and their associated letter codes, which are primarily intended for use in referencing designations and for designation of generic types. The classification schemes are applicable for objects in all technical fields. This edition constitutes a technical revision. The edition includes the following significant technical changes with respect to the previous edition: emission of audible noise; ghosting caused by issues that are not related to the power supply of the dimmer or synchronization; stability of phase angle waveform (for the dimmer); including symmetry and stability tests; flicker of light loads; repetitive ring up voltage; dimming range; and number of switching cycles have been added.

IEC 20190710 25,500円 (本体24,000円)

IEC TR 63037:2019 is available as IEC 63037:2019 RLV which contains the International Standard and its Redline version, showing all changes of the technical content compared to the previous edition: IEC TR 63037:2016. This document provides guidance to controller-integrated lamp designers for the development of products suitable to operate with future phase-cut dimmers. It describes the possible voltage signals and the expected response of the controller-integrated lamps. This document describes the expected response of controller during all operation states of a phase-cut lighting system and provides a complete understanding of the requirements for phase-cut dimmers. The response of a phase-cut dimmer is described in IEC 60669-2-1. This document specifies the system performance aspects and test procedures for the control by mains voltage phase-cut dimming of the brightness of mains operated electronic lighting equipment intended to be controlled by mains voltage phase-cut dimmers, such as LED integrated lamps and light sources with external controller. Safety requirements are not covered by this document, but by respective product standards. This second edition cancels and replaces the first edition published in 2016. This edition constitutes a technical revision. The edition includes the following significant technical changes with respect to the previous edition: emission of audible noise; ghosting caused by issues that are not related to the power supply of the dimmer or synchronization; stability of phase angle waveform (for the dimmer); including symmetry and stability tests; flicker of light loads; repetitive ring up voltage; dimming range; and number of switching cycles have been added.

IEC 20190710 33,560円 (本体31,200円)

IEC TR 63127:2019(E) focuses on the system design of converter stations with line-commutated converters. It is applicable to point-to-point and back-to-back HVDC systems based on line-commutated converter (LCC) technology. This document provides guidance and supporting information on the procedures for system design and the technical issues involved in the system design of HVDC transmission projects for both purchaser and potential suppliers. It can be used as the basis for drafting a procurement specification and as a guide during project implementation.

IEC 2010026 38,080円 (本体36,000円)

IEC 81346-2:2019 establishes classification schemes with defined object classes and their associated letter codes, which are primarily intended for use in referencing designations and for designation of generic types. The classification schemes are applicable for objects in all technical disciplines and all branches of industry. This edition constitutes a technical revision. This edition includes the following significant technical changes with respect to the previous edition: the entry classes of the classification scheme have been defined to reflect the “inhomogeneous function” of the object classified. The classes are defined to align with the principles of ISO 22274 and ISO 7498. A three-level classification scheme has been defined, which provides a greater flexibility for the designer in some technical fields. Classes are defined by their designation and provided with a preferred term. Examples are provided if needed. A separate classification scheme for spaces has been provided.

IEC 2010018 41,417円 (本体36,400円)

IEC 81346-2:2019 establishes classification schemes with defined object classes and their associated letter codes, which are primarily intended for use in referencing designations and for designation of generic types. The classification schemes are applicable for objects in all technical disciplines and all branches of industry. This edition constitutes a technical revision. This edition includes the following significant technical changes with respect to the previous edition: the entry classes of the classification scheme have been defined to reflect the “inhomogeneous function” of the object classified. The classes are defined to align with the principles of ISO 22274 and ISO 7498. A three-level classification scheme has been defined, which provides a greater flexibility for the designer in some technical fields. Classes are defined by their designation and provided with a preferred term. Examples are provided if needed. A separate classification scheme for spaces has been provided.

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### IEC 60068-2-69 Ed. 3.2019

<table>
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<tr>
<th>項目</th>
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<tbody>
<tr>
<td>環境試験 - 電子機器 - 試験 - 試験方法</td>
<td>IEC 60068-2-69 Ed. 3.2019 outlines test Ta/Tc, the solder bath wetting balance method and the solder globule wetting balance method to determine, quantitatively, the solderability of the terminations. Data obtained by these methods are not intended to be used as absolute quantitative data for pass/fail purposes. The procedures describe the solder bath wetting balance method and the solder globule wetting balance method. They are applicable to components and printed boards with solderable terminations and metallized solder pads. This document provides the measurement procedures for solderability both with and without (Pb). This edition includes the following significant technical changes with respect to the previous edition: integration of IEC 60068-2-59 into test methods of printed boards; inclusion of new component types; and updating test parameters for the whole component list.</td>
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### IEC 60747-16-6 Ed. 1.2019

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<tbody>
<tr>
<td>半導体素子 - 第16-6部</td>
<td>IEC 60747-16-6:2019 specifies the terminology, essential ratings and characteristics, and measuring methods of microwave integrated circuit frequency multipliers.</td>
</tr>
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### IEC 60749-20-1 Ed. 2.0:2019

<table>
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<tr>
<td>半導体素子 - 第20-1部</td>
<td>IEC 60749-20-1:2019 is available as IEC 60749-20-1:2019 RLV which contains the International Standard and its Redline version, showing all changes of the technical content compared to the previous edition. IEC 60749-20-1:2019 applies to all devices subjected to bulk solder reflow processes during PCB assembly, including plastic encapsulated packages, process sensitive devices, and other moisture sensitive devices made with moisture-permeable materials (epoxies, silicones, etc.) that are exposed to the ambient air. The purpose of this document is to provide SMD manufacturers and users with standardized methods for handling, packing, shipping, and use of moisture/reflow sensitive SMDs that have been classified to the levels defined in IEC 60749-20. These methods are provided to avoid damage from moisture absorption and exposure to solder reflow temperatures that can result in yield and reliability degradation. By using these procedures, safe and damage-free reflow can be achieved, with the dry packing process, providing a minimum shelf life capability in sealed dry-bags from the seal data. This edition includes the following significant technical changes with respect to the previous edition: updates to subclauses to better align the test method with IPC/JEDEC J-STD-033C, including new sections on aqueous cleaning and dry pack precautions, addition of two annexes on colorimetric testing of HIC (humidity indicator card) and derivation of bake tables.</td>
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### IEC 60894-5-3 Ed. 2.0:2019

<table>
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<tr>
<td>半導体素子 - 第5-3部</td>
<td>IEC 60894-5-3:2019 gives the terms and definitions for sensors representing the state of the art, which are intended for manufacturing piezoelectric elements, cells and the modules.</td>
</tr>
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IEC 61300-3-54:2019 describes the procedure to measure the angular misalignment between the ferrule bore axis and the ferrule. Key terms: ferrule bore, angular misalignment.

 CISPR 16-2-3:2016+A1:2019 specifies the methods of measurement of radiated disturbance phenomena in the frequency range of 3 kHz to 18 GHz. The aspects of measurement uncertainty are specified in CISPR 14-1 and CISPR 14-2. It has the status of a basic EMC publication in accordance with IEC Guide 103. 

IEC 61158-6-2:2019 provides common elements for basic time-critical and non-time-critical messaging communications between application programs in an automation environment and material specific to Type 2 fieldbus systems. The term "time-critical" is used to represent the presence of a time-window, within which one or more specified actions are required to be completed with a defined level of certainty. Failure to complete specified actions within the time window risks failure of the application requesting the actions, with attendant risk to plant and possibly human life. This International Standard specifies interactions between remote applications and defines the externally visible behavior provided by the Type 2 fieldbus application layer. The purpose of this document is to define the "external" behavior provided to a service operation defined in this document, and to define the externally visible behavior associated with their transfer.
IEC 61158-6-12:2019 provides common elements for basic time-critical and non-time-critical messaging communications between application programs in an automation environment and material specific to Type 2 fieldbus. The term “time-critical” is used to represent the presence of a time-window, within which one or more specified actions are required to be completed with some defined level of certainty. Failure to complete specified actions within the time window risks failure of the applications requesting the actions, with attendant risk to equipment, plant and possibly human life. This International Standard specifies interactions between remote applications and defines the externally visible behavior provided by the Type 2 fieldbus application layer. The purpose of this document is to define the protocol provided to a) define the wire-representation of the service primitives defined in this document, and b) define the externally visible behavior associated with their transfer. This document specifies the protocol of the Type 2 fieldbus application layer, in conformance with the OSI Basic Reference Model (ISO/IEC 7498-1) and the OSI application layer structure (ISO/IEC 9545). This fourth edition includes the following significant technical changes with respect to the previous edition: corrections in 5.17.16.2 spelling and grammar.

IEC 61158-6-10:2019 provides common elements for basic time-critical and non-time-critical messaging communications between application programs in an automation environment and material specific to Type 2 fieldbus. The term “time-critical” is used to represent the presence of a time-window, within which one or more specified actions are required to be completed with some defined level of certainty. Failure to complete specified actions within the time window risks failure of the applications requesting the actions, with attendant risk to equipment, plant and possibly human life. This International Standard specifies interactions between remote applications and defines the externally visible behavior provided by the Type 2 fieldbus application layer. The purpose of this document is to define the protocol provided to a) define the wire-representation of the service primitives defined in this document, and b) define the externally visible behavior associated with their transfer. This document specifies the protocol of the Type 2 fieldbus application layer, in conformance with the OSI Basic Reference Model (ISO/IEC 7498-1) and the OSI application layer structure (ISO/IEC 9545). This third edition includes the following significant technical changes with respect to the previous edition: a) additional user parameters to services; b) additional services to support distributed objects; c) additional secure services.

IEC 61158-6-4:2019 provides common elements for basic time-critical and non-time-critical messaging communications between application programs in an automation environment and material specific to Type 2 fieldbus. The term “time-critical” is used to represent the presence of a time-window, within which one or more specified actions are required to be completed with some defined level of certainty. Failure to complete specified actions within the time window risks failure of the applications requesting the actions, with attendant risk to equipment, plant and possibly human life. This International Standard specifies interactions between remote applications and defines the externally visible behavior provided by the Type 2 fieldbus application layer. The purpose of this document is to define the protocol provided to a) define the wire-representation of the service primitives defined in this document, and b) define the externally visible behavior associated with their transfer. This document specifies the protocol of the Type 2 fieldbus application layer, in conformance with the OSI Basic Reference Model (ISO/IEC 7498-1) and the OSI application layer structure (ISO/IEC 9545). This fourth edition includes the following significant technical changes with respect to the previous edition: a) integration of system redundancy basic functionality; b) integration of dynamic reconfiguration basic functionality; c) integration of reporting system basic functionality; d) integration of asset management basic functionality; e) integration of media redundancy ring interconnection basic functionality.
### IEC 61158-6-23 Ed. 2019

#### 1.0:2019

| IEC 61158-6-23 Ed. 2019 |  
|------------------------|---
| Industrial communication networks: Fieldbus specifications - Part 6-23: Application layer protocol specification Type 23 elements |  

IEC 61158-6-23:2019 provides common elements for basic time-critical and non-time-critical messaging communications between application programs in an automation environment and material specific to Type 2 fieldbus. The term "time-critical" is used to represent the presence of a time-window, within which one or more specified actions are required to be completed with some defined level of certainty. Failure to complete specified actions within the time window risks failure of the applications requesting the actions, with attendant risk to equipment, plant and possibly human life. This International Standard specifies interactions between remote applications and defines the externally visible behavior provided by the Type 2 fieldbus application layer. The purpose of this document is to define the protocol provided to a) define the wire-representation of the service primitives defined in this document, and b) define the externally visible behavior associated with their transfer. This document specifies the protocol of the Type 2 fieldbus application layer, in conformance with the OSI Basic Reference Model (ISO/IEC 7498-1) and the OSI application layer structure (ISO/IEC 9545). This second edition includes the following significant technical changes with respect to the previous edition: improving the hotplug and error handling; editorial improvements.

#### 2.0:2019

| IEC 61158-6-21 Ed. 2019 |  
|------------------------|---
| Industrial communication networks: Fieldbus specifications - Part 6-21: Application layer protocol specification Type 21 elements |  

IEC 61158-6-21:2019 provides common elements for basic time-critical and non-time-critical messaging communications between application programs in an automation environment and material specific to Type 2 fieldbus. The term "time-critical" is used to represent the presence of a time-window, within which one or more specified actions are required to be completed with some defined level of certainty. Failure to complete specified actions within the time window risks failure of the applications requesting the actions, with attendant risk to equipment, plant and possibly human life. This International Standard specifies interactions between remote applications and defines the externally visible behavior provided by the Type 2 fieldbus application layer. The purpose of this document is to define the protocol provided to a) define the wire-representation of the service primitives defined in this document, and b) define the externally visible behavior associated with their transfer. This document specifies the protocol of the Type 2 fieldbus application layer, in conformance with the OSI Basic Reference Model (ISO/IEC 7498-1) and the OSI application layer structure (ISO/IEC 9545). This second edition includes the following significant technical changes with respect to the previous edition: added WriteAndRead service; miscellaneous editorial corrections.

#### 3.0:2019

| IEC 61158-6-19 Ed. 2019 |  
|------------------------|---
| Industrial communication networks: Fieldbus specifications - Part 6-19: Application layer protocol specification Type 19 elements |  

IEC 61158-6-19:2019 provides common elements for basic time-critical and non-time-critical messaging communications between application programs in an automation environment and material specific to Type 2 fieldbus. The term "time-critical" is used to represent the presence of a time-window, within which one or more specified actions are required to be completed with some defined level of certainty. Failure to complete specified actions within the time window risks failure of the applications requesting the actions, with attendant risk to equipment, plant and possibly human life. This International Standard specifies interactions between remote applications and defines the externally visible behavior provided by the Type 2 fieldbus application layer. The purpose of this document is to define the protocol provided to a) define the wire-representation of the service primitives defined in this document, and b) define the externally visible behavior associated with their transfer. This document specifies the protocol of the Type 2 fieldbus application layer, in conformance with the OSI Basic Reference Model (ISO/IEC 7498-1) and the OSI application layer structure (ISO/IEC 9545). This second edition includes the following significant technical changes with respect to the previous edition: improving the hotplug and error handling; editorial improvements.

#### 4.0:2019

| IEC 61158-6-25 Ed. 2019 |  
|------------------------|---
| Industrial communication networks: Fieldbus specifications - Part 6-25: Application layer protocol specification Type 25 elements |  

IEC 61158-6-25:2019 provides common elements for basic time-critical and non-time-critical messaging communications between application programs in an automation environment and material specific to Type 2 fieldbus. The term "time-critical" is used to represent the presence of a time-window, within which one or more specified actions are required to be completed with some defined level of certainty. Failure to complete specified actions within the time window risks failure of the applications requesting the actions, with attendant risk to equipment, plant and possibly human life. This International Standard specifies interactions between remote applications and defines the externally visible behavior provided by the Type 2 fieldbus application layer. The purpose of this document is to define the protocol provided to a) define the wire-representation of the service primitives defined in this document, and b) define the externally visible behavior associated with their transfer. This document specifies the protocol of the Type 2 fieldbus application layer, in conformance with the OSI Basic Reference Model (ISO/IEC 7498-1) and the OSI application layer structure (ISO/IEC 9545). This second edition includes the following significant technical changes with respect to the previous edition: improving the hotplug and error handling; editorial improvements.
IEC 63119-1 Ed. 2:2019

IEC/TS 62872-1 Ed. 3.2:2019

1.0:2019

IEC 62848-2 Ed. 47:2019

造船及び海洋構造物

IEC 2019-7 新刊情報

JSA GROUP

General charging roaming service - Part 1: information to ships (NAVTEX)

the reception of navigational and meteorological information as required by the Industrial-process measurement, control and automation - Part 1: System interface between industrial facilities and the smart grid

Inmarsat-C ship earth station and the smart grid

IEC 61158-2 Ed. 10:2019

Fieldbus specifications - Part 6-26: Application layer protocol specification Type 28 elements

Industrial communication networks - Fieldbus specifications - Part 6-26: Application layer protocol specification Type 28 elements

IEC TS 62872-1 Ed. 10:2019

Information exchange for electric vehicle charging roaming service - Part 1: General

IEC 63119-1 Ed. 10:2019

IEC 63119 (all parts) is applicable to high-level operators (CSOs) and clearing house platforms through EV charge service providers (CSP), charging station operators and security mechanisms for roaming between different CSPs, as well as the direct control of energy resources within a facility and the smart grid. This document specifies the protocols needed for the direct control of energy resources within a facility and the smart grid. The scope of this document specifically excludes the protocols needed for the direct control of energy resources within a facility where the control and ultimate liability for such control is delegated by the industrial facility to the external entity (e.g. distributed energy resource (DER) control by the electrical grid operator).

IEC 62848-2:2019 applies to Voltage Limiting Devices (VLDs) to be applied in DC traction systems in order to comply with protective provisions against electric shock from DC, and combined AC – DC voltages, in accordance with the IEC 63119 series, taking into account any current provisions/VDLs operate in such a way as to connect the track return circuit of DC railway systems to the earth system or to conductive parts within the overhead contact line zone or current collector zone.

IEC 61097-6:2005+A1:2011+A2:2019 Specifies the performance requirements and methods of testing for Inmarsat-C ship earth stations (SES) capable of performance requirements and methods of testing for Inmarsat-C ship earth stations (SES) capable of transmitting and receiving direct-printing telecommunications and for enhanced group call (EGC) receivers, for use in the Global Maritime Mobile (GMSS) and for use for long-range identification and tracking (LRIT). This consolidated version consists of the third edition (2013), its amendment 1 (2016) and its amendment 2 (2018). Therefore, no need to order amendment in addition to this publication.

Amendment 2 - Global maritime distress and safety system (GMSS) - 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

Global maritime distress and safety system (GMSS) - 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

Global maritime distress and safety system (GMSS) - Part 6: Narrowband direct-printing telegraph equipment for the reception of navigational and meteorological information as required by the International Convention for Safety of Life at Sea (SOLAS), and which is associated with IEC 61158. This document specifies the performance standards of the relevant IMO regulations and conforms with the ITU-R regulations where applicable. This consolidated version consists of the second edition (2000), its amendment 1 (2011) and its amendment 2 (2018). Therefore, no need to order amendment in addition to this publication.
<table>
<thead>
<tr>
<th>公式番号</th>
<th>原文項目</th>
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<th>制定月日</th>
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<td>EIC 682668-2 Ed. 1.0.2019</td>
<td>Process management for avionics – Counterfeit prevention – Part 2</td>
<td>Managing electronic components from non-franchised sources</td>
<td>IEC 62668-2-033:2019 defines safety requirements for hand-held multimeters for domestic and professional use, capable of measuring mains voltage. Hand-held multimeters are multi-range multifunction measurement instruments intended to measure voltage and other electrical quantities such as resistance or current. Their primary purpose is to measure voltage on a live mains. They are suitable to be supported by one hand during normal use. This second edition cancels and replaces the first edition published in 2012. This edition constitutes a technical revision. This edition includes the following significant technical changes with respect to the previous edition: The scope has been revised to cover hand-held multimeters. Voltmeters and clamp multimeters have been removed. They are addressed respectively by IEC 61010-033:2013. They satisfy the criteria required by the IMO under regulation 5(iii) of the International Convention for the Safety of Life at Sea, 1974, as amended, for the provision of mobile satellite systems and services. It is not associated with IMO Resolution A.1001(25) or IEC 62668-2:2019, which specifies safety requirements for ship earth stations intended for operation in mobile-satellite systems and services which are recognised by the International Maritime Organization as meeting the criteria required by the IMO under regulation 5(iii) of the International Convention for the Safety of Life at Sea, 1974, as amended, for the provision of mobile satellite systems and services. This document incorporates the minimum criteria and performance standards of the IMO, currently prescribed in IMO Resolution A.1001(25) in IMO Resolution MSC.44(98) and is also associated with IMO Resolution A.1001(25) and IEC 62668-2:2019. Matters relating to the installation of the ship earth station are given in Annex A.</td>
<td>20190621</td>
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**IEC 61010-2-033 Ed. 2.0.2019**

Safety requirements for electrical equipment for measurement, control, and laboratory use – Part 2-033: Particular requirements for hand-held multimeters and other meters for domestic and professional use, capable of measuring mains voltage. Hand-held multimeters are multi-range multifunction measurement instruments intended to measure voltage and other electrical quantities such as resistance or current. Their primary purpose is to measure voltage on a live mains. They are suitable to be supported by one hand during normal use. This second edition cancels and replaces the first edition published in 2012. This edition constitutes a technical revision. This edition includes the following significant technical changes with respect to the previous edition: The scope has been revised to cover hand-held multimeters. Voltmeters and clamp multimeters have been removed. They are addressed respectively by IEC 61010-033:2013. They satisfy the criteria required by the IMO under regulation 5(iii) of the International Convention for the Safety of Life at Sea, 1974, as amended, for the provision of mobile satellite systems and services. It is not associated with IMO Resolution A.1001(25) or IEC 62668-2:2019, which specifies safety requirements for ship earth stations intended for operation in mobile-satellite systems and services which are recognised by the International Maritime Organization as meeting the criteria required by the IMO under regulation 5(iii) of the International Convention for the Safety of Life at Sea, 1974, as amended, for the provision of mobile satellite systems and services. This document incorporates the minimum criteria and performance standards of the IMO, currently prescribed in IMO Resolution A.1001(25) in IMO Resolution MSC.44(98) and is also associated with IMO Resolution A.1001(25) and IEC 62668-2:2019. Matters relating to the installation of the ship earth station are given in Annex A.

20190710 | 1,216円（本体1,200円） |

**IEC 61097-16 Ed. 2.0.2019**

Global maritime distress and safety system (GMDSS) – Part 16: Ship earth stations operating in mobile-satellite systems recognized for use in the GMDSS – Operational and performance requirements, methods of testing and required test results. World maritime distress and safety system (GMDSS) – Part 16: GMDSSの船舶地端局の運用と性能要求事項、試験方法及び必要な試験結果

20190708 | 25,602円（本体24,000円） |

**IEC 61097-6 Amd.2 Ed. 1.0.2019**

IEC 61097-6:2019 specifies the minimum operational and performance requirements, methods of testing and required test results for any ship earth stations intended for operation in mobile-satellite systems and services which are recognized by the International Maritime Organization as meeting the criteria required by the IMO under regulation 5(iii) of the International Convention for the Safety of Life at Sea, 1974, as amended, for the provision of mobile satellite systems and services in the GMDSS, regardless of the mobile satellite provider used. This document incorporates the minimum criteria and performance standards of the IMO, currently prescribed in IMO Resolution A.1001(25) in IMO Resolution MSC.44(98) and is also associated with IMO Resolution A.1001(25) and IEC 62668-2:2019. Matters relating to the installation of the ship earth station are given in Annex A.

20190710 | 1,216円（本体1,200円） |
IEC 61207-2:2019 applies to all aspects of analyzers using high-temperature electrochemical sensors for the measurement of oxygen in gas. It applies to in-situ and extractive analyzers and to analyzers installed indoors and outdoors. The object of this part is to specify the terminology and definitions related to the functional performance of gas analyzers, utilizing a high-temperature electrochemical sensor, for the continuous measurement of oxygen concentration in a sample of gas. To unify methods used in making and verifying statements on the functional performance of such analyzers; to specify what tests are performed to determine the functional performance and how such tests are carried out; to provide basic documents to support the application of internationally recognized quality management standards. This second edition cancels and replaces the first edition published in 1994. This edition constitutes a technical revision. This edition includes the following significant technical changes with respect to the previous edition:

- All the terms and definitions relating to the document have been updated where appropriate.
- The description of the principle of the galvanic cell has been expanded and clarified.
- New definitions and illustrations have been added for different measurement methods for oxygen using solid electrolytes for galvanic cells.
- New illustrations have been added for existing descriptions for ion pump cells.
- A more detailed description of the effect of the presence of oxidizable gases has been added.
- All references to “errors” have been replaced by “uncertainties” and appropriate updated definitions applied.

IEC 61207-3:2019 is available as IEC 61207-3:2019 RLV which contains both the official IEC International Standard and its Redline version. The Redline version is not an official document. It is available in English only and provides you with a quick and easy way to compare all the changes between the official IEC Standard and its previous edition. IEC 61207-2-033:2019 specifies safety requirements for hand-held multimeters for domestic and professional use, capable of measuring mains voltage and other electrical quantities such as resistance or current. Their primary purpose is to measure voltages on a live mains. They are suitable to be supported by one hand during normal use. This second edition cancels and replaces the first edition published in 2012. This edition constitutes a technical revision. This edition includes the following significant technical changes with respect to the previous edition. The scope has been reduced to hand-held multimeters. Voltmeters and clamp multimeters have been removed. They are addressed respectively by IEC 61010-2-030 and IEC 61010-2-032. The relevant definitions have been removed. Subclause 4.4.2.101 has been relocated into Clause 102. Clearances and creepage distances for wet locations and for measuring circuit terminals exceeding 1 000 V a.c. or 1 414 V d.c. have been specified. Subclause 14.101 related to “Circuits or components used as transient overvoltage limiting devices in measuring circuits used to measure mains” has been removed. References to IEC 61010-031 for probe assemblies and IEC 61010-2-032 for current sensors have been added. Requirements for protection against mains overvoltage measuring circuits have been added. Clause 102 has been rewritten.

IEC 61010-2-033:2019 RLV contains both the official IEC International Standard and its Redline version. The Redline version is not an official document. It is available in English only and provides you with a quick and easy way to compare all the changes between the official IEC Standard and its previous edition. IEC 61010-2-033:2019 specifies safety requirements for hand-held multimeters for domestic and professional use, capable of measuring mains voltage and other electrical quantities such as resistance or current. Their primary purpose is to measure voltages on a live mains. They are suitable to be supported by one hand during normal use. This second edition cancels and replaces the first edition published in 2012. This edition constitutes a technical revision. This edition includes the following significant technical changes with respect to the previous edition: The scope has been reduced to hand-held multimeters. Voltmeters and clamp multimeters have been removed. They are addressed respectively by IEC 61010-2-030 and IEC 61010-2-032. The relevant definitions have been removed. Subclause 4.4.2.101 has been relocated into Clause 102. Clearances and creepage distances for wet locations and for measuring circuit terminals exceeding 1 000 V a.c. or 1 414 V d.c. have been specified. Subclause 14.101 related to “Circuits or components used as transient overvoltage limiting devices in measuring circuits used to measure mains” has been removed. References to IEC 61010-031 for probe assemblies and IEC 61010-2-032 for current sensors have been added. Requirements for protection against mains overvoltage measuring circuits have been added. Clause 102 has been rewritten.

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IEC 61207-3:2019 RLV contains both the official IEC International Standard and its Redline version. The Redline version is not an official document, it is available in English only and provides you with a quick and easy way to compare all the changes between the official IEC Standard and its previous edition. IEC 61207-3:2019 applies to the three main methods for measuring oxygen by its paramagnetic property, which are outlined in the introduction. It considers essential ancillary units and applies to analyzers installed indoors and outdoors. Safety-critical applications can require additional requirements from system and analyzer specifications not covered in this document. This document is intended: to specify terminology and definitions related to the functional performance of paramagnetic gas analyzers for the measurement of oxygen in a source gas; to unify methods used in making and verifying statements on the functional performance of such analyzers; to specify what tests are performed to determine the functional performance and how such tests are carried out; to provide basic documents to support the application of internationally recognized quality management standards. This third edition cancels and replaces the second edition published in 2002. This edition constitutes a technical revision. This edition includes the following significant technical changes with respect to the previous edition: all references (normative and informative) have been updated, deleted or added to as appropriate; all the terms, descriptions and definitions relating to the document have been updated where appropriate; all references to “errors” have been replaced by “uncertainties” and appropriate updated definitions applied.

IEC 60335-2-89:2019 specifies safety requirements for electrically operated commercial refrigerating appliances and ice-makers that have an incorporated motor-compressor or that are supplied in two units for assembly as a single appliance in accordance with the instructions (split system). Examples of appliances that are within the scope of this standard are refrigerated display and storage cabinets; refrigerated trolley cabinets; service counters and self-service counters; blast chillers and blast freezers; commercial ice-makers. As far as is practicable, this standard deals with the common hazards presented by these types of appliances including those that use flammable refrigerants and appliances employing R 744 refrigerant. This International Standard is not applicable to appliances with a mass of flammable refrigerant exceeding the limits specified in 22.110 or to appliances that use refrigerants with a toxicity classification of B according to ISO 817. It does not cover those features of construction and operation of refrigerating appliances that are dealt with in ISO standards. Attention is drawn to the fact that for appliances intended to be used in vehicles or aboard ships or aircraft, additional requirements are necessary in many countries; additional requirements are specified by national health authorities, the national authorities responsible for the protection of labour, the national water supply authorities and similar authorities. This standard does not apply to appliances using flammable refrigerant in transcritical refrigeration systems; domestic refrigerating appliances (IEC 60335-2-24); split systems having a refrigerant charge of flammable refrigerant exceeding 150 g in any refrigerating circuit; industrial refrigerating systems; motor-compressors (IEC 60335-2-34).