

# Deutsche Akkreditierungsstelle

## Annex to the Partial Accreditation Certificate D-PL-11020-03-01 according to DIN EN ISO/IEC 17025:2018

**Valid from:** 19.03.2024

**Date of issue:** 13.11.2024

This annex is a part of the accreditation certificate D-PL-11020-03-00.

Holder of partial accreditation certificate:

**SGS Germany GmbH  
Heidenkampsweg 99, 20097 Hamburg**

with the locations

**SGS Germany GmbH  
Benzstr. 26/28, 82178 Puchheim (Location A)**

**Tests in the fields:** Electromagnetic Compatibility (EMC), Safety of Electrical Appliances, Luminaires, Batteries, Low-voltage Switchgear and Controlgear Assemblies, Environmental Simulation, Radio Telecommunication

**SGS Germany GmbH  
Traunreuter Str. 3, 82538 Gelting (Location B)**

**Tests in the fields:** Environmental Simulation, Electromechanical Components, Batteries

**SGS Germany GmbH  
Oberaustraße 47, 83026 Rosenheim (Location C)**

**Tests in the fields:** Environmental Simulation

*This certificate annex is only valid together with the written accreditation certificate and reflects the status as indicated by the date of issue. The current status of any given scope of accreditation can be found in the directory of accredited bodies maintained by Deutsche Akkreditierungsstelle GmbH at <https://www.dakks.de>.*

Abbreviations used: see last page

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The testing laboratory meets the requirements of DIN EN ISO/IEC 17025:2018 to carry out the conformity assessment activities listed in this annex. The testing laboratory meets additional legal and normative requirements, if applicable, including those in relevant sectoral schemes, provided that these are explicitly confirmed below.

The management system requirements of DIN EN ISO/IEC 17025 are written in the language relevant to the operations of testing laboratories and they conform to the principles of DIN EN ISO 9001.

**Flexible accreditation according to category 3**

**The laboratory is permitted to use standard test methods listed here with different issue dates or revision status without being required to inform and obtain prior approval from DAkKS.**

**Flexible accreditation according to category 1**

**The laboratory is permitted the free choice of standard or equivalent test methods without being required to inform and obtain prior approval from DAkKS. The listed test methods are exemplary. The laboratory maintains a current list of all test methods in a flexible scope of accreditation.**

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Test area	Norm / Standard / Version	Title of standard or procedure (If applicable, indicate deviations / modifications of standard procedures)	Test area / restriction
<b>Location A Benzstr. 26/28, 82178 Puchheim</b>			
<b>1. EMC</b>			
<b>1.1. EMC Basic Standards</b>			
EMC	IEC 61000-4-2: 2008	Electromagnetic compatibility (EMC) - Part 4-2: Testing and measurement techniques - Electrostatic discharge immunity test	
EMC	EN 61000-4-2: 2009	Electromagnetic compatibility (EMC) - Part 4-2: Testing and measurement techniques - Electrostatic discharge immunity test	
EMC	DIN EN 61000-4-2: 2009	Elektromagnetische Verträglichkeit (EMV) - Teil 4-2: Prüf- und Messverfahren - Prüfung der Störfestigkeit gegen die Entladung statischer Elektrizität (IEC 61000-4-2:2008); Deutsche Fassung EN 61000-4-2:2009	
EMC	IEC 61000-4-3: 2006 +A1:2008 +A2:2010 IEC 61000-4-3:2020	Electromagnetic compatibility (EMC) - Part 4-3: Testing and measurement techniques - Radiated, radio-frequency, electromagnetic field immunity test	
EMC	EN 61000-4-3: 2006 +A1:2008 +A2:2010	Electromagnetic compatibility (EMC) - Part 4-3: Testing and measurement techniques - Radiated, radio-frequency, electromagnetic field immunity test	
EMC	EN IEC 61000-4-3: 2006:2020	Electromagnetic compatibility (EMC) - Part 4-3: Testing and measurement techniques - Radiated, radio-frequency, electromagnetic field immunity test (IEC 61000-4-3:2020)	

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EMC	DIN EN 61000-4-3:2011	Elektromagnetische Verträglichkeit (EMV) - Teil 4-3: Prüf- und Messverfahren - Prüfung der Störfestigkeit gegen hochfrequente elektromagnetische Felder (IEC 61000-4-3:2006 + A1:2007 + A2:2010); Deutsche Fassung EN 61000-4-3:2006 + A1:2008 + A2:2010	
EMC	DIN EN 61000-4-3:2021	Elektromagnetische Verträglichkeit (EMV) - Teil 4-3: Prüf- und Messverfahren - Prüfung der Störfestigkeit gegen hochfrequente elektromagnetische Felder (IEC 61000-4-3:2020); Deutsche Fassung EN IEC 61000-4-3:2020	
EMC	IEC 61000-4-4: 2012	Electromagnetic compatibility (EMC) - Part 4-4: Testing and measurement techniques - Electrical fast transient/burst immunity test	
EMC	EN 61000-4-4: 2012	Electromagnetic compatibility (EMC) - Part 4-4: Testing and measurement techniques - Electrical fast transient/burst immunity test	
EMC	DIN EN 61000-4-4:2013	Elektromagnetische Verträglichkeit (EMV) - Teil 4-4: Prüf- und Messverfahren - Prüfung der Störfestigkeit gegen schnelle transiente elektrische Störgrößen/Burst (IEC 61000-4-4:2012); Deutsche Fassung EN 61000-4-4:2012	
EMC	IEC 61000-4-5: 2005	Electromagnetic Compatibility (EMC) - Part 4-5: Testing and measurement techniques - Surge immunity test	
EMC	IEC 61000-4-5: 2014 + A1:2017	Electromagnetic Compatibility (EMC) - Part 4-5: Testing and measurement techniques - Surge immunity test	
EMC	EN 61000-4-5: 2006	Electromagnetic Compatibility (EMC) - Part 4-5: Testing and measurement techniques - Surge immunity test	
EMC	EN 61000-4-5: 2014 + A1:2017	Electromagnetic Compatibility (EMC) - Part 4-5: Testing and measurement techniques - Surge immunity test	

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EMC	DIN EN 61000-4-5:2015	Elektromagnetische Verträglichkeit (EMV) - Teil 4-5: Prüf- und Messverfahren - Prüfung der Störfestigkeit gegen Stoßspannungen (IEC 61000-4-5:2014); Deutsche Fassung EN 61000-4-5:2014	
EMC	DIN EN 61000-4-5:2019	Elektromagnetische Verträglichkeit (EMV) - Teil 4-5: Prüf- und Messverfahren - Prüfung der Störfestigkeit gegen Stoßspannungen (IEC 61000-4-5:2014 + A1:2017); Deutsche Fassung EN 61000-4-5:2014 + A1:2017	
EMC	IEC 61000-4-6: 2013	Electromagnetic compatibility (EMC) - Part 4-6: Testing and measurement techniques - Immunity to conducted disturbances, induced by radio-frequency fields	
EMC	EN 61000-4-6: 2014	Electromagnetic compatibility (EMC) - Part 4-6: Testing and measurement techniques - Immunity to conducted disturbances, induced by radio-frequency fields	
EMC	DIN EN 61000-4-6:2014	Elektromagnetische Verträglichkeit (EMV) - Teil 4-6: Prüf- und Messverfahren - Störfestigkeit gegen leitungsgeführte Störgrößen, induziert durch hochfrequente Felder (IEC 61000-4-6:2013); Deutsche Fassung EN 61000-4-6:2014	
EMC	IEC 61000-4-8: 2009	Electromagnetic compatibility (EMC) - Part 4-8: Testing and measurement techniques - Power frequency magnetic field immunity test	1) Tests with frequencies 50Hz; 60Hz: test level 1000A/m only for test devices with "small" dimensions 2) Tests with frequencies 16 2/3, 400Hz: only „small“ test level for test devices with "small" dimensions

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EMC	EN 61000-4-8: 2010	Electromagnetic compatibility (EMC) - Part 4-8: Testing and measurement techniques - Power frequency magnetic field immunity test	1) Tests with frequencies 50Hz; 60Hz: test level 1000A/m only for test devices with “small” dimensions 2) Tests with frequencies 16 2/3, 400Hz: only „small“ test level for test devices with “small” dimensions
EMC	DIN EN 61000-4-8:2010	Elektromagnetische Verträglichkeit (EMV) - Teil 4-8: Prüf- und Messverfahren - Prüfung der Störfestigkeit gegen Magnetfelder mit energietechnischen Frequenzen (IEC 61000-4-8:2009); Deutsche Fassung EN 61000-4-8:2010	1) Tests with frequencies 50Hz; 60Hz: test level 1000A/m only for test devices with “small” dimensions 2) Tests with frequencies 16 2/3, 400Hz: only „small“ test level for test devices with “small” dimensions
EMC	IEC 61000-4-9: 2016	Electromagnetic compatibility (EMC) - Part 4-9: Testing and measurement techniques; Impulse magnetic field immunity test	
EMC	EN 61000-4-9: 2016	Electromagnetic compatibility (EMC) - Part 4-9: Testing and measurement techniques; Impulse magnetic field immunity test	
EMC	DIN EN 61000-4-9:2017	Elektromagnetische Verträglichkeit (EMV) - Teil 4-9: Prüf- und Messverfahren - Prüfung der Störfestigkeit gegen impulsförmige Magnetfelder (IEC 61000- 4-9:2016); Deutsche Fassung EN 61000- 4-9:2016	

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EMC	IEC 61000-4-10: 2016	Electromagnetic compatibility (EMC) - Part 4-10: Testing and measurement techniques; Damped oscillatory magnetic field immunity test	Test level 500 A/m only possible for test devices with "small" dimensions
EMC	EN 61000-4-10: 2017	Electromagnetic compatibility (EMC) - Part 4-10: Testing and measurement techniques; Damped oscillatory magnetic field immunity test	Test level 500 A/m only possible for test devices with "small" dimensions
EMC	DIN EN 61000-4-10:2018	Elektromagnetische Verträglichkeit (EMV) - Teil 4-10: Prüf- und Messverfahren - Prüfung der Störfestigkeit gegen gedämpft schwingende Magnetfelder (IEC 61000-4-10:2016); Deutsche Fassung EN 61000-4-10:2017	Test level 500 A/m only possible for test devices with "small" dimensions
EMC	IEC 61000-4-11: 2004 +A1:2017 IEC 61000-4-11:2020	Electromagnetic compatibility (EMC) - Part 4-11: Testing and measurement techniques - Voltage dips, short interruptions and voltage variations immunity tests	
EMC	EN 61000-4-11: 2004 +A1:2017  EN IEC 61000-4-11:2020+AC2020	Electromagnetic compatibility (EMC) - Part 4-11: Testing and measurement techniques - Voltage dips, short interruptions and voltage variations immunity tests	
EMC	DIN EN 61000-4-11:2019	Elektromagnetische Verträglichkeit (EMV) - Teil 4-11: Prüf- und Messverfahren - Prüfungen der Störfestigkeit gegen Spannungseinbrüche, Kurzzeitunterbrechungen und Spannungsschwankungen (IEC 61000-4-11:2004 + A1:2017); Deutsche Fassung EN 61000-4-11:2004 + A1:2017	

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EMC	DIN EN 61000-4-11:2021	Elektromagnetische Verträglichkeit (EMV) - Teil 4-11: Prüf- und Messverfahren - Prüfungen der Störfestigkeit gegen Spannungseinbrüche, Kurzzeitunterbrechungen und Spannungsschwankungen (IEC 61000-4-11:2020 + COR1:2020); Deutsche Fassung EN 61000-4-11:2020 + AC:2020	
EMC	IEC 61000-4-13: 2002 +A1:2009 +A2:2015	Electromagnetic compatibility (EMC) - Part 4-13: Testing and measurement techniques - Harmonics and interharmonics including mains signalling at a.c. power port, low frequency immunity tests	
EMC	EN 61000-4-13: 2002 +A1:2009 +A2:2016	Electromagnetic compatibility (EMC) - Part 4-13: Testing and measurement techniques - Harmonics and interharmonics including mains signalling at a.c. power port, low frequency immunity tests	
EMC	DIN EN 61000-4-13:2016	Elektromagnetische Verträglichkeit (EMV) - Teil 4-13: Prüf- und Messverfahren - Prüfungen der Störfestigkeit am Wechselstrom-Netzanschluss gegen Oberschwingungen und Zwischenharmonische einschließlich leitungsgeführter Störgrößen aus der Signalübertragung auf elektrischen Niederspannungsnetzen (IEC 61000-4-13:2002 + A1:2009 + A2:2015); Deutsche Fassung EN 61000-4-13:2002 + A1:2009 + A2:2016	
EMC	IEC 61000-4-14: 2009	Electromagnetic compatibility (EMC) - Part 4-14: Testing and measurement techniques - Voltage fluctuation immunity test for equipment with input current not exceeding 16 A per phase	

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EMC	EN 61000-4-14: 1999 +A1:2004 +A2:2009	Electromagnetic compatibility (EMC) - Part 4-14: Testing and measurement techniques - Voltage fluctuation immunity test for equipment with input current not exceeding 16 A per phase	
EMC	DIN EN 61000-4-14: 2010	Elektromagnetische Verträglichkeit (EMV) - Teil 4-14: Prüf- und Messverfahren - Prüfung der Störfestigkeit von Geräten und Einrichtungen mit einem Eingangsstrom bis einschließlich 16 A je Leiter gegen Spannungsschwankungen (IEC 61000-4- 14:1999 + A1:2001 + A2:2009); Deutsche Fassung EN 61000-4-14:1999 + A1:2004 + A2:2009	
EMC	IEC 61000-4-16: 2015	Electromagnetic Compatibility (EMC) - Part 4-16: Testing and measurement techniques - Test for immunity to conducted, common mode disturbances in the frequency range 0 Hz to 150 kHz	
EMC	EN 61000-4-16: 2016	Electromagnetic Compatibility (EMC) - Part 4-16: Testing and measurement techniques - Test for immunity to conducted, common mode disturbances in the frequency range 0 Hz to 150 kHz	
EMC	DIN EN 61000-4-16:2016	Elektromagnetische Verträglichkeit (EMV) - Teil 4-16: Prüf- und Messverfahren - Prüfung der Störfestigkeit gegen leitungsgeführte, asymmetrische Störgrößen im Frequenzbereich von 0 Hz bis 150 kHz (IEC 61000-4-16:2015); Deutsche Fassung EN 61000-4-16:2016	
EMC	IEC 61000-4-17: 2009	Electromagnetic compatibility (EMC) - Part 4-17: Testing and measurement techniques - Ripple on d.c. input power port immunity test	
EMC	EN 61000-4-17: 1999 +A1 :2004 +A2 :2009	Electromagnetic compatibility (EMC) - Part 4-17: Testing and measurement techniques - Ripple on d.c. input power port immunity test	

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EMC	DIN EN 61000-4-17/A2:2009	Elektromagnetische Verträglichkeit (EMV) - Teil 4-17: Prüf- und Messverfahren - Prüfung der Störfestigkeit gegen Wechselanteile der Spannung an Gleichstrom-Netzanschlüssen (IEC 61000-4-17:1999/A2:2008); Deutsche Fassung EN 61000-4-17:1999/A2:2009	
EMC	IEC 61000-4-18: 2019	Electromagnetic compatibility (EMC) - Part 4-18: Testing and measurement techniques - Damped oscillatory wave immunity test	
EMC	EN IEC 61000-4-18: 2019	Electromagnetic compatibility (EMC) - Part 4-18: Testing and measurement techniques - Damped oscillatory wave immunity test	
EMC	DIN 61000-4-18 :2020 DIN 61000-4-18 /A1:2011	Elektromagnetische Verträglichkeit (EMV) - Teil 4-18: Prüf- und Messverfahren - Prüfung der Störfestigkeit gegen gedämpft schwingende Wellen (IEC 61000-4-18:2019 + COR1:2019); Deutsche Fassung EN IEC 61000-4-18:2019 + AC:2019	
EMC	IEC 61000-4-27: 2000 +A1:2009	Electromagnetic compatibility (EMC) - Part 4-27: Testing and measurement techniques - Unbalance, immunity test for equipment with input current not exceeding 16 A per phase	
EMC	EN 61000-4-27: 2000 A1:2009	Electromagnetic compatibility (EMC) - Part 4-27: Testing and measurement techniques - Unbalance, immunity test for equipment with input current not exceeding 16 A per phase	

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EMC	DIN EN 61000-4-27:2009	Elektromagnetische Verträglichkeit (EMV) - Teil 4-27: Prüf- und Messverfahren - Prüfung der Störfestigkeit von Geräten mit einem Eingangsstrom, der 16 A je Leiter nicht überschreitet, gegen Unsymmetrie (der Versorgungsspannung) (IEC 61000-4-27:2000 + A1:2009); Deutsche Fassung EN 61000-4-27:2000 + A1:2009	
EMC	IEC 61000-4-28: 2000 +A1:2004 +A2:2009	Electromagnetic compatibility (EMC) - Part 4-28: Testing and measurement techniques - Variation of power frequency, immunity test for equipment with input current not exceeding 16 A per phase	
EMC	EN 61000-4-28: 2000 +A1:2004 +A2:2009	Electromagnetic compatibility (EMC) - Part 4-28: Testing and measurement techniques - Variation of power frequency, immunity test for equipment with input current not exceeding 16 A per phase	
EMC	DIN EN 61000-4-28:2009	Elektromagnetische Verträglichkeit (EMV) - Teil 4-28: Prüf- und Messverfahren - Prüfung der Störfestigkeit von Geräten mit einem Eingangsstrom, der 16 A je Leiter nicht überschreitet, gegen Schwankungen der energietechnischen Frequenz (Netzfrequenz) (IEC 61000-4-28:1999 + A1:2001 + A2:2009); Deutsche Fassung EN 61000-4-28:2000 + A1:2004 + A2:2009	
EMC	IEC 61000-4-29: 2000	Electromagnetic compatibility (EMC) - Part 4-29: Testing and measurement techniques; Voltage dips, short interruptions and voltage variations on d.c. input power port immunity tests	

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EMC	EN 61000-4-29: 2000	Electromagnetic compatibility (EMC) - Part 4-29: Testing and measurement techniques; Voltage dips, short interruptions and voltage variations on d.c. input power port immunity tests	
EMC	DIN EN 61000-4-29:2001	Elektromagnetische Verträglichkeit (EMV) - Teil 4-29: Prüf- und Messverfahren; Prüfungen der Störfestigkeit gegen Spannungseinbrüche, Kurzzeitunterbrechungen und Spannungsschwankungen an Gleichstrom-Netzeingängen (IEC 61000-4-29:2000); Deutsche Fassung EN 61000-4-29:2000	
EMC	IEC 61000-4-34: 2005 +A1:2009	Electromagnetic compatibility (EMC) – Part 4-34: Testing and measurement techniques – Voltage dips, short interruptions and voltage variations immunity tests for equipment with mains current more than 16 A per phase	
EMC	EN 61000-4-34: 2007 +A1:2009	Electromagnetic compatibility (EMC) – Part 4-34: Testing and measurement techniques – Voltage dips, short interruptions and voltage variations immunity tests for equipment with mains current more than 16 A per phase	
EMC	DIN EN 61000-4-34: 2010	Elektromagnetische Verträglichkeit (EMV) - Teil 4-34: Prüf- und Messverfahren - Prüfungen der Störfestigkeit von Geräten und Einrichtungen mit einem Netzstrom > 16 A je Leiter gegen Spannungseinbrüche, Kurzzeitunterbrechungen und Spannungsschwankungen (IEC 61000-4-34:2005 + A1:2009 + Cor. :2009); Deutsche Fassung EN 61000-4-34:2007 + A1:2009	

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EMC	IEC 61000-4-39:2017	Electromagnetic Compatibility (EMC) - Part 4-39: Testing and measurement techniques - Radiated fields in close proximity - Immunity test	Only for frequency range < 26 MHz
EMC	EN 61000-4-39:2017	Electromagnetic Compatibility (EMC) - Part 4-39: Testing and measurement techniques - Radiated fields in close proximity - Immunity test (IEC 61000-4- 39:2017)	Only for frequency range < 26 MHz
EMC	DIN EN 61000-4-39: 2019	Elektromagnetische Verträglichkeit (EMV) - Teil 4-39: Prüf- und Messverfahren Gestahlte Felder im Nahbereich - Prüfung der Störfestigkeit (IEC 61000-4- 39:2017); Deutsche Fassung EN 61000-4- 39:2017	Only for frequency range < 26 MHz
<b>1.2. EMC Generic standards</b>			
EMC	IEC 61000-6-1 :2005 IEC 61000-6-1 :2016	Electromagnetic compatibility (EMC) - Part 6-1: Generic standards - Immunity for residential, commercial and light- industrial environments	
EMC	EN 61000-6-1 :2007 EN IEC 61000-6-1: 2019	Electromagnetic compatibility (EMC) - Part 6-1: Generic standards - Immunity for residential, commercial and light- industrial environments	
EMC	DIN EN 61000-6-1:2007	Elektromagnetische Verträglichkeit (EMV) - Teil 6-1: Fachgrundnormen - Störfestigkeit für Wohnbereich, Geschäfts- und Gewerbebereiche sowie Kleinbetriebe (IEC 61000-6-1:2005); Deutsche Fassung EN 61000-6-1:2007	
EMC	DIN EN IEC 61000-6-1:2019	Elektromagnetische Verträglichkeit (EMV) - Teil 6-1: Fachgrundnormen - Störfestigkeit für Wohnbereich, Geschäfts- und Gewerbebereiche sowie Kleinbetriebe (IEC 61000-6-1:2016); Deutsche Fassung EN IEC 61000-6-1:2019	

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EMC	IEC 61000-6-2: 2005 IEC 61000-6-2: 2016	Electromagnetic compatibility (EMC) - Part 6-2: Generic standards - Immunity for industrial environments	
EMC	EN 61000-6- 2: 2005  EN IEC 61000-6-2: 2019	Electromagnetic compatibility (EMC) - Part 6-2: Generic standards - Immunity for industrial environments	
EMC	DIN EN 61000-6-2:2006	Elektromagnetische Verträglichkeit (EMV) - Teil 6-2: Fachgrundnormen - Störfestigkeit für Industriebereiche (IEC 61000-6-2:2005); Deutsche Fassung EN 61000-6-2:2005	
EMC	DIN EN 61000-6-2: 2019	Elektromagnetische Verträglichkeit (EMV) - Teil 6-2: Fachgrundnormen - Störfestigkeit für Industriebereiche (IEC 61000-6-2:2016); Deutsche Fassung EN IEC 61000-6-2:2019	
EMC	IEC 61000-6-3: 2006 +A1:2010	Electromagnetic compatibility (EMC) - Part 6-3: Generic standards - Emission standard for residential, commercial and light-industrial environments	Only SAC
EMC	IEC 61000-6-3: 2020	Electromagnetic compatibility (EMC) - Part 6-3: Generic standards - Emission standard for equipment in residential environments	Only SAC
EMC	EN 61000-6-3: 2007 +A1 :2011	Electromagnetic compatibility (EMC) - Part 6-3: Generic standards - Emission standard for residential, commercial and light-industrial environments	Only SAC
EMC	EN IEC 61000-6-3: 2021	Electromagnetic compatibility (EMC) - Part 6-3: Generic standards - Emission standard for equipment in residential environments	Only SAC

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EMC	DIN EN 61000-6-3: 2011	Elektromagnetische Verträglichkeit (EMV) - Teil 6-3: Fachgrundnormen - Störaussendung für Wohnbereich, Geschäfts- und Gewerbebereiche sowie Kleinbetriebe (IEC 61000-6-3:2006 + A1:2010); Deutsche Fassung EN 61000-6-3:2007 + A1:2011	Only SAC
EMC	IEC 61000-6-4: 2006 +A1:2010 IEC 61000-6-4: 2018	Electromagnetic compatibility (EMC) - Part 6-4: Generic standards - Emission standard for industrial environments	Only SAC
EMC	EN 61000-6-4: 2007 +A1:2011 EN IEC 61000-6-4: 2019	Electromagnetic compatibility (EMC) - Part 6-4: Generic standards - Emission standard for industrial environments	Only SAC
EMC	DIN EN 61000-6-4: 2011	Elektromagnetische Verträglichkeit (EMV) - Teil 6-4: Fachgrundnormen - Störaussendung für Industriebereiche (IEC 61000-6-4:2006 + A1:2010); Deutsche Fassung EN 61000-6-4:2007 + A1:2011	Only SAC
EMC	DIN EN 61000-6-4: 2020	Elektromagnetische Verträglichkeit (EMV) - Teil 6-4: Fachgrundnormen - Störaussendung für Industriebereiche (IEC 61000-6-4:2018); Deutsche Fassung EN IEC 61000-6-4:2019	Only SAC
EMC	IEC 61000-6-5: 2015	Electromagnetic compatibility (EMC) – Part 6-5: Generic standards – Immunity for power station and substation environments	
EMC	EN 61000-6-5: 2015	Electromagnetic compatibility (EMC) – Part 6-5: Generic standards – Immunity for power station and substation environments	

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EMC	DIN EN 61000-6-5:2016	Elektromagnetische Verträglichkeit (EMV) - Teil 6-5: Fachgrundnormen - Störfestigkeit von Betriebsmitteln, Geräten und Einrichtungen, die im Bereich von Kraftwerken und Schaltstationen verwendet werden (IEC 61000-6-5:2015); Deutsche Fassung EN 61000-6-5:2015	
EMC	IEC 61000-6-7: 2014	Electromagnetic compatibility(EMC) Part 6-7: Generic standards - Immunity requirements for safety-related systems and equipment intended to perform functions in a safety-related system (functional safety) in industrial environments	
EMC	EN 61000-6-7: 2015	Electromagnetic compatibility(EMC) Part 6-7: Generic standards - Immunity requirements for safety-related systems and equipment intended to perform functions in a safety-related system (functional safety) in industrial environments	
EMC	DIN EN 61000-6-7: 2015	Elektromagnetische Verträglichkeit (EMV) - Teil 6-7: Fachgrundnormen - Störfestigkeitsanforderungen an Geräte und Einrichtungen, die zur Durchführung von Funktionen in sicherheitsbezogenen Systemen (funktionale Sicherheit) an industriellen Standorten vorgesehen sind (IEC 61000-6-7:2014); Deutsche Fassung EN 61000-6-7:2015	
EMC	IEC 61000-6-8:2020	Electromagnetic compatibility (EMC) - Part 6-8: Generic standards - Emission standard for professional equipment in commercial and light-industrial locations	Only SAC
EMC	EN IEC 61000-6-8:2020	Electromagnetic compatibility (EMC) - Part 6-8: Generic standards - Emission standard for professional equipment in commercial and light-industrial locations	Only SAC

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EMC	DIN EN IEC 61000-6-8:2022	Elektromagnetische Verträglichkeit (EMV) - Teil 6-8: Fachgrundnormen - Störaussendung für professionell genutzte Geräte, die in Geschäfts- und Gewerbebereichen sowie in Kleinbetrieben verwendet werden (IEC 61000-6-8:2020); Deutsche Fassung EN IEC 61000-6-8:2020	Only SAC
<b>1.3. EMC Product family standards</b>			
EMC	1 TR 9 :2016	Elektromagnetische Verträglichkeit von Einrichtungen der Deutschen Telekom AG Telekommunikationstechnik	
EMC	EN 12015:2021	Electromagnetic compatibility - Product family standard for lifts, escalators and moving walks - Emission	
EMC	DIN EN 12015: 2021	Elektromagnetische Verträglichkeit - Produktfamilien-Norm für Aufzüge, Fahrtreppen und Fahrsteige - Störaussendung; Deutsche Fassung EN 12015:2020	
EMC	EN 12016:2013	Electromagnetic compatibility - Product family standard for lifts, escalators and moving walks - Immunity	
EMC	DIN EN 12016: 2013	Elektromagnetische Verträglichkeit - Produktfamilien-Norm für Aufzüge, Fahrtreppen und Fahrsteige - Störfestigkeit; Deutsche Fassung EN 12016:2013	
EMC	ETS 300 132-1: V2.1.1, 2019	Environmental Engineering (EE); Power supply interface at the input to Information and Communication Technology (ICT) equipment; Part 1: Alternating Current (AC)	
EMC	EN 300 132-2 V2.6.1, 2019	Environmental Engineering (EE); Power supply interface at the input of Information and Communication Technology (ICT) equipment; Part 2: -48 V Direct Current (DC)	

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EMC	EN 300 132-3-0 V2.1.1, 2012	Environmental Engineering (EE); Power supply interface at the input to telecommunications equipment; Part 3: Operated by rectified current source, alternating current source or direct current source up to 400 V	
EMC	EN 300 132-3-1 V2.1.1, 2012	Environmental Engineering (EE); Power supply interface at the input to telecommunications equipment; Part 3: Operated by rectified current source, alternating current source or direct current source up to 400 V	
EMC	EN 300 386 V2.1.1, 2016	Electromagnetic compatibility and Radio spectrum Matters (ERM); Telecommunication network equipment; Electro Magnetic Compatibility (EMC) requirements	
EMC	EN 50090-2-2: 1996 +A1:2002 +A2:2007	Home and Building Electronic Systems (HBES) - Part 2-2: System overview - General technical requirements	Only chapter 7; EMC
EMC	DIN EN 50090-2-2: 2007	Elektrische Systemtechnik für Heim und Gebäude (ESHG) - Teil 2-2: Systemübersicht - Allgemeine technische Anforderungen; Deutsche Fassung EN 50090-2-2:1996 + Corrigendum:1997 + A1:2002 + A2:2007	Only chapter 7; EMC
EMC	EN 50090-8: 2000	Home and Building Electronic Systems (HBES) - Part 8: Conformity assessment of products	Only chapter 4.4, EMC and without products according to EN 50065-1
EMC	DIN EN 50090-8: 2001	Elektrische Systemtechnik für Heim und Gebäude (ESHG) - Teil 8: Konformitätsbeurteilung von Produkten; Deutsche Fassung EN 50090-8:2000	Only chapter 4.4, EMC and without products according to EN 50065-1
EMC	EN 50130-4: 2011 +A1:2014	Alarm systems - Part 4: Electromagnetic compatibility; Product family standard: Immunity requirements for components of fire, intruder and social alarm systems	

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EMC	DIN EN 50130-4: 2015	Alarmanlagen - Teil 4: Elektromagnetische Verträglichkeit - Produktfamilienorm: Anforderungen an die Störfestigkeit von Anlageteilen für Brandmeldeanlagen, Einbruch- und Überfallmeldeanlagen, Video- Überwachungsanlagen, Zutrittskontrollanlagen sowie Personen- Hilferufanlagen; Deutsche Fassung EN 50130-4:2011 + A1:2014	
EMC	EN 50293:2012	Electromagnetic compatibility - Road traffic signal systems - Product standard	
EMC	DIN EN 50293: 2013	Straßenverkehrs-Signalanlagen - Elektromagnetische Verträglichkeit; Deutsche Fassung EN 50293:2012	
EMC	EN 50412-2-1: 2005	Power line communication apparatus and systems used in low-voltage installations in the frequency range 1,6 MHz to 30 MHz - Part 2-1: Residential, commercial and industrial environment - Immunity requirements	
EMC	DIN EN 50412-2-1:2006	Kommunikationsgeräte und -systeme auf elektrischen Niederspannungsnetzen im Frequenzbereich 1,6 MHz bis 30 MHz - Teil 2-1: Für den Gebrauch in Wohnbereichen, Geschäfts- und Gewerbebereichen sowie in Kleinbetrieben und in industriellen Räumlichkeiten – Störfestigkeitsanforderungen; Deutsche Fassung EN 50412-2-1:2005	
EMC	EN 50491-5-1: 2010	General requirements for Home and Building Electronic Systems (HBES) and Building Automation and Control Systems (BACS) - Part 5-1: EMC requirements, conditions and test set-up; German version	

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EMC	DIN EN 50491-5-1:2010	Allgemeine Anforderungen an die Elektrische Systemtechnik für Heim und Gebäude (ESHG) und an Systeme der Gebäudeautomation (GA) - Teil 5-1: EMV-Anforderungen, Bedingungen und Prüfungen; Deutsche Fassung EN 50491-5-1:2010	
EMC	EN 50491-5-2: 2010	General requirements for Home and Building Electronic Systems (HBES) and Building Automation and Control Systems (BACS) - Part 5-2: EMC requirements for HBES/BACS used in residential, commercial and light industry environment; German version	
EMC	DIN EN 50491-5-2: 2010	Allgemeine Anforderungen an die Elektrische Systemtechnik für Heim und Gebäude (ESHG) und an Systeme der Gebäudeautomation (GA) - Teil 5-2: EMV-Anforderungen an ESHG/GA für den Gebrauch in Wohnbereichen, Geschäfts- und Gewerbebereichen sowie in Kleinbetrieben; Deutsche Fassung EN 50491-5-2:2010	
EMC	EN 50491-5-3:2010	General requirements for Home and Building Electronic Systems (HBES) and Building Automation and Control Systems (BACS) - Part 5-3: EMC requirements for HBES/BACS used in industry environment; German version	
EMC	DIN EN 50491-5-3: 2010	Allgemeine Anforderungen an die Elektrische Systemtechnik für Heim und Gebäude (ESHG) und an Systeme der Gebäudeautomation (GA) - Teil 5-3: EMV-Anforderungen an ESHG/GA für den Gebrauch im Industriebereich; Deutsche Fassung EN 50491-5-3:2010	
EMC	EN 50561-1: 2013	Power line communication apparatus used in low-voltage installations - Radio disturbance characteristics - Limits and methods of measurement - Part 1: Apparatus for in-home use	

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EMC	DIN EN 50561-1: 2014	Kommunikationsgeräte auf elektrischen Niederspannungsnetzen - Funkstöreigenschaften - Grenzwerte und Messverfahren - Teil 1: Geräte für die Verwendung im Heimbereich; Deutsche Fassung EN 50561-1:2013	
EMC	CISPR 11:2016 +A1:2017 +A2:2019	Industrial, scientific and medical equipment - Radio-frequency disturbance characteristics - Limits and methods of measurement	Only 3m, 10m distance
EMC	EN 55011:2016 +A1:2017 EN 55011:2016 +A11:2020	Industrial, scientific and medical equipment - Radio-frequency disturbance characteristics - Limits and methods of measurement	Only 3m, 10m distance
EMC	DIN EN 55011: 2018 DIN EN 55011: 2018 +A11:2021	Industrielle, wissenschaftliche und medizinische Geräte - Funkstörungen - Grenzwerte und Messverfahren (CISPR 11:2015, modifiziert + A1:2017); Deutsche Fassung EN 55011:2016 +A1:2017	Only 3m, 10m distance
EMC	CISPR 14-1:2016	Electromagnetic compatibility - Requirements for household appliances, electric tools and similar apparatus - Part 1: Emission	Without IEC 61000-4-20 (TEM waveguides)
EMC	CISPR 14-1:2020	Electromagnetic compatibility - Requirements for household appliances, electric tools and similar apparatus - Part 1: Emission	Without IEC 61000-4-20 (TEM waveguides)
EMC	EN 55014-1: 2017 EN 55014-1: 2017 +A11:2020	Electromagnetic compatibility - Requirements for household appliances, electric tools and similar apparatus - Part 1: Emission	Without IEC 61000-4-20 (TEM waveguides) and IEC 61000-4-22 (FAR)
EMC	DIN EN 55014-1: 2018	Elektromagnetische Verträglichkeit - Anforderungen an Haushaltgeräte, Elektrowerkzeuge und ähnliche Elektrogeräte - Teil 1: Störaussendung (CISPR 14-1:2016 + COR1:2016); Deutsche Fassung EN 55014-1:2017	Without IEC 61000-4-20 (TEM waveguides) and IEC 61000-4-22 (FAR)

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EMC	DIN EN 55014-1: 2018 + A11:2021	Elektromagnetische Verträglichkeit - Anforderungen an Haushaltgeräte, Elektrowerkzeuge und ähnliche Elektrogeräte - Teil 1: Störaussendung; Deutsche Fassung EN 55014- 1:2017/A11:2020	Without IEC 61000-4-20 (TEM waveguides) and IEC 61000-4-22 (FAR)
EMC	CISPR 14-2: 2015	Electromagnetic compatibility - Requirements for household appliances, electric tools and similar apparatus - Part 2: Immunity - Product family standard	Without IEC 61000-4-22 (FAR)
EMC	CISPR 14-2: 2020	Electromagnetic compatibility - Requirements for household appliances, electric tools and similar apparatus - Part 2: Immunity - Product family standard	Without IEC 61000-4-22 (FAR)
EMC	EN 55014-2: 2015	Electromagnetic compatibility - Requirements for household appliances, electric tools and similar apparatus - Part 2: Immunity - Product family standard	Without IEC 61000-4-22 (FAR)
EMC	DIN EN 55014-2: 2016	Elektromagnetische Verträglichkeit - Anforderungen an Haushaltgeräte, Elektrowerkzeuge und ähnliche Elektrogeräte - Teil 2: Störfestigkeit - Produktfamilienorm (CISPR 14-2:2015); Deutsche Fassung EN 55014-2:2015	Without IEC 61000-4-22 (FAR)
EMC	CISPR 15:2013 CISPR 15:2018+ ISH1:2019	Limits and methods of measurement of radio disturbance characteristics of electrical lighting and similar equipment	
EMC	EN 55015:2013 +A1:2015 EN IEC 55015:2019 +A11:2020	Limits and methods of measurement of radio disturbance characteristics of electrical lighting and similar equipment	
EMC	DIN EN 55014-1: 2018 + A11:2021	Elektromagnetische Verträglichkeit - Anforderungen an Haushaltgeräte, Elektrowerkzeuge und ähnliche Elektrogeräte - Teil 1: Störaussendung; Deutsche Fassung EN 55014- 1:2017/A11:2020	Without IEC 61000-4-20 (TEM) and IEC 6100-4-22 (FAR)

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EMC	DIN EN 55015:2016	Grenzwerte und Messverfahren für Funkstörungen von elektrischen Beleuchtungseinrichtungen und ähnlichen Elektrogeräten (CISPR 15:2013 + IS1:2013 + IS2:2013 + A1:2015); Deutsche Fassung EN 55015:2013 + A1:2015	
EMC	DIN EN IEC 55015: 2020	Grenzwerte und Messverfahren für Funkstörungen von elektrischen Beleuchtungseinrichtungen und ähnlichen Elektrogeräten (CISPR 15:2018 + ISH1:2019); Deutsche Fassung EN IEC 55015:2019 + A11:2020	
EMC	CISPR 16-2-3:2016 + A1:2019	Specification for radio disturbance and immunity measuring apparatus and methods – Part 2-3: Methods of measurement of disturbances and immunity – Radiated disturbance measurements	Without FAR, TEM waveguide and Reverberation chamber
EMC	EN 55016-2-3: 2017 + A1:2019	Specification for radio disturbance and immunity measuring apparatus and methods – Part 2-3: Methods of measurement of disturbances and immunity – Radiated disturbance measurements (CISPR 16-2-3_2016 + A1:2019)	Without FAR, TEM waveguide and Reverberation chamber
EMC	DIN EN 55016-2-3: 2020	Anforderungen an Geräte und Einrichtungen sowie Festlegung der Verfahren zur Messung der hochfrequenten Störaussendung (Funkstörungen) und Störfestigkeit – Messung der gestrahlten Störaussendung (CISPR 16-2-3_2016 + A1:2019; German Version EN 55016-2-3:2016 + A1:2019	Without FAR, TEM waveguide and Reverberation chamber
EMC	CISPR 22:2008	Information technology equipment - Radio disturbance characteristics - Limits and methods of measurement	
EMC	EN 55022:2010	Information technology equipment - Radio disturbance characteristics - Limits and methods of measurement	

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EMC	DIN EN 55022: 2011	Einrichtungen der Informationstechnik - Funkstöreigenschaften - Grenzwerte und Messverfahren (CISPR 22:2008, modifiziert); Deutsche Fassung EN 55022:2010	
EMC	CISPR 24:2010+A1: 2015	Information technology equipment - Immunity characteristics - Limits and methods of measurement	
EMC	EN 55024:2010 +A1:2015	Information technology equipment - Immunity characteristics - Limits and methods of measurement	
EMC	DIN EN 55024: 2016	Einrichtungen der Informationstechnik - Störfestigkeitseigenschaften - Grenzwerte und Prüfverfahren (CISPR 24:2010 + Cor.:2011 + A1:2015); Deutsche Fassung EN 55024:2010 + A1:2015	
EMC	CISPR 25, Ed.4.0:2016 +COR1:2017	Vehicles, boats and internal combustion engines - Radio disturbance characteristics - Limits and methods of measurement for the protection of on- board receivers	
EMC	CISPR 25, Ed. 5.0: 2021-12	Vehicles, boats and internal combustion engines - Radio disturbance characteristics - Limits and methods of measurement for the protection of on- board receivers	
EMC	EN 55025:2017 + AC: 2017	Vehicles, boats and internal combustion engines - Radio disturbance characteristics - Limits and methods of measurement for the protection of on- board receivers	
EMC	DIN EN 55025: 2018	Fahrzeuge, Boote und von Verbrennungs-motoren angetriebene Geräte - Funkstöreigenschaften - Grenzwerte und Messverfahren für den Schutz von an Bord befindlichen Empfängern (CISPR 25:2016 + COR1:2017); Deutsche Fassung EN 55025:2017 + AC:2017	

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EMC	CISPR 32:2012	Electromagnetic compatibility of multimedia equipment - Emission requirements	
EMC	CISPR 32:2015 CISPR 32:2015 + AMD1:2019	Electromagnetic compatibility of multimedia equipment - Emission requirements	Without FAR. Without "Home satellite receiving systems"
EMC	EN 55032:2012	Electromagnetic compatibility of multimedia equipment - Emission requirements	
EMC	EN 55032:2015 EN 55032:2015 + A11:2020	Electromagnetic compatibility of multimedia equipment - Emission requirements	Without FAR. Without "Home satellite receiving systems"
EMC	DIN EN 55032:2012	Elektromagnetische Verträglichkeit von Multimediageräten und -einrichtungen - Anforderungen an die Störaussendung (CISPR 32:2012); Deutsche Fassung EN 55032:2012	
EMC	DIN EN 55032:2016	Elektromagnetische Verträglichkeit von Multimediageräten und -einrichtungen - Anforderungen an die Störaussendung (CISPR 32:2015); Deutsche Fassung EN 55032:2015	Without FAR. Without "Home satellite receiving systems"
EMC	CISPR 35:2016	Electromagnetic compatibility of multimedia equipment - Immunity requirements	Without IEC 61000-4-20 (TEM waveguides) Without IEC 61000-4-21 (Reverberation chamber) Without IEC 61000-4-22 (FAR)

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EMC	EN 55035:2017 EN 55035:2017 + A11:2020	Electromagnetic compatibility of multimedia equipment - Immunity requirements	Without IEC 61000-4-20 (TEM waveguides) Without IEC 61000-4-21 (Reverberation chamber) Without IEC 61000-4-22 (FAR)
EMC	DIN EN 55035: 2018	Elektromagnetische Verträglichkeit von Multimediageräten. Anforderungen zur Störfestigkeit (CISPR 35:2016, modifiziert); Deutsche Fassung EN 55035:2017	Without IEC 61000-4-20 (TEM waveguides) Without IEC 61000-4-21 (Reverberation chamber) Without IEC 61000-4-22 (FAR)
EMC	CISPR 36: 2020	Electric and hybrid electric road vehicles — Radio disturbance characteristics — Limits and methods of measurement for the protection of off-board receivers below 30 MHz	
EMC	EN IEC 55036:2020	Electric and hybrid electric road vehicles — Radio disturbance characteristics — Limits and methods of measurement for the protection of off-board receivers below 30 MHz	
EMC	DIN EN IEC 55036:2021	Elektro- und Hybrid-Straßenfahrzeuge - Funkstöreigenschaften - Grenzwerte und Messverfahren zum Schutz von außerhalb befindlichen Empfängern unterhalb 30 MHz (CISPR 36:2020); Deutsche Fassung EN IEC 55036:2020	
EMC	EN 55103-1: 2009+A1: 2012	Electromagnetic compatibility - Product family standard for audio, video, audio- visual and entertainment lighting control apparatus for professional use - Part 1: Emissions	

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EMC	DIN EN 55103-1:2013	Elektromagnetische Verträglichkeit - Produktfamilienorm für Audio-, Video- und audiovisuelle Einrichtungen sowie für Studio-Lichtsteuereinrichtungen für professionellen Einsatz - Teil 1: Störaussendungen; Deutsche Fassung EN 55103-1:2009 + A1:2012	
EMC	EN 55103-2: 2009	Electromagnetic compatibility - Product family standard for audio, video, audio-visual and entertainment lighting control apparatus for professional use - Part 2: Immunity	
EMC	DIN EN 55103-2:2010	Elektromagnetische Verträglichkeit - Produktfamilienorm für Audio-, Video- und audiovisuelle Einrichtungen sowie für Studio-Lichtsteuereinrichtungen für professionellen Einsatz - Teil 2: Störfestigkeit; Deutsche Fassung EN 55103-2:2009	
EMC	IEC 60146-1-1: 2009	Semiconductor converters - General requirements and line commutated converters - Part 1-1: Specification of basic requirements	Only Annex A "Harmonics and interharmonics"
EMC	EN 60146-1-1: 2010	Semiconductor converters - General requirements and line commutated converters - Part 1-1: Specification of basic requirements	Only Annex A "Harmonics and interharmonics"
EMC	DIN EN 60146-1-1: 2011	Halbleiter-Stromrichter - Allgemeine Anforderungen und netzgeführte Stromrichter - Teil 1-1: Festlegung der Grundanforderungen (IEC 60146-1-1:2009); Deutsche Fassung EN 60146-1-1:2010	Only Annex A "Harmonics and interharmonics"
EMC	IEC 60335-1: 2010 +A1:2013 +A2:2016	Household and similar electrical appliances Safety - Part 1: General requirements	Only chapter 19.11.4
EMC	EN 60335-1: 2012 +A11:2014 +A12:2017	Household and similar electrical appliances Safety - Part 1: General requirements	Only chapter 19.11.4

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EMC	IEC 61000-3-2: 2014 IEC 61000-3-2: 2018  IEC 61000-3-2: 2018+ AMD1:2020	Electromagnetic compatibility (EMC) - Part 3-2: Limits - Limits for harmonic current emissions (equipment input current $\leq 16$ A per phase)	
EMC	EN 61000-3-2: 2014 EN IEC 61000-3-2: 2019	Electromagnetic compatibility (EMC) - Part 3-2: Limits - Limits for harmonic current emissions (equipment input current $\leq 16$ A per phase)	
EMC	DIN EN 61000-3-2: 2015	Elektromagnetische Verträglichkeit (EMV) - Teil 3-2: Grenzwerte - Grenzwerte für Oberschwingungsströme (Geräte-Eingangsstrom $\leq 16$ A je Leiter) (IEC 61000-3-2:2014); Deutsche Fassung EN 61000-3-2:2014	
EMC	DIN EN 61000-3-2: 2019	Elektromagnetische Verträglichkeit (EMV) - Teil 3-2: Grenzwerte - Grenzwerte für Oberschwingungsströme (Geräte- Eingangsstrom $\leq 16$ A je Leiter) (IEC 61000-3-2:2018); Deutsche Fassung EN IEC 61000-3-2:2019	
EMC	IEC 61000-3-3:2013 (Ed3) IEC 61000-3-3:2013+ A1:2017 IEC 61000-3-3:2013+ A1:2017+A2:2021	Electromagnetic compatibility (EMC) - Part 3-3: Limits - Limitation of voltage changes, voltage fluctuations and flicker in public low-voltage supply systems, for equipment with rated current $\leq 16$ A per phase and not subject to conditional connection	
EMC	EN 61000-3-3: 2013 EN 61000-3-3: 2013+ A1:2019	Electromagnetic compatibility (EMC) - Part 3-3: Limits - Limitation of voltage changes, voltage fluctuations and flicker in public low-voltage supply systems, for equipment with rated current $\leq 16$ A per phase and not subject to conditional connection	

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EMC	DIN EN 61000-3-3: 2014	Elektromagnetische Verträglichkeit (EMV) - Teil 3-3: Grenzwerte - Begrenzung von Spannungs-änderungen, Spannungsschwankungen und Flicker in öffentlichen Niederspannungs-Versorgungsnetzen für Geräte mit einem Bemessungsstrom $\leq 16$ A je Leiter, die keiner Sonderanschlussbedingung unterliegen (IEC 61000-3-3:2013); Deutsche Fassung EN 61000-3-3:2013	
EMC	DIN EN 61000-3-3: 2020	Elektromagnetische Verträglichkeit (EMV) - Teil 3-3: Grenzwerte - Begrenzung von Spannungs-änderungen, Spannungsschwankungen und Flicker in öffentlichen Niederspannungs-Versorgungsnetzen für Geräte mit einem Bemessungsstrom $\sim 16$ A je Leiter, die keiner Sonderanschlussbedingung unterliegen (IEC 61000-3-3:2013 + A1:2017); Deutsche Fassung EN 61000-3-3:2013 + A1:2019	
EMC	IEC 61000-3-11: 2017	Electromagnetic compatibility (EMC) - Part 3-11: Limits; Limitation of voltage changes, voltage fluctuations and flicker in public low-voltage supply systems; Equipment with rated current $\leq 75$ A and subject to conditional connection	
EMC	EN 61000-3-11:2000 prEN EN 61000-3-11: 2016 EN IEC 61000-3-11: 2019	Electromagnetic compatibility (EMC) - Part 3-11: Limits; Limitation of voltage changes, voltage fluctuations and flicker in public low-voltage supply systems; Equipment with rated current $\leq 75$ A and subject to conditional connection	

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EMC	DIN EN 61000-3-11: 2001	Elektromagnetische Verträglichkeit (EMV) - Grenzwerte - Begrenzung von Spannungs-änderungen, Spannungsschwankungen und Flicker in öffentlichen Niederspannungs-Versorgungsnetzen - Geräte und Einrichtungen mit einem Bemessungsstrom $\leq 75$ A, die einer Sonderanschlussbedingung unterliegen	
EMC	DIN EN 61000-3-11: 2021	Elektromagnetische Verträglichkeit (EMV) - Teil 3-11: Grenzwerte - Begrenzung von Spannungsänderungen, Spannungsschwankungen und Flicker in öffentlichen Niederspannungs-Versorgungsnetzen für Geräte mit einem Bemessungsstrom $\leq 75$ A je Leiter, die einer Sonderanschlussbedingung unterliegen (IEC 61000-3-11:2017); Deutsche Fassung EN IEC 61000-3-11:2019	
EMC	IEC 61000-3-12: 2011	Electromagnetic compatibility (EMC) - Part 3-12: Limits - Limits for harmonic currents produced by equipment connected to public low-voltage systems with input current $> 16$ A and $\leq 75$ A per phase	
EMC	EN 61000-3-12: 2011	Electromagnetic compatibility (EMC) - Part 3-12: Limits - Limits for harmonic currents produced by equipment connected to public low-voltage systems with input current $> 16$ A and $\leq 75$ A per phase	

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EMC	DIN EN 61000-3-12: 2012	Elektromagnetische Verträglichkeit (EMV) - Teil 3-12: Grenzwerte - Grenzwerte für Oberschwingungsströme, verursacht von Geräten und Einrichtungen mit einem Eingangsstrom > 16A und ≤ 75A je Leiter, die zum Anschluss an öffentliche Niederspannungsnetze vorgesehen sind (IEC 61000-3-12:2011); Deutsche Fassung EN 61000-3-12:2011	
EMC	IEC 61000-5-7: 2001	Electromagnetic compatibility (EMC) - Part 5-7: Installation and mitigation guidelines; Degrees of protection provided by enclosures against electromagnetic disturbances (EM-code)	
EMC	EN 61000-5-7: 2001	Electromagnetic compatibility (EMC) - Part 5-7: Installation and mitigation guidelines; Degrees of protection provided by enclosures against electromagnetic disturbances (EM-code)	
EMC	DIN EN 61000-5-7: 2001	Elektromagnetische Verträglichkeit (EMV) - Teil 5-7: Installationsrichtlinien und Abhilfemaßnahmen; Schutzarten durch Gehäuse gegen elektromagnetische Störgrößen (EM-Code) (IEC 61000-5-7:2001); Deutsche Fassung EN 61000-5-7:2001	
EMC	IEC 61131-2: 2020	Industrial-process measurement and control — Programmable controllers — Part 2: Equipment requirements and tests	Only Sec 6.2 and 9
EMC	EN 61131-2: 2007	Programmable controllers - Part 2: Equipment requirements and tests	Only Sec 6.4, 8 and 9
EMC	DIN EN 61131-2:2008	Speicherprogrammierbare Steuerungen - Teil 2: Betriebsmittelanforderungen und Prüfungen (IEC 61131-2:2007); Deutsche Fassung EN 61131-2:2007	Only Sec 6.4, 8 and 9
EMC	IEC 61204-3: 2016	Low-voltage power supplies DC output - Part 3: Electromagnetic compatibility (EMC)	

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EMC	EN IEC 61204-3 :2018	Low-voltage power supplies DC output - Part 3: Electromagnetic compatibility (EMC)	
EMC	DIN EN IEC 61204-3: 2018	Stromversorgungsgeräte für Niederspannung mit Gleichstromausgang - Teil 3: Elektromagnetische Verträglichkeit (EMV) (IEC 61204- 3:2016); Deutsche Fassung EN IEC 61204- 3:2018	
EMC	IEC 61326-1: 2012 IEC 61326-1: 2020	Electrical equipment for measurement, control and laboratory use – EMC requirements – Part 1: General requirements	
EMC	EN 61326-1: 2013 EN IEC 61326-1:2021	Electrical equipment for measurement, control and laboratory use – EMC requirements – Part 1: General requirements	
EMC	DIN EN 61326-1:2013	Elektrische Mess-, Steuer-, Regel- und Laborgeräte - EMV-Anforderungen - Teil 1: Allgemeine Anforderungen (IEC 61326- 1:2012); Deutsche Fassung EN 61326- 1:2013	
EMC	IEC 61326-2-1: 2012 IEC 61326-2-1: 2020	Electrical equipment for measurement, control and laboratory use – EMC requirements – Part 2-1: Particular requirements – Test configurations, operational conditions and performance criteria for sensitive test and measurement equipment for EMC unprotected applications	
EMC	EN 61326-2-1: 2013 EN IEC 61326-2-1:2021	Electrical equipment for measurement, control and laboratory use – EMC requirements – Part 2-1: Particular requirements – Test configurations, operational conditions and performance criteria for sensitive test and measurement equipment for EMC unprotected applications	

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EMC	DIN EN 61326-2-1: 2013	Elektrische Mess-, Steuer-, Regel- und Laborgeräte - EMV-Anforderungen - Teil 2-1: Besondere Anforderungen - Prüfanordnung, Betriebsbedingungen und Leistungsmerkmale für empfindliche Prüf- und Messgeräte für Anwendungen ohne EMV-Schutzmaßnahmen (IEC 61326-2-1:2012); Deutsche Fassung EN 61326-2-1:2013	
EMC	IEC 61326-2-2: 2012 IEC 61326-2-2: 2020	Electrical equipment for measurement, control and laboratory use – EMC requirements – Part 2-2: Particular requirements – Test configurations, operational conditions and performance criteria for portable test, measuring and monitoring equipment used in low-voltage distribution systems	
EMC	EN 61326-2-2: 2013 EN IEC 61326-2-2:2021	Electrical equipment for measurement, control and laboratory use – EMC requirements – Part 2-2: Particular requirements – Test configurations, operational conditions and performance criteria for portable test, measuring and monitoring equipment used in low-voltage distribution systems	
EMC	DIN EN 61326-2-2: 2013	Elektrische Mess-, Steuer-, Regel- und Laborgeräte - EMV-Anforderungen - Teil 2-2: Besondere Anforderungen - Prüfanordnung, Betriebsbedingungen und Leistungsmerkmale für ortsveränderliche Prüf-, Mess- und Überwachungsgeräte für den Gebrauch in Niederspannungs-Stromversorgungsnetzen (IEC 61326-2-2:2012); Deutsche Fassung EN 61326-2-2:2013	

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EMC	IEC 61326-2-3: 2012 IEC 61326-2-3: 2020	Electrical equipment for measurement, control and laboratory use – EMC requirements – Part 2-3: Particular requirements – Test configuration, operational conditions and performance criteria for transducers with integrated or remote signal conditioning	
EMC	EN 61326-2-3: 2013 EN IEC 61326-2-3:2021	Electrical equipment for measurement, control and laboratory use – EMC requirements – Part 2-3: Particular requirements – Test configuration, operational conditions and performance criteria for transducers with integrated or remote signal conditioning	
EMC	DIN EN 61326-2-3: 2013	Elektrische Mess-, Steuer-, Regel- und Laborgeräte - EMV-Anforderungen - Teil 2-3: Besondere Anforderungen - Prüfanordnung, Betriebsbedingungen und Leistungsmerkmale für Messgrößenumformer mit integrierter oder abgesetzter Signalaufbereitung (IEC 61326-2-3:2012); Deutsche Fassung EN 61326-2-3:2013	
EMC	IEC 61326-2-4: 2012 IEC 61326-2-4: 2020	Electrical equipment for measurement, control and laboratory use – EMC requirements – Part 2-4: Particular requirements – Test configurations, operational conditions and performance criteria for insulation monitoring devices according to IEC 61557-8 and for equipment for insulation fault location according to IEC 61557-9	
EMC	EN 61326-2-4: 2013 EN IEC 61326-2-4:2021	Electrical equipment for measurement, control and laboratory use – EMC requirements – Part 2-4: Particular requirements – Test configurations, operational conditions and performance criteria for insulation monitoring devices according to IEC 61557-8 and for equipment for insulation fault location according to IEC 61557-9	

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EMC	DIN EN 61326-2-4: 2013	Elektrische Mess-, Steuer-, Regel- und Laborgeräte - EMV-Anforderungen - Teil 2-4: Besondere Anforderungen - Prüfanordnung, Betriebsbedingungen und Leistungsmerkmale für Isolationsüberwachungsgeräte gemäß IEC 61557-8 und Geräte zur Isolationsfehlerortung gemäß IEC 61557-9 (IEC 61326-2-4:2012); Deutsche Fassung EN 61326-2-4:2013	
EMC	IEC 61326-2-5: 2012 IEC 61326-2-5: 2020	Electrical equipment for measurement, control and laboratory use - EMC requirements - Part 2-5: Particular requirements - Test configurations, operational conditions and performance criteria for field devices with field bus interfaces according to IEC 61784-1	
EMC	EN 61326-2-5: 2013 EN IEC 61326-2-5:2021	Electrical equipment for measurement, control and laboratory use - EMC requirements - Part 2-5: Particular requirements - Test configurations, operational conditions and performance criteria for field devices with field bus interfaces according to IEC 61784-1	
EMC	DIN EN 61326-2-5: 2013	Elektrische Mess-, Steuer-, Regel- und Laborgeräte - EMV-Anforderungen - Teil 2-5: Besondere Anforderungen - Prüfanordnungen, Betriebsbedingungen und Leistungsmerkmale für Feldgeräte mit Feldbus-Schnittstellen gemäß IEC 61784-1 (IEC 61326-2-5:2012); Deutsche Fassung EN 61326-2-5:2013	
EMC	IEC 61326-3-1:2017	Electrical equipment for measurement, control and laboratory use - EMC requirements - Part 3-1: Immunity requirements for safety-related systems and for equipment intended to perform safety-related functions (functional safety) - General industrial applications	

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EMC	EN 61326-3-1:2017	Electrical equipment for measurement, control and laboratory use - EMC requirements - Part 3-1: Immunity requirements for safety-related systems and for equipment intended to perform safety-related functions (functional safety) - General industrial applications	
EMC	DIN EN 61326-3-1: 2018	Elektrische Mess-, Steuer-, Regel- und Laborgeräte - EMV-Anforderungen - Teil 3-1: Störfestigkeitsanforderungen für sicherheitsbezogene Systeme und für Geräte, die für sicherheitsbezogene Funktionen vorgesehen sind (Funktionale Sicherheit) - Allgemeine industrielle Anwendungen (IEC 61326-3-1:2017); Deutsche Fassung EN 61326-3-1:2017	
EMC	IEC 61326-3-2:2017	Electrical equipment for measurement, control and laboratory use - EMC requirements - Part 3-2: Immunity requirements for safety-related systems and for equipment intended to perform safety-related functions (functional safety) - Industrial applications with specified electromagnetic environment	
EMC	EN IEC 61326-3-2: 2018	Electrical equipment for measurement, control and laboratory use - EMC requirements - Part 3-2: Immunity requirements for safety-related systems and for equipment intended to perform safety-related functions (functional safety) - Industrial applications with specified electromagnetic environment	

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EMC	DIN EN 61326-3-2: 2019	Elektrische Mess-, Steuer-, Regel- und Laborgeräte - EMV-Anforderungen - Teil 3-2: Störfestigkeitsanforderungen für sicherheitsbezogene Systeme und für Geräte, die für sicherheitsbezogene Funktionen vorgesehen sind (Funktionale Sicherheit) - Industrielle Anwendungen in spezifizierter elektromagnetischer Umgebung (IEC 61326-3-2:2017); Deutsche Fassung EN IEC 61326-3-2:2018	
EMC	IEC 61496-1: 2012 IEC 61496-1:2020	Safety of machinery - Electro-sensitive protective equipment - Part 1: General requirements and tests	Only section 4.3.2
EMC	EN 61496-1: 2013 EN IEC 61496-1:2020	Safety of machinery - Electro-sensitive protective equipment - Part 1: General requirements and tests	Only section 4.3.2
EMC	DIN EN 61496-1:2014	Sicherheit von Maschinen - Berührungslos wirkende Schutzeinrichtungen - Teil 1: Allgemeine Anforderungen und Prüfungen (IEC 61496-1:2012); Deutsche Fassung EN 61496-1:2013	Only section 4.3.2
EMC	DIN EN IEC 61496-1: 2021	Sicherheit von Maschinen – Berührungslos wirkende Schutzeinrichtungen – Teil 1: Allgemeine Anforderungen und Prüfungen (IEC 61496-1:2020); Deutsche Fassung EN IEC 61496-1:2020	Only section 4.3.2
EMC	IEC 61547:2009 IEC 61547:2020	Equipment for general lighting purposes - EMC immunity requirements	
EMC	EN 61547:2009	Equipment for general lighting purposes - EMC immunity requirements	
EMC	DIN EN 61547: 2010	Einrichtungen für allgemeine Beleuchtungs-zwecke - EMV-Störfestigkeitsanforderungen (IEC 61547:2009); Deutsche Fassung EN 61547:2009	

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EMC	IEC 61587-3: 2013	Mechanical structures for electronic equipment - Tests for IEC 60917 and IEC 60297 - Part 3: Electromagnetic shielding performance tests for cabinets, racks and subracks	
EMC	EN 61587-3: 2013	Mechanical structures for electronic equipment - Tests for IEC 60917 and IEC 60297 - Part 3: Electromagnetic shielding performance tests for cabinets, racks and subracks	
EMC	DIN EN 61587-3:2013	Mechanische Bauweisen für elektronische Einrichtungen - Prüfungen für IEC 60917 und IEC 60297 - Teil 3: Schirmdämpfungsprüfungen für Schränke und Baugruppenträger (IEC 61587-3:2013); Deutsche Fassung EN 61587-3:2013	
EMC	IEC 61800-3:2017	Adjustable speed electrical power drive systems - Part 3: EMC requirements and specific test methods	Without PDS of rated voltage above 1000 V
EMC	EN IEC 61800-3:2018	Adjustable speed electrical power drive systems - Part 3: EMC requirements and specific test methods	Without PDS of rated voltage above 1000 V
EMC	DIN EN IEC 61800-3: 2019	Drehzahlveränderbare elektrische Antriebssysteme - Teil 3: EMV Anforderungen einschließlich spezieller Prüfverfahren (IEC 61800-3:2017); Deutsche Fassung EN IEC 61800-3:2018	Without PDS of rated voltage above 1000 V
EMC	IEC 61850-3: 2014	Communication networks and systems for power utility automation – Part 3: General requirements	Only chapter 6.7 EMC
EMC	EN 61850-3: 2014	Communication networks and systems for power utility automation – Part 3: General requirements	Only chapter 6.7 EMC
EMC	DIN EN 61850-3:2014	Kommunikationsnetze und -systeme für die Automatisierung in der elektrischen Energieversorgung - Teil 3: Allgemeine Anforderungen (IEC 61850-3:2013); Deutsche Fassung EN 61850-3:2014	Only chapter 6.7 EMC

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EMC	IEC 61851-1: 2010	Electric vehicle conductive charging system - Part 1: General requirements	Only chapter 11.12 EMC
EMC	EN 61851-1: 2011	Electric vehicle conductive charging system - Part 1: General requirements	Only chapter 11.12 EMC
EMC	DIN EN 61851-1:2012	Elektrische Ausrüstung von Elektro-Straßenfahrzeugen - Konduktive Ladesysteme für Elektrofahrzeuge - Teil 1: Allgemeine Anforderungen (IEC 61851-1:2010); Deutsche Fassung EN 61851-1:2011	Only chapter 11.12 EMC
EMC	IEC 61851-21: 2001	Electrical equipment of electric road vehicles - Electric vehicles conductive charging system - Part 2-1: Electric vehicle requirements for conductive connection to an a.c./d.c. supply	Only chapter 9 EMC
EMC	EN 61851-21: 2002	Electrical equipment of electric road vehicles - Electric vehicles conductive charging system - Part 2-1: Electric vehicle requirements for conductive connection to an a.c./d.c. supply	Only chapter EMC
EMC	DIN EN 61851-21: 2002	Elektrische Ausrüstung von Elektro-Straßenfahrzeugen - Konduktive Ladesysteme für Elektrofahrzeuge - Teil 2-1: Anforderung eines Elektrofahrzeuges für Konduktive Verbindung an AC/DC-Versorgung (IEC 61851-21:2001); Deutsche Fassung EN 61851-21:2002	Only chapter 9 EMC
EMC	IEC 61851-21-1: 2017	Electric vehicle conductive charging systems - Part 21-1: Electric vehicle onboard charger EMC requirements for conductive connection to an a.c./d.c. supply	
EMC	EN 61851-21-1 :2017 + AC:2017	Electric vehicle conductive charging systems - Part 21-1: Electric vehicle onboard charger EMC requirements for conductive connection to an a.c./d.c. supply	

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EMC	DIN EN 61851-21-1: 2018	Konduktive Ladesysteme für Elektrofahrzeuge - Teil 21-1: EMV-Anforderungen an Bordlade-geräte für Elektrofahrzeuge mit Wechselstrom-/Gleichstromversorgung (IEC 61851-21-1:2017); Deutsche Fassung EN 61851-21-1:2017 + AC:2017	
EMC	IEC 61851-21-2: 2018	Electric vehicle conductive charging system - Part 21-2: Electric vehicle requirements for conductive connection to an AC/DC supply - EMC requirements for off board electric vehicle charging systems	
EMC	EN IEC 61851-21-2:2021	Electric vehicle conductive charging system - Part 21-2: Electric vehicle requirements for conductive connection to an AC/DC supply - EMC requirements for off board electric vehicle charging systems	
EMC	DIN EN IEC 61851-21-2:2021	Konduktive Ladesysteme für Elektrofahrzeuge - Teil 21-2: Anforderungen für den konduktiven Anschluss von Elektrofahrzeugen an eine Wechsel-/Gleichstromversorgung - EMV-Anforderungen an externe Ladesysteme für Elektrofahrzeuge (IEC 61851-21-2:2018); Deutsche Fassung EN IEC 61851-21-2:2021	
EMC	IEC 61851-22: 2001	Electric vehicle conductive charging system - Part 22: AC electric vehicle charging station / Applies in conjunction with IEC 61851-1 (2001-01)	Only chapter 11.3 EMC
EMC	EN 61851-22: 2002	Electric vehicle conductive charging system - Part 22: AC electric vehicle charging station / Applies in conjunction with IEC 61851-1 (2001-01)	Only chapter 11.3 EMC

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EMC	DIN EN 61851-22: 2002	Elektrische Ausrüstung von Elektro- Straßenfahrzeugen - Konduktive Ladesysteme für Elektrofahrzeuge - Teil 2-2: Wechselstrom-Ladestation für Elektrofahrzeuge (IEC 61851-22:2001); Deutsche Fassung EN 61851-22:2002	Only chapter 11.3 EMC
EMC	IEC 62040-2: 2016	Uninterruptible power systems (UPS) - Part 2: Electromagnetic compatibility (EMC) requirements	Max. current 3x 125 A
EMC	EN IEC 62040-2: 2018	Uninterruptible power systems (UPS) - Part 2: Electromagnetic compatibility (EMC) requirements	Max. current 3x 125 A
EMC	DIN EN IEC 62040: 2019	Unterbrechungsfreie Stromversorgungssysteme (USV) - Teil 2: Anforderungen an die elektro- magnetische Verträglichkeit (EMV) (IEC 62040-2:2016); Deutsche Fassung EN IEC 62040-2:2018	Max. current 3x 125 A
EMC	IEC 62301:2011	Household electrical appliances - Measurement of standby power	
EMC	ITU-T K.20:2019-11	Resistibility of telecommunication equipment installed in a telecommunication centre to overvoltages and overcurrents	Without pulse > 10 kA 8/20µs Without Test No. 7.3 (USB shielded cable to earth)
EMC	ITU-T K.21: 2019 + A1:2020	Resistibility of telecommunication equipment installed in customer premises to overvoltages and overcurrents	Without pulse > 10 kA 8/20µs Without Test No. 7.3 (USB shielded cable to earth) Without Test 13 kV (10/700µs) acc. Annex A
EMC	ITU-T K.43:2009	Immunity requirements for telecommunication equipment	

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EMC	ITU-T K.44:2019	Resistibility tests for telecommunication equipment exposed to overvoltages and overcurrents – Basic Recommendation	Without pulse > 10 kA 8/20µs Without Test No. 7.3 (USB shielded cable to earth)
EMC	ITU-T K.45:2019 +A1:2020	Resistibility of telecommunication equipment installed in the access and trunk networks to overvoltages and overcurrents	Without pulse > 10 kA 8/20µs Without Test 13 kV (10/700µs) acc. Annex A
EMC	ITU-T K.48:2006	EMC requirements for each telecommunication network equipment - Product family Recommendation	
EMC	ITU-T K.54:2004	Conducted immunity test method and level at fundamental power frequencies	
EMC	VdS 2110:2017	Richtlinien für Einbruchmeldeanlagen; Schutz gegen Umwelteinflüsse; Anforderungen und Prüfmethoden	Only chapter 5.1.6, EMVC
EMC	VdS 2115:2015	Richtlinien für Einbruchmeldeanlagen, Energieversorgungen; Anforderungen und Prüfmethoden	Only chapter 16, EMC
EMC	VdS 2195 :2001	Richtlinien für Einbruchmeldeanlagen, Energieversorgungsgeräte der Klasse A, Anforderungen	Only chapter 5.5, EMC
<b>1.4. EMC for radio equipment and services (RED Art. 3.1b and Art. 3.2)</b>			
EMC (radio equipment)	ETSI EN 301 489-1 V2.1.1: 2017	Electromagnetic Compatibility (EMC) standard for radio equipment and services; Part 1: Common technical requirements; Harmonised Standard covering the essential requirements of article 3.1(b) of Directive 2014/53/EU and the essential requirements of article 6 of Directive 2014/30/EU	
EMC (radio equipment)	ETSI EN 301 489-1 V2.2.3: 2019	Electromagnetic Compatibility (EMC) standard for radio equipment and services; Part 1: Common technical requirements; Harmonised Standard for Electromagnetic Compatibility	

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EMC (radio equipment)	ETSI EN 301 489-3 V2.1.1: 2019	Electromagnetic Compatibility (EMC) standard for radio equipment and services; Part 3: Specific conditions for Short-Range Devices (SRD) operating on frequencies between 9 kHz and 246 GHz; Harmonised Standard covering the essential requirements of article 3.1(b) of Directive 2014/53/EU	
EMC (radio equipment)	ETSI EN 301 489-4 V3.2.1: 2019	Electromagnetic Compatibility (EMC) standard for radio equipment and services; Part 4: Specific conditions for fixed radio links and ancillary equipment; Harmonised Standard covering the essential requirements of article 3.1(b) of Directive 2014/53/EU	
EMC (radio equipment)	ETSI EN 301 489-4 V3.3.1: 2021	Electromagnetic Compatibility (EMC) standard for radio equipment and services; Part 4: Specific conditions for fixed radio links and ancillary equipment; Harmonised Standard for Electro Magnetic Compatibility	
EMC (radio equipment)	ETSI EN 301 489-6 V2.2.1: 2019	Electromagnetic Compatibility (EMC) standard for radio equipment and services; Part 6: Specific conditions for Digital Enhanced Cordless Telecommunications (DECT) equipment; Harmonised Standard covering the essential requirements of article 3.1(b) of Directive 2014/53/EU	
EMC (radio equipment)	ETSI EN 301 489-7 V1.3.1: 2005	Electromagnetic compatibility and Radio spectrum Matters (ERM); Electromagnetic Compatibility (EMC) standard for radio equipment and services; Part 7: Specific conditions for mobile and portable radio and ancillary equipment of digital cellular radio telecommunications systems (GSM and DCS)	Limited to Emission tests Chapter 7.1

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EMC (radio equipment)	ETSI EN 301 489-17 V3.1.1: 2017	Electromagnetic Compatibility (EMC) standard for radio equipment and services; Part 17: Specific conditions for Broadband Data Transmission Systems; Harmonised Standard covering the essential requirements of article 3.1(b) of Directive 2014/53/EU	
EMC (radio equipment)	ETSI EN 301 489-17 V3.2.4: 2020	Electromagnetic Compatibility (EMC) standard for radio equipment and services; Part 17: Specific conditions for Broadband Data Transmission Systems; Harmonised Standard for Electromagnetic Compatibility	
EMC (radio equipment)	ETSI EN 301 489-19 V2.1.1: 2019	Electromagnetic Compatibility (EMC) standard for radio equipment and services; Part 19: Specific conditions for Receive Only Mobile Earth Stations (ROMES) operating in the 1,5 GHz band providing data communications and GNSS receivers operating in the RNSS band (ROGNSS) providing positioning, navigation, and timing data; Harmonised Standard covering the essential requirements of article 3.1(b) of Directive 2014/53/EU	
EMC (radio equipment)	ETSI EN 301 489-24 V1.5.1: 2019	Electromagnetic compatibility and Radio spectrum Matters (ERM); Electromagnetic Compatibility (EMC) standard for radio equipment and services; Part 24: Specific conditions for IMT-2000 CDMA Direct Spread (UTRA and E-UTRA) for Mobile and portable (UE) radio and ancillary equipment	Limited to Emission tests Chapter 7.1
EMC (radio equipment)	ETSI EN 301 489-25 V2.3.2: 2005	Electromagnetic compatibility and Radio spectrum Matters (ERM); Electromagnetic Compatibility (EMC) standard for radio equipment and services; Part 25: Specific conditions for CDMA 1x spread spectrum Mobile Stations and ancillary equipment	Limited to Emission tests Chapter 7.1

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EMC (radio equipment)	ETSI EN 301 489-34 V1.4.1: 2013	Electromagnetic compatibility and Radio spectrum Matters (ERM); Electromagnetic Compatibility (EMC) standard for radio equipment and services; Part 34: Specific conditions for External Power Supply (EPS) for mobile phones	
EMC (radio equipment)	ETSI EN 301 489-34 V2.1.1: 2019	Electromagnetic Compatibility (EMC) standard for radio equipment and services; Part 34: Specific conditions for External Power Supply (EPS) for mobile phones; Harmonised Standard covering the essential requirements of article 6 of Directive 2014/30/EU	
EMC (radio equipment)	ETSI EN 301 489-35 V2.2.1: 2019	Electromagnetic Compatibility (EMC) standard for radio equipment and services; Part 35: Specific requirements for Low Power Active Medical Implants (LP-AMI) operating in the 2 483,5 MHz to 2 500 MHz bands; Harmonised Standard covering the essential requirements of article 3.1(b) of Directive 2014/53/EU	The use of a simulated man is necessary (must be provided by customer)
EMC (radio equipment)	ETSI EN 301 489-50 V2.2.1: 2019	Electromagnetic Compatibility (EMC) standard for radio equipment and services; Part 50: Specific conditions for Cellular Communication Base Station (BS), repeater and ancillary equipment; Harmonised Standard covering the essential requirements of article 3.1(b) of Directive 2014/53/EU	

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EMC (radio equipment)	ETSI EN 301 489-50 V2.3.1: 2021	Electromagnetic Compatibility (EMC) standard for radio equipment and services; Part 50: Specific conditions for Cellular Communication Base Station (BS), repeater and ancillary equipment; Harmonised Standard for Electromagnetic Compatibility	Performance Assessment limited to repeaters and ancillary equipment: Chapter 5.7, 5.8 Performance Criteria limited to repeaters and ancillary equipment: Chapter 6.1.2, 6.2.1 Repeaters
EMC (radio equipment)	ETSI EN 301 489-51 V2.1.1: 2019	Electromagnetic Compatibility (EMC) standard for radio equipment and services; Part 51: Specific conditions for Automotive, Ground based Vehicles and Surveillance Radar Devices using 24,05 GHz to 24,25 GHz, 24,05 GHz to 24,5 GHz, 76 GHz to 77 GHz and 77 GHz to 81 GHz; Harmonised Standard covering the essential requirements of article 3.1(b) of Directive 2014/53/EU	
EMC (radio equipment)	ETSI EN 301 489-52 Draft V1.1.0:2016	Electromagnetic Compatibility (EMC) standard for radio equipment and services; Part 52: Specific conditions for Cellular Communication Mobile and portable (UE) radio and ancillary equipment; Harmonised Standard covering the essential requirements of article 3.1(b) of Directive 2014/53/EU	Limited to Emission tests Chapters 7.1.1 & 7.2.1
EMC (radio equipment)	Final draft ETSI EN 301 489- 52 V1.2.0 (2021-09)	Electromagnetic Compatibility (EMC) standard for radio equipment and services; Part 52: Specific conditions for Cellular Communication User Equipment (UE) radio and ancillary equipment; Harmonised Standard for Electromagnetic Compatibility	Limited to Emission tests Chapter 7.2

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EMC (radio equipment)	ETSI EN 301 489-52 V1.2.1 (2021-11)	Electromagnetic Compatibility (EMC) standard for radio equipment and services; Part 52: Specific conditions for Cellular Communication User Equipment (UE) radio and ancillary equipment; Harmonised Standard for Electromagnetic Compatibility	Limited to Emission tests Chapter 7.2
<b>1.5. EMC and Telecommunication (RED Art. Art. 3.2)</b>			
TC + EMC	ETSI EN 300 220-1 V3.1.1: 2017	Short Range Devices (SRD) operating in the frequency range 25 MHz to 1 000 MHz; Part 1: Technical characteristics and methods of measurement	
TC + EMC	ETSI EN 300 220-2 V3.2.1: 2018	Short Range Devices (SRD) operating in the frequency range 25 MHz to 1 000 MHz; Part 2: Harmonised Standard for access to radio spectrum for non specific radio equipment	
TC + EMC	ETSI EN 300 220-2 V3.1.1: 2017	Short Range Devices (SRD) operating in the frequency range 25 MHz to 1 000 MHz; Part 2: Harmonised Standard covering the essential requirements of article 3.2 of Directive 2014/53/EU for non specific radio equipment	
TC + EMC	ETSI EN 300 220-3-1 V2.1.1: 2016	Short Range Devices (SRD) operating in the frequency range 25 MHz to 1 000 MHz; Part 3-1: Harmonised Standard covering the essential requirements of article 3.2 of Directive 2014/53/EU; Low duty cycle high reliability equipment, social alarms equipment operating on designated frequencies (869,200 MHz to 869,250 MHz)	
TC + EMC	ETSI EN 300 220-3-2 V1.1.1: 2017	Short Range Devices (SRD) operating in the frequency range 25 MHz to 1 000 MHz; Part 3-2: Harmonised Standard covering the essential requirements of article 3.2 of Directive 2014/53/EU; Wireless alarms operating in designated LDC/HR frequency bands 868,60 MHz to 868,70 MHz, 869,25 MHz to 869,40 MHz, 869,65 MHz to 869,70 MHz	

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TC + EMC	ETSI EN 300 220-4 V1.1.1:2017	Short Range Devices (SRD) operating in the frequency range 25 MHz to 1 000 MHz; Part 4: Harmonised Standard covering the essential requirements of article 3.2 of Directive 2014/53/EU; Metering devices operating in designated band 169,400 MHz to 169,475 MHz	
TC + EMC	ETSI EN 300 328 V2.1.1:2016	Wideband transmission systems; Data transmission equipment operating in the 2,4 GHz ISM band and using wide band modulation techniques; Harmonised Standard covering the essential requirements of article 3.2 of Directive 2014/53/EU	
TC + EMC	ETSI EN 300 328 V2.2.2:2019	Wideband transmission systems; Data transmission equipment operating in the 2,4 GHz band; Harmonised Standard for access to radio spectrum	
TC + EMC	ETSI EN 300 330 V2.1.1:2017	Short Range Devices (SRD); Radio equipment in the frequency range 9 kHz to 25 MHz and inductive loop systems in the frequency range 9 kHz to 30 MHz; Harmonised Standard covering the essential requirements of article 3.2 of Directive 2014/53/EU	
TC + EMC	ETSI EN 300 440 V2.2.1:2018	Short Range Devices (SRD); Radio equipment to be used in the 1 GHz to 40 GHz frequency range; Harmonised Standard for access to radio spectrum	f <sub>max</sub> = 40 GHz
TC + EMC	ETSI EN 300 440 V2.1.1:2017	Short Range Devices (SRD); Radio equipment to be used in the 1 GHz to 40 GHz frequency range; Harmonised Standard covering the essential requirements of article 3.2 of Directive 2014/53/EU	
TC + EMC	ETSI EN 301 406 V2.2.2:2016	Digital Enhanced Cordless Telecommunications (DECT); Harmonised Standard covering the essential requirements of article 3.2 of the Directive 2014/53/EU	Only chapter 5.3.6.5.1 for radiated emissions

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TC + EMC	ETSI EN 301 502 V12.5.2:2017	Global System for Mobile communications (GSM); Base Station (BS) equipment; Harmonised Standard covering the essential requirements of article 3.2 of Directive 2014/53/EU	Only chapter 5.3.16 for radiated spurious emissions
TC + EMC	ETSI EN 301 511 V12.5.1:2017	Global System for Mobile communications (GSM); Mobile Stations (MS) equipment; Harmonised Standard covering the essential requirements of article 3.2 of Directive 2014/53/EU	Only chapter 5.3.16 to 5.3.19 for radiated spurious emissions
TC + EMC	ETSI EN 301 893 V2.1.1:2017	5 GHz RLAN; Harmonised Standard covering the essential requirements of article 3.2 of Directive 2014/53/EU	Without clauses 5.4.8 and 5.4.9
TC + EMC	ETSI EN 301 908-1 V13.1.1: 2019	IMT cellular networks; Harmonised Standard for access to radio spectrum; Part 1: Introduction and common requirements	Only chapter 5.3.1 and 5.3.2 for radiated emission
TC + EMC	ETSI EN 301 908-1 V15.1.1: 2021	IMT cellular networks; Harmonised Standard for access to radio spectrum; Part 1: Introduction and common requirements Release 15	Only chapter 5.3.1 and 5.3.2 for radiated emission
TC + EMC	ETSI EN 302 208 V3.1.1:2016	Radio Frequency Identification Equipment operating in the band 865 MHz to 868 MHz with power levels up to 2 W and in the band 915 MHz to 921 MHz with power levels up to 4 W; Harmonised Standard covering the essential requirements of article 3.2 of the Directive 2014/53/EU	
TC + EMC	ETSI EN 302 208 V3.3.1: 2020	Radio Frequency Identification Equipment operating in the band 865 MHz to 868 MHz with power levels up to 2 W and in the band 915 MHz to 921 MHz with power levels up to 4 W; Harmonised Standard for access to radio spectrum	

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TC + EMC	ETSI EN 303 413 V1.1.1:2017	Satellite Earth Stations and Systems (SES); Global Navigation Satellite System (GNSS) receivers; Radio equipment operating in the 1 164 MHz to 1 300 MHz and 1 559 MHz to 1 610 MHz frequency bands; Harmonised Standard covering the essential requirements of article 3.2 of Directive 2014/53/EU	Only chapter 5.5 for receiver spurious emission
TC + EMC	ETSI EN 303 417 V1.1.1:2017	Wireless power transmission systems, using technologies other than radio frequency beam in the 19 - 21 kHz, 59 - 61 kHz, 79 - 90 kHz, 100 - 300 kHz, 6 765 - 6 795 kHz ranges; Harmonised Standard covering the essential requirements of article 3.2 of Directive 2014/53/EU	
<b>1.6. EMF/EMVU</b>			
EMC (EMF)	BGV B 11 DGUV VORSCHRIFT 15: 2001	BG-Vorschrift - Elektromagnetische Felder	H-Field: 0 Hz bis 1 GHz E-Field: 1 Hz bis 50 GHz Measurements of field strength and flux density values according to EN 50413
EMC (EMF)	EN 50413:2008 + A1:2013 EN 50413:2019	Basic standard on measurement and calculation procedures for human exposure to electric, magnetic and electromagnetic fields (0 Hz - 300 GHz)	Only chapter 5.2 "EM field measurement" H-Field: 0 Hz to 1 GHz E-Field: 1 Hz to 50 GHz
EMC (EMF)	DIN EN 50413/ A1:2014 DIN EN 50413: 2020	Grundnorm zu Mess- und Berechnungsverfahren der Exposition von Personen in elektrischen, magnetischen und elektromagnetischen Feldern (0 Hz bis 300 GHz); Deutsche Fassung EN 50413:2019	Only chapter 5.2 "EM field measurement" H-Field: 0 Hz to 1 GHz E-Field: 1 Hz to 50 GHz

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EMC (EMF)	EN 50364:2018	Product standard for human exposure to electromagnetic fields from devices operating in the frequency range 0 Hz to 300 GHz, used in Electronic Article Surveillance (EAS), Radio Frequency Identification (RFID) and similar applications	Only measurement of electric and magnetic fields acc. to EN 62369-1:2009, section 4.2: H-Field: 0 Hz to 1 GHz E-Field: 1 Hz to 50 GHz
EMC (EMF)	DIN EN 50364:2019-05	Produktnorm für die Exposition von Personen gegenüber elektromagnetischen Feldern von Geräten, die im Frequenzbereich von 0 Hz bis 300 GHz betrieben und in der elektronischen Artikelüberwachung (EAS), Hochfrequenz-Identifizierung (RFID) und ähnlichen Anwendungen verwendet werden; Deutsche Fassung EN 50364:2018	Only measurement of electric and magnetic fields acc. to EN 62369-1:2009, section 4.2: H-Field: 0 Hz to 1 GHz E-Field: 1 Hz to 50 GHz
EMC (EMF)	EN 50663:2017	Generic standard for assessment of the compliance of low power electronic and electrical equipment with the basic restrictions related to human exposure to electromagnetic fields (10 MHz to 300 GHz)	Refers to EN 624797:2010 for technical aspects
EMC (EMF)	DIN EN 50663:2017	Fachgrundnorm für die Beurteilung der Übereinstimmung von elektronischen und elektrischen Geräten kleiner Leistung mit den Basisgrenzwerten für die Sicherheit von Personen in elektromagnetischen Feldern (10 MHz bis 300 GHz) (IEC 62479:2010, modifiziert); Deutsche Fassung EN 50663:2017	Refers to DIN EN 62479:2011 for technical aspects

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EMC (EMF)	EN 62233:2008	Measurement methods for electromagnetic fields of household appliances and similar apparatus with regard to human exposure	<ul style="list-style-type: none"> <li>• Only test method acc. to chapt. 5.5.2</li> <li>• Without measurement of individual coupling factor acc. to annex C</li> <li>• Measurement with coupling factor acc. to Table D.3 is possible</li> </ul>
EMC (EMF)	DIN EN 62233:2008	Verfahren zur Messung der elektromagnetischen Felder von Haushaltsgeräten und ähnlichen Elektrogeräten im Hinblick auf die Sicherheit von Personen in elektromagnetischen Feldern (IEC 62233:2005, modifiziert); Deutsche Fassung EN 62233:2008	<ul style="list-style-type: none"> <li>• Only test method acc. to chapt. 5.5.2</li> <li>• Without measurement of individual coupling factor acc. to annex C</li> <li>• Measurement with coupling factor acc. to Table D.3 is possible</li> </ul>
EMC (EMF)	IEC 62493: 2015	Assessment of lighting equipment related to human exposure to electromagnetic fields	No assessment of Lighting equipment with intentional radiators that have to be assessed according to EN 62209-2 or EN 62232 (not accredited).

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EMC (EMF)	EN 62493: 2015	Assessment of lighting equipment related to human exposure to electromagnetic fields	No assessment of Lighting equipment with intentional radiators that have to be assessed according to EN 62209-2 or EN 62232 (not accredited).
EMC (EMF)	DIN EN 62493: 2016	Beurteilung von Beleuchtungseinrichtungen bezüglich der Exposition von Personen gegenüber elektromagnetischen Feldern (IEC 62493:2015); Deutsche Fassung EN 62493:2015	No assessment of Lighting equipment with intentional radiators that have to be assessed according to EN 62209-2 or EN 62232 (not accredited).
EMC (EMF)	EN 62311:2008	Assessment of electronic and electrical equipment related to human exposure restrictions for electromagnetic fields (0 Hz - 300 GHz) (IEC 62311:2007, modified)	Only calculation acc. Annex A and measurement acc. Annex F
EMC (EMF)	EN IEC 62311:2020	Assessment of electronic and electrical equipment related to human exposure restrictions for electromagnetic fields (0 Hz - 300 GHz) (IEC 62311:2019)	Only the following assessment methods: <ul style="list-style-type: none"> <li>• Simplified assessment acc. to IEC 62479 (low power device)</li> <li>• Measurement of E and H resp. B</li> </ul>

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EMC (EMF)	DIN EN 62311: 2008	Bewertung von elektrischen und elektronischen Einrichtungen in Bezug auf Begrenzungen der Exposition von Personen in elektromagnetischen Feldern (0 Hz bis 300 GHz) (IEC 62311:2007, modifiziert); Deutsche Fassung EN 62311:2008	Only calculation acc. Annex A and measurement acc. Annex F
EMC (EMF)	DIN EN IEC 62311:2020	Bewertung von elektrischen und elektronischen Einrichtungen in Bezug auf Begrenzungen der Exposition von Personen in elektromagnetischen Feldern (0 Hz bis 300 GHz) (IEC 62311:2019); Deutsche Fassung EN IEC 62311:2020	Only the following assessment methods: • Simplified assessment acc. to IEC 62479 (low power device) • Measurement of E and H resp. B
EMC (EMF)	EN 62369-1: 2009	Evaluation of human exposure to electromagnetic fields from short range devices (SRDs) in various applications over the frequency range 0 GHz to 300 GHz - Part 1: Fields produced by de-vices used for electronic article surveillance, radio frequency identification and similar systems (IEC 62369-1:2008) / Endorsement notice)	Without chapter 4.3, 4.4, 4.5, 4.6 H-Field: 0 Hz to 1 GHz E-Field: 1 Hz to 50 GHz
EMC (EMF)	DIN EN 62369-1:2010	Ermittlung der Exposition von Personen gegen-über elektromagnetischen Feldern im Frequenz-bereich 0 GHz bis 300 GHz durch Geräte mit kurzer Reichweite für verschiedene Anwendungen - Teil 1: Felder, die durch Geräte erzeugt werden, die zur elektronischen Artikelüberwachung, Hochfrequenz-Identifizierung und für ähnliche Anwendungen verwendet werden (IEC 62369-1:2008); Deutsche Fassung EN 62369-1:2009	Without chapter 4.3, 4.4, 4.5, 4.6 H-Field: 0 Hz to 1 GHz E-Field: 1 Hz to 50 GHz

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EMC (EMF)	EN 62479:2010	Assessment of the compliance of low power electronic and electrical equipment with the basic restrictions related to human exposure to electromagnetic fields (10 MHz to 300 GHz) (IEC 62479:2010, modified)	
EMC (EMF)	DIN EN 62479: 2011	Beurteilung der Übereinstimmung von elektronischen und elektrischen Geräten kleiner Leistung mit den Basisgrenzwerten für die Sicherheit von Personen in elektromagnetischen Feldern (10 MHz bis 300 GHz) (IEC 62479:2010, modifiziert); Deutsche Fassung EN 62479:2010	
<b>1.7. Railway</b>			
EMC	EN 50121-3-2: 2016 EN 50121-3-2:2016 + A1:2019	Railway applications - Electromagnetic compatibility - Part 3-2: Rolling stock - Apparatus	
EMC	DIN EN 50121-3-2:2016 DIN EN 50121-3- 2:2016 + A1:2020	Bahnanwendungen - Elektromagnetische Verträglichkeit - Teil 3-2: Bahnfahrzeuge - Geräte; Deutsche Fassung EN 50121-3-2:2016/A1:2019	
EMC	EN 50121-4:2016 + A1:2019	Railway applications - Electromagnetic compatibility - Part 4: Emission and immunity of the signalling and telecommunications apparatus	
EMC	DIN EN 50121-4:2017 +A1:2020	Bahnanwendungen - Elektromagnetische Verträglichkeit - Teil 4: Störaussendungen und Störfestigkeit von Signal- und Telekommunikationseinrichtungen; Deutsche Fassung EN 50121-4:2016	
EMC	EN 50121-5: 2017	Railway applications - Electromagnetic compatibility - Part 5: Emission and immunity of fixed power supply installations and apparatus	

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EMC	DIN EN 50121-5: 2017	Bahnanwendungen - Elektromagnetische Verträglichkeit - Teil 5: Störaussendungen und Störfestigkeit von ortsfesten Anlagen und Einrichtungen der Bahnenergieversorgung; Deutsche Fassung EN 50121-5:2017	
EMC	EN 50155:2017	Railway applications - Electronic equipment used on rolling stock	Only chapter 13.4.3 and 13.4.8
EMC	EN 50155:2021	Railway applications - Electronic equipment used on rolling stock	Only chapter 13.4.1 - 13.4.3 and 13.4.9
EMC	DIN EN 50155 :2018	Bahnanwendungen - Elektronische Einrichtungen auf Bahnfahrzeugen; Deutsche Fassung EN 50155:2017	Only chapter 13.4.3 and 13.4.8
EMC	IEC 62236-3-2 :2018	Railway applications - Electromagnetic compatibility - Part 3-2: Rolling stock – Apparatus	
<b>1.8. Automotive</b>			
EMC	EN 12895:2015 +A1:2019	Industrial trucks - Electromagnetic compatibility.	
EMC	DIN EN 12895: 2020	Flurförderzeuge - Elektromagnetische Verträglichkeit; Deutsche Fassung EN 12895:2015 + A1:2019	
EMC	EN 13309:2010	Construction machinery - Electromagnetic compatibility of machines with internal power supply	
EMC	DIN EN 13309: 2010	Baumaschinen - Elektromagnetische Verträglichkeit von Maschinen mit internem elektrischen Bordnetz; Deutsche Fassung EN 13309:2010	
EMC	EN 15194:2017	Cycles - Electrically power assisted cycles - EPAC Bicycles	Only chapter 4.2.15 EMC; roller bench will be rent

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EMC	DIN EN 15194: 2018	Fahrräder - Elektromotorisch unterstützte Raeder - EPAC-Fahrräder; Deutsche Fassung EN 15194:2009	Only chapter 4.2.15 EMC; roller bench will be rent
EMC	ISO 13766-1: 2018	Earth-moving and building construction machinery - Electromagnetic compatibility (EMC) of machines with internal electrical power supply - Part 1: General EMC requirements under typical electromagnetic environmental conditions	
EMC	EN ISO 13766-1: 2018	Earth-moving and building construction machinery - Electromagnetic compatibility (EMC) of machines with internal electrical power supply - Part 1: General EMC requirements under typical electromagnetic environmental conditions	
EMC	DIN EN ISO 13766-1 2019	Erdbaumaschinen und Baumaschinen – Elektro-magnetische Verträglichkeit von Maschinen mit internem elektrischen Bordnetz - Teil 1: Allgemeine EMV- Anforderungen unter typischen EMV- Umgebungsbedingungen (ISO 13766- 1:2018); Deutsche Fassung EN ISO 13766- 1:2018	
EMC	ISO 13766-2: 2018	Earth-moving and building construction machinery - Electromagnetic compatibility (EMC) of machines with internal electrical power supply - Part 2: Additional EMC requirements for functional safety	
EMC	EN ISO 13766-2: 2018	Earth-moving and building construction machinery - Electromagnetic compatibility (EMC) of machines with internal electrical power supply - Part 2: Additional EMC requirements for functional safety	

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EMC	DIN EN ISO 13766-2: 2018	Erdbaumaschinen und Baumaschinen - Elektromagnetische Verträglichkeit von Maschinen mit internem elektrischen Bordnetz - Teil 2: Zusätzliche EMV- Anforderungen für die funktionale Sicherheit (ISO 13766-2:2018); Deutsche Fassung EN ISO 13766-2:2018	
EMC	ISO 14982:1998	Agricultural and forestry machines - Electromagnetic compatibility - Test methods and acceptance criteria	
EMC	EN ISO 14982: 2009	Agricultural and forestry machines - Electromagnetic compatibility - Test methods and acceptance criteria	
EMC	DIN EN ISO 14982: 2009	Land- und forstwirtschaftliche Maschinen - Elektromagnetische Verträglichkeit - Prüfverfahren und Bewertungskriterien (ISO 14982:1998); Deutsche Fassung EN ISO 14982:2009	
EMC	CISPR 12:2007 + A1:2009	Vehicles, boats and internal combustion engines - Radio disturbance characteristics - Limits and methods of measurement for the protection of off- board receivers	No boats
EMC	EN 55012:2007 +A1:2009	Vehicles, boats and internal combustion engines - Radio disturbance characteristics - Limits and methods of measurement for the protection of off- board receivers	No boats
EMC	DIN EN 55012: 2010	Fahrzeuge, Boote und von Verbrennungsmotoren angetriebene Geräte - Funkstöreigenschaften - Grenzwerte und Messverfahren zum Schutz von außerhalb befindlichen Empfängern (IEC/CISPR 12:2007 + A1:2009); Deutsche Fassung EN 55012:2007 + A1:2009	No boats
EMC	EN 50498:2010	Electromagnetic Compatibility (EMC) - Product family standard for aftermarket electronic equipment in vehicles	

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EMC	DIN EN 50498: 2011	Elektromagnetische Verträglichkeit (EMV) - Produktfamiliennorm für elektronische Geräte, die nachträglich in Fahrzeuge eingebaut werden; Deutsche Fassung EN 50498:2010	
EMC	ECE R 10 Rev. 3, 4, 5, 6 2005/2012/ 2014/2019	Regulation No 10 of the Economic Commission for Europe of the United Nations (UN/ECE) – Uniform provisions concerning the approval of vehicles with regard to electromagnetic compatibility	
EMC	VO (EU) 44/2014	DELEGIERTE VERORDNUNG (EU) Nr. 44/2014 DER KOMMISSION vom 21. November 2013 zur Ergänzung der Verordnung (EU) Nr. 168/2013 des Europäischen Parlaments und des Rates hinsichtlich der Anforderungen an die Bauweise von Fahrzeugen und der allgemeinen Anforderungen im Zusammenhang mit der Typgenehmigung von zwei-, drei- und vierrädrigen Fahrzeugen	Only Annex VII
EMC	VO (EU) 2015/208	DELEGIERTE VERORDNUNG (EU) 2015/208 DER KOMMISSION vom 8. Dezember 2014  zur Ergänzung der Verordnung (EU) Nr. 167/2013 des Europäischen Parlaments und des Rates hinsichtlich der Anforderungen an die funktionale Sicherheit von Fahrzeugen für die Genehmigung von land- und forstwirtschaftlichen Fahrzeugen	Only Annex XV, parts 3-5 and parts 6-8
EMC	ISO 7637-2:2011	Road vehicles - Electrical disturbances from conduction and coupling - Part 2: Electrical transient conduction along supply lines only	
EMC	ISO 7637-3: 2016	Road vehicles - Electrical disturbances from conduction and coupling - Part 3: Electrical transient transmission by capacitive and inductive coupling via lines other than supply lines	

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EMC	ISO/DTS 7637-4: 2020-01	Road Vehicles – Electrical disturbances by conduction and coupling – Part 4: Electrical transient conduction along shielded high voltage supply lines only	
EMC	ISO 10605:2008 + Corr 1:2010 + AMD1:2014	Road vehicles — Test methods for electrical disturbances from electrostatic discharge	
EMC	ISO 11451-2: 2015	Road vehicles-electrical disturbances by narrow- band radiated electromagnetic energy - vehicle test methods, Part 2: Off-vehicle radiation source	Testlevel II below 40 MHz Testlevel IV above 40 MHz
EMC	ISO 11451-4: 2013	Road vehicles-electrical disturbances by narrow- band radiated electromagnetic energy - vehicle test methods, Part 4: Bulk current injection (BCI)	
EMC	ISO 11452-2: 2019	Road vehicles- Component test methods for electrical disturbances from narrowband radiated electromagnetic energy - Part 2: Absorber-lined shielded enclosure	
EMC	ISO 11452-3 :2016	Road vehicles-electrical disturbances by narrow-band radiated electromagnetic energy-component test methods, Part 3: Transverse electromagnetic mode (TEM) cell	
EMC	ISO 11452-4: 2020	Road vehicles - Component test methods for electrical disturbances from narrowband radiated electromagnetic energy - Part 4: Harness excitation methods	
EMC	ISO 11452-5: 2002	Road vehicles - Component test methods for electrical disturbances by narrowband radiated electromagnetic energy - Part 5: Stripline	

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EMC	ISO 11452-8: 2015	Road vehicles - Component test methods for electrical disturbances from narrowband radiated electromagnetic energy - Part 8: Immunity to magnetic fields	
EMC	ISO 11452-9: 2012	Road vehicles - Component test methods for electrical disturbances from narrowband radiated electromagnetic energy - Part 9: Portable transmitters	
EMC	ISO 11452-10: 2009	Road vehicles - Component test methods for electrical disturbances from narrowband radiated electromagnetic energy - Part 10: Immunity to conducted disturbance in the extended audio frequency range	
EMC	ISO 16750-2: 2012	Road vehicles — Environmental conditions and testing for electrical and electronic equipment Part 2: Electrical loads	
<b>1.9. Automotive - Manufacturer</b>			
EMC	LV124:2013	Elektrische und elektronische Komponenten in Kraftfahrzeugen bis 3,5t – Allgemeine Anforderungen, Prüfbedingungen und Prüfungen	
EMC	LV148:2013	Elektrische und elektronische Komponenten im Kraftfahrzeug 48V-Bordnetz Anforderungen und Prüfungen	
EMC	BMW Group Standard GS 95002-2: 2013-07	Kraftfahrzeuge; Elektromagnetische Verträglichkeit (EMV); Anforderungen und Prüfungen an Komponenten bis 60 V Nennspannung	
EMC	BMW Group Standard GS 95002-2: 2019-10	Kraftfahrzeuge; Elektromagnetische Verträglichkeit (EMV); Anforderungen und Prüfungen an Komponenten	

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EMC	BMW Group Standard GS 95002-2: 2021-05	Kraftfahrzeuge; Elektromagnetische Verträglichkeit (EMV); Anforderungen und Prüfungen an Komponenten	Without test chap. 8.5 (SYNF) acc. to IEC 61000-4-19
EMC	BMW Group Standard GS 95002-3: 2015-12	Kraftfahrzeuge; Elektromagnetische Verträglichkeit (EMV); Anforderungen und Prüfungen an Komponenten größer 60 V Nennspannung	Test HV_TI01: Pulse HV1 not available, replaced by burst pulse acc. to EN 61000-4-4
EMC	BMW Group Standard GS 95002-5: 2015-03	Kraftfahrzeuge; Elektromagnetische Verträglichkeit (EMV); Anforderungen und Prüfungen im Frequenzbereich 9 kHz bis 30 MHz	
EMC	BMW Group Standard GS 95024-2-1: 2010-01	Elektrische und elektronische Komponenten in Kraftfahrzeugen; Elektrische Anforderungen und Prüfungen	
EMC	BMW Group Standard GS 95024-2-2: 2011-02	Elektrische und elektronische Komponenten in Kraftfahrzeugen; Elektrische Anforderungen und Prüfungen; Ergänzende Anforderungen und Prüfungen	
EMC	BMW Group Standard GS 95025-1: 2012-05	Motor vehicles; Environmental requirements for electric and electronic equipment; EMC characteristics	Without EQ/CI_02 Test HV_TI01: Pulse HV1 not available, replaced by burst pulse acc. to EN 61000-4-4
EMC	BMW Group Standard GS 95024-2: 2021-03	Elektrische und elektronische Komponenten in Kraftfahrzeugen; Elektrische Anforderungen und Prüfungen in 12-V-Energiebordnetzen	
EMC	Volkswagen AG VW 80000: 2017-10	Elektrische und elektronische Komponenten in Kraftfahrzeugen bis 3,5 t; Allgemeine Anforderungen, Prüfbedingungen und Prüfungen	Electrical tests only (Part I)
EMC	Volkswagen AG VW 80000: 2020-12	Elektrische und elektronische Komponenten in Kraftfahrzeugen bis 3,5 t; Allgemeine Anforderungen, Prüfbedingungen und Prüfungen	Electrical tests only (chap. 5.4)

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EMC	Volkswagen AG VW 80000: 2021-07	Elektrische und elektronische Komponenten in Kraftfahrzeugen bis 3,5 t; Allgemeine Anforderungen, Prüfbedingungen und Prüfungen	Electrical tests only (chap. 5.4)
EMC	Volkswagen AG VW 82148: 2013-09	Elektrische und elektronische Komponenten im Kraftfahrzeug; 48V- Bordnetz Anforderungen und Prüfungen	
EMC	Volkswagen AG VW 81000:2016-02	EMV von Kfz-Elektronikbauteilen	Components only; Chapter 3.3.11 "Isotropic magnetic field coil 100 cm <sup>2</sup> ": H-field: 0 Hz to 1 GHz
EMC	Volkswagen AG VW 81000:2018-03	EMV von Kfz-Elektronikbauteilen	Components only; Chapter 5.3.11 "Isotropic magnetic field coil 100 cm <sup>2</sup> ": H-field: 0 Hz to 1 GHz
EMC	Volkswagen AG VW 81000: 2021-09	EMV von Kfz-Elektronikbauteilen	Components only
EMC	M 3285:2017-07	Elektromagnetische Verträglichkeit (EMV) in MAN-Nutzfahrzeugen	Without Chapter 7 (Vehicles) and 9.3 (NEMP)
EMC	Mercedes-Benz MBN 10284- 2: 2015-07	EMV-Anforderungen – Komponentenprüfungen (PKW und Transporter)	NFA-Test: Original antennas or replacement antennas not available, Without CRC test

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EMC	Mercedes-Benz MBN 10284-2: 2019-10	EMV-Anforderungen – Komponentenprüfungen (PKW und Transporter) EMC-requirements – Component Tests (Passenger Cars and Vans)	NFA-Test: Original antennas or replacement antennas not available. For ICNIRP B test only test 2 possible, tests 1 and 3 not feasible. The ICNIRP I test is not feasible. CRC test not possible, as no Mode swirl Chamber available. Data format: JSON according to Annex B (normative) for ICNIRP I Test is not available.
EMC	Daimler AG MBN 10284-3: 2015-07	EMV-Anforderungen – Hochvoltzusatzanforderungen	Only Chapter 8, but without 8.16 CRC Test
EMC	Mercedes Benz MBN 10284-3: 2020-05	Electromagnetic compliance – Additional high voltage requirements	Only chapter 8 in scope: For 8.8 (ICNIPR-B) only test 2 possible (evaluation acc. to 1998 General Public), 8.9 (ICNIRP-I) not possible, 8.16 (CRC test) not possible
EMC	Daimler AG MBN 10284-4: 2011-04	EMV-Anforderungen – Komponentenprüfungen (Nutzfahrzeuge und Busse)	
EMC	Daimler AG MBN 10284-4: 2017-07	EMV-Anforderungen – Komponentenprüfungen (Nutzfahrzeuge und Busse)	

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EMC	Mercedes-Benz MBN LV124-1: 2011-03	Elektrische und elektronische Komponenten in Personenkraftwagen bis 3,5t – Allgemeine Anforderungen, Prüfbedingungen und Prüfungen Teil I: Elektrische Anforderungen und Prüfungen	
EMC	Mercedes-Benz MBN LV124-1: 2013-03	Elektrische und elektronische Komponenten in Personenkraftwagen bis 3,5t – Allgemeine Anforderungen, Prüfbedingungen und Prüfungen Teil I: Elektrische Anforderungen und Prüfungen 12 V Bordnetz	
EMC	Mercedes-Benz MBN LV148: 2013-11	Elektrische und elektronische Komponenten im Kraftfahrzeug – 48V-Bordnetz Anforderungen und Prüfbedingungen	
EMC	Mercedes-Benz MBN 10567: 2018-03	Elektrische und elektronische Komponenten im Kraftfahrzeug – 12 V Bordnetz - Anforderungen und Prüfungen	
EMC	Renault 36-00-808/--M 2012-07	Resistance to electrical disturbances and electromagnetic compatibility instructions concerning electrical electronic and pyrotechnic equipment	Without EQ/IC_09, EQ/IC_11, EQ/MC_01 EQ/IR_05 only frequency range 360 MHz – 2.7 GHz
EMC	Renault 36-00-808/--N: 2016	Resistance to electrical disturbances and electromagnetic compatibility instructions concerning electrical electronic and pyrotechnic equipment	Without EQ/IC_09, EQ/IC_11, EQ/MC_01 EQ/IR_05 only frequency range 360 MHz – 2.7 GHz
EMC	Hyundai KIA ES 96200-00, L 2014-06	Electromagnetic Compatibility Specification	Without test 4.4.6 Commercial transmitter
EMC	Volvo STD 515-0003 2009-10	Parts and components Electro-magnetic compatibility, EMC	Components only

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EMC	Volvo STD 515-0003 2017-02	Parts and components Electro-magnetic compatibility, EMC	Components only
EMC	Scania TB1901 2007-04	Technical Regulation Requirements and verification methods for electrical factors in a 24V system	Components only Test "6.1.22 EMC protection, immunity (component level testing)" with antenna only possible from 200 MHz
EMC	Scania TB1901 2016-05	Technical Regulation Requirements and verification methods for electrical factors in a 24V system	Components only
EMC	BAPP, Teil 1 2017-10	Basis Anforderungen und Prüfungen ENBN 12V / Elektrische und elektronische in Kraftfahrzeugen bis 3,5t - Allgemeine Anforderungen, Prüfbedingungen und Prüfungen, Teil 1	
EMC	VDA 320: 2014	Elektrische und elektronische Komponenten im Kraftfahrzeug 48 V-Bordnetz Anforderungen und Prüfungen	
EMC	Nissan 28401NDS02- 8: 2016-03	Nissan design specification EMC specifications of electrical and electronic parts	
EMC	CS.00054: 2018-01 Fiat Chrysler Automobiles	GENERAL ELECTRICAL AND EMC PERFORMANCE REQUIREMENTS FOR E/E COMPONENTS	
<b>1.10. Maritime Equipment</b>			
EMC	IEC 60533: 2015	Electrical and electronic installations in ships - Electromagnetic compatibility	
EMC	IEC 60945:2002	Navigations- und Funkkommunikationsgeräte und Systeme für die Schifffahrt Allgemeine Anforderungen – Prüfverfahren und geforderte Prüfergebnisse	Only EMC (Chap. 7, 9, 10, 12.2 and 12.3)

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EMC	EN 60945:2002	Navigations- und Funkkommunikationsgeräte und Systeme für die Schifffahrt Allgemeine Anforderungen – Prüfverfahren und geforderte Prüfergebnisse	Only EMC (Chap. 7, 9, 10, 12.2 and 12.3)
EMC	DIN EN 60945: 2003	Navigations- und Funkkommunikationsgeräte und - systeme für die Seeschifffahrt - Allgemeine Anforderungen - Prüfverfahren und geforderte Prüfergebnisse (IEC 60945:2002); Deutsche Fassung EN 60945:2002	Only EMC (Chap. 7, 9, 10, 12.2 and 12.3)
<b>1.11. Airborne Equipment</b>			
EMC	RTCA/DO-160D Section 15	Environmental Conditions and Test Procedures for Airborne Equipment - Magnetic Effect	
EMC	RTCA/DO-160D Section 16	Environmental Conditions and Test Procedures for Airborne Equipment - Power Input	No AC Equipment
EMC	RTCA/DO-160D Section 17	Environmental Conditions and Test Procedures for Airborne Equipment – Voltage Spike	
EMC	RTCA/DO-160D Section 18	Environmental Conditions and Test Procedures for Airborne Equipment: Audio Frequency Conducted Susceptibility – Power Inputs	
EMC	RTCA/DO-160D Section 19	Environmental Conditions and Test Procedures for Airborne Equipment – Induced Signal Susceptibility	Without Section 19.3.4
EMC	RTCA/DO-160D Section 20	Environmental Conditions and Test Procedures for Airborne Equipment – Radio Frequency Susceptibility (Radiated and Conducted)	
EMC	RTCA/DO-160D Section 21	Environmental Conditions and Test Procedures for Airborne Equipment – Emission of Radio Frequency Energy	
EMC	RTCA/DO-160D Section 25	Environmental Conditions and Test Procedures for Airborne Equipment – Electrostatic Discharge (ESD)	

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EMC	RTCA/DO-160E Section 15	Environmental Conditions and Test Procedures for Airborne Equipment - Magnetic Effect	
EMC	RTCA/DO-160E Section 16	Environmental Conditions and Test Procedures for Airborne Equipment - Power Input	No AC Equipment
EMC	RTCA/DO-160E Section 17	Environmental Conditions and Test Procedures for Airborne Equipment – Voltage Spike	
EMC	RTCA/DO-160E Section 18	Environmental Conditions and Test Procedures for Airborne Equipment: Audio Frequency Conducted Susceptibility – Power Inputs	
EMC	RTCA/DO-160E Section 19	Environmental Conditions and Test Procedures for Airborne Equipment – Induced Signal Susceptibility	Without Section 19.3.4
EMC	RTCA/DO-160E Section 20	Environmental Conditions and Test Procedures for Airborne Equipment – Radio Frequency Susceptibility (Radiated and Conducted)	
EMC	RTCA/DO-160E Section 21	Environmental Conditions and Test Procedures for Airborne Equipment – Emission of Radio Frequency Energy	
EMC	RTCA/DO-160E Section 25	Environmental Conditions and Test Procedures for Airborne Equipment – Electrostatic Discharge (ESD)	
EMC	RTCA/DO-160F Section 15	Environmental Conditions and Test Procedures for Airborne Equipment - Magnetic Effect	
EMC	RTCA/DO-160F Section 16	Environmental Conditions and Test Procedures for Airborne Equipment - Power Input	Without 16.5, 16.7
EMC	RTCA/DO-160F Section 17	Environmental Conditions and Test Procedures for Airborne Equipment – Voltage Spike	
EMC	RTCA/DO-160F Section 18	Environmental Conditions and Test Procedures for Airborne Equipment: Audio Frequency Conducted Susceptibility – Power Inputs	

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EMC	RTCA/DO-160F Section 19	Environmental Conditions and Test Procedures for Airborne Equipment – Induced Signal Susceptibility	Without Section 19.3.4
EMC	RTCA/DO-160F Section 20	Environmental Conditions and Test Procedures for Airborne Equipment – Radio Frequency Susceptibility (Radiated and Conducted)	
EMC	RTCA/DO-160F Section 21	Environmental Conditions and Test Procedures for Airborne Equipment – Emission of Radio Frequency Energy	
EMC	RTCA/DO-160F Section 25	Environmental Conditions and Test Procedures for Airborne Equipment – Electrostatic Discharge (ESD)	
EMC	RTCA/DO-160G Section 15	Environmental Conditions and Test Procedures for Airborne Equipment - Magnetic Effect	
EMC	RTCA/DO-160G Section 16	Environmental Conditions and Test Procedures for Airborne Equipment - Power Input	Without 16.5, 16.7
EMC	RTCA/DO-160G Section 17	Environmental Conditions and Test Procedures for Airborne Equipment – Voltage Spike	
EMC	RTCA/DO-160G Section 18	Environmental Conditions and Test Procedures for Airborne Equipment: Audio Frequency Conducted Susceptibility – Power Inputs	
EMC	RTCA/DO-160G Section 19	Environmental Conditions and Test Procedures for Airborne Equipment – Induced Signal Susceptibility	Without 19.3.5
EMC	RTCA/DO-160G Section 20	Environmental Conditions and Test Procedures for Airborne Equipment – Radio Frequency Susceptibility (Radiated and Conducted)	
EMC	RTCA/DO-160G Section 21	Environmental Conditions and Test Procedures for Airborne Equipment – Emission of Radio Frequency Energy	
EMC	RTCA/DO-160G Section 25	Environmental Conditions and Test Procedures for Airborne Equipment – Electrostatic Discharge (ESD)	

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<b>1.12. Military Equipment</b>			
EMC	MIL-STD-461 Issues D	Requirements for the control of electromagnetic interference emission and susceptibility	Without: CE106, CS103, CS104, CS105, RE103 RS103 above 18 GHz; 30 – 200 MHz with 200 V/m in antenna method, RS105
EMC	MIL-STD-461 E	Requirements for the control of electromagnetic interference emission and susceptibility	Without: CE106, CS103, CS104, CS105, RE103 RS103 above 18 GHz; 30 – 200 MHz with 200 V/m in antenna method, RS105
EMC	MIL-STD-461 F	Requirements for the control of electromagnetic interference emission and susceptibility	Without: CE106, CS103, CS104, CS105, CS106, RE103 RS103 above 18 GHz; 30 – 200 MHz with 200 V/m in antenna method, RS105
EMC	MIL-STD-461 G	Requirements for the control of electromagnetic interference emission and susceptibility	Without: CE106, CS103, CS104, CS105, CS106, CS117, RE103 RS103 above 18 GHz; 30 – 200 MHz with 200 V/m in antenna method, RS105

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EMC	VG 95373-10: 2008	Electromagnetic Compatibility (EMC) - Electromagnetic Compatibility of Equipment - Part 10: Test procedure for conducted emissions (current)	
EMC	VG 95373-12: 2008	Electromagnetic Compatibility (EMC) - Electromagnetic Compatibility of Equipment - Part 12: Test procedures for radiated emissions	
EMC	VG 95373-13: 2008	Electromagnetic Compatibility (EMC) - Electromagnetic Compatibility of Equipment - Part 13: Test procedures radiated susceptibility	Test range up to 18 GHz. GWK 2 from 200 MHz
EMC	VG 95373-14: 2008	Electromagnetic Compatibility (EMC) – Electromagnetic Compatibility of Equipment – Part 14: Test procedures for conducted susceptibility	
EMC	VG 95373 Part 15:2005	Electromagnetic compatibility - Electromagnetic compatibility of equipment - Part 15: Test methods for coupling and shielding	
EMC	VG 96903 Part 76:2021	Nuclear electromagnetic pulse (NEMP) and lightning protection — Test methods, test equipment and limits — Part 76: Test with direct injection of a 1,2/50 µs voltage pulse and a 8/20 µs current pulse (Test method LF 76)	Max. 10 kV
<b>1.13. Procedures of foreign standardization organizations</b>			
EMC	ANSI C 63.4-2014 + ANSI C63.4a:2017	American National Standard for Methods of Measurement of Radio-Noise Emissions from Low-Voltage Electrical and Electronic Equipment in the Range of 9 kHz to 40 GHz	Measurements in GTEM Cell excluded; without chapter 12.3, 12.4
EMC (USA)	ASTM D 4935: 2010	Limits and methods of measurement of radio disturbance characteristics of information technology equipment	
EMC (USA)	ATIS-0600315: 2013	Voltage Levels for dc-powered equipment used in the telecommunication environment	

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EMC (USA)	GR-1089-CORE Issue 6:2011	Electromagnetic Compatibility and Electrical Safety - Generic Criteria for Network Telecommunications Equipment. Chapter 2, 3, 4, 5, 6, 10	No Surge and AC Faults on coax. cables
EMC (USA)	GR-3108-CORE: 2018	Generic Requirements for Network Equipment in the Outside Plant (OSP)	Only EMC relevant parts of section 5 (Electrical Requirements)
EMC (Canada)	CAN/CSA-CEI/IEC CISPR 11 :04 2013	Industrial, scientific and medical equipment - Radio-frequency disturbance characteristics - Limits and methods of measurement	Only 3m, 10m distance
EMC (Canada)	CAN/CSA-CISPR 12-10:2010	Vehicles, boats and internal combustion engines - Radio disturbance characteristics - Limits and methods of measurement for the protection of off- board receivers	No boats
EMC (Canada)	ICES-001 Issue 5: 2020	Industrial, Scientific and Medical (ISM) Radio Frequency Generators	
EMC (Canada)	ICES-002 Issue 7: 2020	Vehicles, Boats and Other Devices Equipped with Internal Combustion Engine, Traction Batteries or Both	No boats
EMC (Canada)	ICES 003 Issue 7: 2020	Information Technology Equipment (Including Digital Apparatus)	fmax = 40 GHz
EMC (Canada)	ICES 005: 2018	Lighting Equipment	
EMC (Canada)	ICES Gen Issue 1 : July 2018 + Amendment 1 (February 2021)	General Requirements for Compliance of Interference-Causing Equipment	
EMC	IEEE Std 299: 2006	IEEE Standard Method for Measuring the Effectiveness of Electromagnetic Shielding Enclosures	
EMC	NSA 65-6 :1964	National Security Agency Specification for R.F. shielded enclosure for communication equipment	

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TC	ANSI C 63.10-2013 ANSI C63.10-2020	American National Standard for Testing of Unlicensed Wireless Devices Stand alone or in combination with:	Highest measurable Frequency Range is limited to fmax = 40 GHz; Measurements in GTEM Cell excluded
TC	ANSI C 63.17-2013	American National Standard - Methods of Measurement of the Electromagnetic and Operational Compatibility of Unlicensed Personal Communications Services (UPCS) Devices	Highest measurable Frequency Range is limited to fmax = 40 GHz
TC	FCC MP-5:1986	FCC Methods of Measurements of Radio Noise Emissions From Industrial, Scientific, and Medical Equipment; 1986	
TC + EMC	47 CFR Part 2	Frequency Allocations and Radio Treaty Matters; General Rules and Regulations	
TC + EMC	47 CFR Part 15	Radio Frequency Devices	
TC + EMC	47 CFR Part 18	Industrial, Scientific, and Medical Equipment	
TC	ANSI/TIA-603-D: 2010	Land Mobile FM or PM Communications Equipment Measurement and Performance Standards	Highest measurable Frequency Range is limited to fmax = 40 GHz
TC	TIA-102.CAAA-D :2013	Project 25 Digital C4FM/CQPSK Transceiver Measurement Methods	Highest measurable Frequency Range is limited to fmax = 40 GHz
TC	ANSI C63.26 :2015	IEEE/ANSI Standard For Compliance Testing Of Transmitters Used In Licensed Radio Services	Highest measurable Frequency Range is limited to fmax = 40 GHz

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TC	RSS-Gen Issue 5 : April 2018 + Amendment 1: (March 2019) + Amendment 2: (February 2021)	General Requirements for Compliance of Radio Apparatus	Highest measurable Frequency Range is limited to fmax = 40 GHz
TC	IEEE Std 299: 2006	Land Mobile and Fixed Equipment Operating in the Band 1670–1675 MHz	Special auxiliary equipment to be provided externally
TC	RSS-112:2008	Land Mobile and Fixed Equipment Operating in the Band 1670–1675 MHz	Special auxiliary equipment to be provided externally
TC	RSS-119 Issue 12 : May 2015	Land Mobile and Fixed Equipment Operating in the Frequency Range 27.41- 960 MHz	Special auxiliary equipment to be provided externally
TC	RSS-130 Issue 2 : February 2019	Equipment Operating in the Frequency Bands 617-652 MHz, 663-698 MHz, 698- 756 MHz and 777-787 MHz	Special auxiliary equipment to be provided externally
TC	RSS-132 Issue 3 : January 2013	Cellular Telephone Systems Operating in the Bands 824-849 MHz and 869-894 MHz	Special auxiliary equipment to be provided externally
TC	RSS-134 Issue 2 : February 2016	900 MHz Narrowband Personal Communication Service	Special auxiliary equipment to be provided externally
TC	RSS-137 Issue 2 : February 2009	Location and Monitoring Service in the Band 902-928 MHz	Special auxiliary equipment to be provided externally
TC	RSS-139 Issue 3 : July 2015	Advanced Wireless Services (AWS) Equipment Operating in the Bands 1710- 1780 MHz and 2110-2180 MHz	Special auxiliary equipment to be provided externally
TC	RSS-142 Issue 5 : April 2013	Narrowband Multipoint Communication Systems in the Bands 1429.5-1432 MHz	Special auxiliary equipment to be provided externally
TC	RSS-194 Issue 1 : October 2007	Fixed Wireless Access Equipment Operating in the Band 953–960 MHz	Special auxiliary equipment to be provided externally
TC	RSS-199 Issue 3 : December 2016	Broadband Radio Service (BRS) Equipment Operating in the Band 2500– 2690 MHz	Special auxiliary equipment to be provided externally

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TC	RSS-210 Issue 10 : December 2019	Licence-Exempt Radio Apparatus: Category I Equipment	Special auxiliary equipment to be provided externally
TC	RSS-213 Issue 3 : March 2015	2 GHz Licence-Exempt Personal Communications Services (LE-PCS) Devices	Special auxiliary equipment to be provided externally
TC	RSS-216 Issue 2 : January 2016 + Amendment 1 (September 2020)	Wireless Power Transfer Devices	Special auxiliary equipment to be provided externally
TC	RSS-310 Issue 5 : January 2020	Licence-Exempt Radio Apparatus: Category II Equipment	Special auxiliary equipment to be provided externally
<b>2. Product Safety</b>			
<b>2.1. Safety: Audio/Video, Information and Communication Technology Equipment</b>			
ITAV	DIN EN 62368-1: 2016 + CORRIGENDUM 1:2016-11 + CORRIGENDUM 2:2017-04 + CORRIGENDUM 3:2017-07 DIN EN 62368-1:2016 + A11 :2017 DIN EN IEC 62368-1:2021	Einrichtungen für Audio/Video, Informations- und Kommunikationstechnik – Teil 1: Sicherheitsanforderungen Audio/video, information and communication technology equipment - Part 1: Safety requirements	
ITAV	EN 62368-1:2014 EN 62368-1/AC: 2015 EN IEC 62368-1:2020+ A11 :2020	Audio/video, information and communication technology equipment - Part 1: Safety requirement	
ITAV	DIN EN IEC 62368-1:2021-05 EN IEC 62368-1:2020+ A11 :2020  IEC 62368-1:2018	Einrichtungen für Audio/Video, Informations- und Kommunikationstechnik - Teil 1: Sicherheitsanforderungen Audio/video, information and communication technology equipment - Part 1: Safety requirements	
ITAV	IEC 62368-1 ed 2.0: 2014 + CORRIGENDUM 1: 2015 CORRIGENDUM 2: 2015 IEC 62368-1 ed 3.0:2018 + CORRIGENDUM 1: 2020	Audio/video, information and communication technology equipment - Part 1: Safety requirements	

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ITAV	IEC 62368-1: 2010 + CORRIGENDUM 1: 2010	Audio/video, information and communication technology equipment - Part 1: Safety requirements	
ITAV	UL 62368-1: 2014 ANSI/UL 62368-1 :2014	Audio/video, information and communication technology equipment - Part 1: Safety requirements	
ITAV	UL 62368-1:2019-12-13	Audio/video, information and communication technology equipment - Part 1: Safety requirements (3 <sup>rd</sup> Edition)	
ITAV	CAN/CSA-C22.2 NO. 62368- 1-14:2014	Audio/video, information and communication technology equipment - Part 1: Safety requirements	
ITAV	CAN/CSA C22.2 No. 62368- 1:19	Audio/video, information and communication technology equipment - Part 1: Safety requirements (3 <sup>rd</sup> Edition)	
ITAV	IEC 62368-3:2017 EN IEC 62368-3:2020 DIN EN IEC 62368-3:2020-10	Einrichtungen für Audio/Video, Informations- und Kommunikationstechnik - Sicherheit - Teil 3: Gleichstrom-Leistungsübertragung über Kommunikationskabel der Informationstechnik Audio/video, information and communication technology equipment - Part 3: Safety aspects for DC power transfer through communication cables and ports	

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ITAV	DIN EN 62368-3:2020	Einrichtungen für Audio/Video, Informations- und Kommunikationstechnik - Sicherheit - Teil 3: Gleichstrom-Leistungsübertragung über Kommunikationskabel der Informationstechnik Audio/video, information and communication technology equipment - Part 3: Safety aspects for DC power transfer through communication cables and ports	
OFF	DIN EN 60950-1 (2014-08) DIN EN 60950-1 (2011-01) VDE 0805-1 + BEIBLATT 1(2007-05) + / A12(2011-08) + / A12 BERICHTIGUNG 1(2012-09)	Einrichtungen der Informationstechnik - Sicherheit - Teil 1: Allgemeine Anforderungen Information Technology Equipment - Safety - Part 1: General requirements	Except Annex U: Insulating wires for use without interleaved insulation, Annex Y: Ultraviolet light conditioning test and Annex AA: Mandrel test.
OFF	EN 60950-1 (2006-04) + /A1(2010-03) +/A11(2009-03) +/A12(2011-02) +/AC(2011-10) +/A2(2013-08)	Einrichtungen der Informationstechnik - Sicherheit - Teil 1: Allgemeine Anforderungen Information Technology Equipment - Safety - Part 1: General requirements	Except Annex U: Insulating wires for use without interleaved insulation, Annex Y: Ultraviolet light conditioning test and Annex AA: Mandrel test.
OFF	IEC 60950-1 EDITION 2.2:2013 IEC 60950-1 EDITION 2.1:2012 IEC 60950-1:2005-+ CORRIGENDUM 1:2006+ AMD 1:2009 + AMD 1 CORRIGENDUM 1: 2012 +AMD 2:2013 + CORRIGENDUM 2:2013	Information Technology Equipment - Safety - Part 1: General requirements	Except Annex U: Insulating wires for use without interleaved insulation, Annex Y: Ultraviolet light conditioning test and Annex AA: Mandrel test.

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OFF	AS/NZS 60950.1	Einrichtungen der Informationstechnik - Sicherheit - Teil 1: Allgemeine Anforderungen Information Technology Equipment - Safety - Part 1: General requirements	Except Annex U: Insulating wires for use without interleaved insulation, Annex Y: Ultraviolet light conditioning test and Annex AA: Mandrel test.
OFF	CAN/CSA-C22.2 No. 60950- 1:2007 CAN/CSA-C22.2 No. 60950- 1A AMD 1 (2011-01) CAN/CSA-C22.2 No. 60950- 1B AMD 2 (2014-01)	Information Technology Equipment - Safety - Part 1: General requirements	Except Annex U: Insulating wires for use without interleaved insulation, Annex Y: Ultraviolet light conditioning test and Annex AA: Mandrel test.
OFF	ANSI/UL 60950-1: 2014 + ANSI/UL 60950-1 2011 + A1:2011  UL 60950-1:2007	Standard for Safety for Information Technology Equipment - Safety - Part 1: General Requirements	Except Annex U: Insulating wires for use without interleaved insulation, Annex Y: Ultraviolet light conditioning test and Annex AA: Mandrel test.
OFF	DIN EN 60950-21: 2003	Einrichtungen der Informationstechnik - Sicherheit - Teil 21: Fernspeisung Information Technology Equipment - Safety - Part 21: Remote power feeding	
OFF	EN 60950-21 : 2003	Information Technology Equipment - Safety - Part 21: Remote power feeding	
OFF	IEC 60950-21 : 2002 + CORRIGENDUM 1: 2003	Information Technology Equipment - Safety - Part 21: Remote power feeding	

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OFF	ANSI/UL 60950-21: 2007 UL 60950-21:2003	Information Technology Equipment - Safety - Part 21: Remote power feeding	
OFF	CAN/CSA-C22.2 NO. 60950- 21-03: 2003	Information Technology Equipment - Safety - Part 21: Remote power feeding	
OFF	DIN EN 60950-22: 2006 + BERICHTIGUNG 1: 2009 + A11: 2009 + A11 BERICHTIGUNG 1: 2011 BERICHTIGUNG 1: 2011 DIN EN 60950-22: 2017	Einrichtungen der Informationstechnik - Sicherheit - Einrichtungen für den Außenbereich Information Technology Equipment - Safety - Part 22: Equipment installed outdoors	
OFF	EN 60950-22 : 2006 + A11:2008 + AC: 2008 + A11/AC: 2009 EN 60950-22:2017	Information Technology Equipment - Safety - Part 22: Equipment installed outdoors	
OFF	IEC 60950-22: 2016 IEC 60950-22: 2005	Information Technology Equipment - Safety - Part 22: Equipment installed outdoors	
OFF	ANSI/UL 60950-22: 2011 ANSI/UL 60950-22:2017 UL 60950-22:2017	Information Technology Equipment - Safety - Part 22: Equipment installed outdoors	
OFF	CAN/CSA-C22.2 NO. 60950- 22:2017	Information Technology Equipment - Safety - Part 22: Equipment installed outdoors	
TRON	EN 60065:2002 + AC: 2007+ A1: 2006 + A2 2010+ A11:2008 + A12 2011 EN 60065: 2014 + AC: 2016+ A11: 2017+ AC: 2017	Audio, video and similar electronic apparatus - Safety requirements	Except Annex H: Insulated winding wires for use without interleaved insulation.
TRON	IEC 60065: 2014 + CORRIGENDUM 1: 2015 +CORRIGENDUM 2: 2016 +CORRIGENDUM 3: 2018	Audio, video and similar electronic apparatus - Safety requirements	Except Annex H: Insulated winding wires for use without interleaved insulation.

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TRON	ANSI/UL 60065: 2013 ANSI/UL 60065: 2015 UL 60065: 2015	Audio, video and similar electronic apparatus - Safety requirements	Except Annex H: Insulated winding wires for use without interleaved insulation.
TRON	CAN/CSA-C22.2 NO. 60065: 2016	Audio, video and similar electronic apparatus - Safety requirements	Except Annex H: Insulated winding wires for use without interleaved insulation.
	DIN EN 41003: 2009 + BEIBLATT 1: 2006	Elektrische Sicherheit - Klassifizierung der Schnittstellen für den Anschluss von Geräten an Informations- und Kommunikationsnetze  Particular safety requirements for equipment to be connected to telecommunication networks and/or a cable distribution system	No preparation with ultraviolet light, no tests of material properties after UV-irradiation
	IEC 62911: 2016	Audio, video and information technology equipment - Routine electrical safety testing in production	
	DIN EN 60215: 1993 + A1: 1995 +/A2: 1995	Sicherheitsbestimmungen für Funksender  Safety requirements for radio transmitting equipment	
	EN 60215:1989 + A1:1992 + A2: 1994	Safety requirements for radio transmitting equipment	
	IEC 60215:1987 + AMD 1:1990 + AMD 2:1993 IEC 60215:2016	Safety requirements for radio transmitting equipment	

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<b>2.2. Safety: Safety requirements for electrical equipment for measurement, control and laboratory use</b>			
MEAS	DIN EN 61010-1:2020-03	Sicherheitsbestimmungen für elektrische Mess-, Steuer-, Regel- und Laborgeräte - Teil 1: Allgemeine Anforderungen Safety requirements for electrical equipment for measurement, control and laboratory use - Part 1: General requirements (3 <sup>rd</sup> Edition)	Except section 12.3 Ultraviolet (UV) Radiation and 12.5.2: (can be made at SGS France)
MEAS	EN 61010-1:2010 + A1:2019 + A1:2019/AC:2019	Safety requirements for electrical equipment for measurement, control and laboratory use - Part 1: General requirements (3 <sup>rd</sup> Edition)	
MEAS	IEC 61010-1 : 2010 + CORRIGENDUM 1 : 2011 + CORRIGENDUM 2: 2013 INTERPRETATION SHEET 1: 2013 + AMD 1:2016 IEC 61010-1 Ed. 3.1: 2017 IEC 61010-1 : 2010 +AMD1 :2016+COR1 :2019 IEC 61010-1: 2001 + CORRIGENDUM 1: 2002 + CORRIGENDUM 2: 2003	Safety requirements for electrical equipment for measurement, control and laboratory use - Part 1: General requirements (3 <sup>rd</sup> Edition)	
MEAS	ANSI/UL 61010-1: 2015 ANSI/UL 61010-1: 2016 UL 61010-1: 2012 UL 61010-1 (3rd Ed.):2019	Safety requirements for electrical equipment for measurement, control and laboratory use - Part 1: General requirements	
MEAS	CAN/CSA C22.2 NO. 61010-1-12: 2012 CAN/CSA-C22.2 No 61010-1 + Amd 1:2018	Safety requirements for electrical equipment for measurement, control and laboratory use - Part 1: General requirements	

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MEAS	DIN EN 61010-2-010: 2015 DIN EN 61010-2-010: 2004	Sicherheitsbestimmungen für elektrische Mess-, Steuer-, Regel- und Laborgeräte - Teil 2-010: Besondere Anforderungen an Laborgeräte für das Erhitzen von Stoffen  Safety requirements for electrical equipment for measurement, control, and laboratory use – Part 2-010: Particular requirements for laboratory equipment for the heating of materials	
MEAS	EN 61010-2-010: 2014 EN 61010-2-010: 2003	Safety requirements for electrical equipment for measurement, control, and laboratory use – Part 2-010: Particular requirements for laboratory equipment for the heating of materials	
MEAS	IEC 61010-2-010: 2014 IEC 61010-2-010: 2003 IEC 61010-2-010: 2019	Safety requirements for electrical equipment for measurement, control, and laboratory use – Part 2-010: Particular requirements for laboratory equipment for the heating of materials	
MEAS	ANSI/UL 61010-2-010: 2015 UL 61010-2-010: 2015 UL 61010-2-010: 2019-06-27	Safety requirements for electrical equipment for measurement, control, and laboratory use – Part 2-010: Particular requirements for laboratory equipment for the heating of materials	
MEAS	CAN/CSA-C22.2 NO. 61010-2-010: 2015 CSA C22.2 NO. 61010-2-010:19	Safety requirements for electrical equipment for measurement, control, and laboratory use – Part 2-010: Particular requirements for laboratory equipment for the heating of materials	

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MEAS	DIN EN 61010-2-011:2017-12	<p>Sicherheitsbestimmungen für elektrische Mess-, Steuer-, Regel- und Laborgeräte - Teil 2-011: Besondere Anforderungen für Kühlgeräte</p> <p>Safety requirements for electrical equipment for measurement, control, and laboratory use - Part 2-011: Particular requirements for refrigerating equipment</p>	
MEAS	EN 61010-2-011:2017	<p>Safety requirements for electrical equipment for measurement, control, and laboratory use - Part 2-011: Particular requirements for refrigerating equipment</p>	
MEAS	IEC 61010-2-011:2016 IEC 61010-2-011:2019	<p>Safety requirements for electrical equipment for measurement, control, and laboratory use - Part 2-011: Particular requirements for refrigerating equipment</p>	
MEAS	ANSI/UL 61010-2-011:2017-01-31 UL 61010-2-011:2021-05-13	<p>Safety requirements for electrical equipment for measurement, control, and laboratory use - Part 2-011: Particular requirements for refrigerating equipment</p>	

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MEAS	CAN/CSA-C22.2 No. 61010-2-011:2017 CSA C22.2 No. 61010-2-011:2019-11-01	Safety requirements for electrical equipment for measurement, control, and laboratory use - Part 2-011: Particular requirements for refrigerating equipment	
MEAS	DIN EN 61010-2-012:2017-09	Sicherheitsbestimmungen für elektrische Mess-, Steuer-, Regel- und Laborgeräte - Teil 2-012: Besondere Anforderungen an Klima- und Umwelttestgeräte und andere Temperatur-Konditionierungsgeräte  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	
MEAS	EN 61010-2-012: 2016	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	
MEAS	IEC 61010-2-012:2016 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	

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MEAS	UL 61010-2-012: 2017-02-20	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	
MEAS	CAN/CSA-C22.2 No. 61010-2-012:2017  CSA-C22.2 No. 61010-2-012:2019-11-01	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	
MEAS	DIN EN 61010-2-020: 2017-12	Sicherheitsbestimmungen für elektrische Mess-, Steuer-, Regel- und Laborgeräte - Teil 2-020: Besondere Anforderungen an Laborzentrifugen  Safety requirements for electrical equipment for measurement, control, and laboratory use - Part 2-020: Particular requirements for laboratory centrifuges	

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MEAS	EN 61010-2-020: 2017	Safety requirements for electrical equipment for measurement, control, and laboratory use - Part 2-020: Particular requirements for laboratory centrifuges	
MEAS	IEC 61010-2-020: 2016 IEC 61010-2-020: 2006 IEC 61010-2-020: 2016	Safety requirements for electrical equipment for measurement, control, and laboratory use - Part 2-020: Particular requirements for laboratory centrifuges	
MEAS	ANSI/ UL 61010-2-020:2016-12-15	Safety requirements for electrical equipment for measurement, control, and laboratory use - Part 2-020: Particular requirements for laboratory centrifuges	
MEAS	CAN/CSA-C22.2 No. 61010-2-020:2017-05-01	Safety requirements for electrical equipment for measurement, control, and laboratory use - Part 2-020: Particular requirements for laboratory centrifuges	

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MEAS	DIN EN 61010-2-030: 2011	<p>Sicherheitsbestimmungen für elektrische Mess-, Steuer-, Regel- und Laborgeräte - Teil 2-030: Besondere Bestimmungen für Prüf- und Messstromkreise</p> <p>Safety requirements for electrical equipment for measurement, control and laboratory use - Part 2-030: Particular requirements for testing and measuring circuits</p>	
MEAS	EN 61010-2-030: 2010	<p>Safety requirements for electrical equipment for measurement, control and laboratory use - Part 2-030: Particular requirements for testing and measuring circuits</p>	
MEAS	IEC 61010-2-030: 2010 + CORRIGENDUM 1: 2011 IEC 61010-2-030: 2017	<p>Safety requirements for electrical equipment for measurement, control and laboratory use - Part 2-030: Particular requirements for testing and measuring circuits</p>	
MEAS	ANSI/UL 61010-2-030: 2012 UL 61010-2-030:2012 UL 61010-2-030:2018	<p>Safety requirements for electrical equipment for measurement, control and laboratory use - Part 2-030: Particular requirements for testing and measuring circuits</p>	

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MEAS	CAN/CSA-C22.2 NO. 61010-2-030:2018	Safety requirements for electrical equipment for measurement, control and laboratory use - Part 2-030: Particular requirements for testing and measuring circuits	
MEAS	DIN EN 61010-031: 2016 + BERICHTIGUNG 1: 2017	Sicherheitsbestimmungen für elektrische Mess-, Steuer-, Regel- und Laborgeräte - Teil 031: Sicherheitsbestimmungen für handgehaltenes Messzubehör zum Messen und Prüfen  Safety requirements for electrical equipment for measurement, control and laboratory use - Part 031: Safety requirements for hand-held probe assemblies for electrical measurement and test	
MEAS	EN 61010-031: 2015	Safety requirements for electrical equipment for measurement, control and laboratory use - Part 031: Safety requirements for hand-held probe assemblies for electrical measurement and test	
MEAS	IEC 61010-031: 2002 + AMD 1: 2008  IEC 61010-031: 2015  IEC 61010-031:2015/AMD1: 2018	Safety requirements for electrical equipment for measurement, control and laboratory use - Part 031: Safety requirements for hand-held probe assemblies for electrical measurement and test	

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MEAS	ANSI/UL 61010-031: 2010 UL 61010-031: 2017	Safety requirements for electrical equipment for measurement, control and laboratory use - Part 031: Safety requirements for hand-held probe assemblies for electrical measurement and test	
MEAS	CAN/CSA-C22.2 NO. 61010-031: 2010 CAN/CSA-C22.2 NO. 61010-031: 2017-01-01	Safety requirements for electrical equipment for measurement, control and laboratory use - Part 031: Safety requirements for hand-held probe assemblies for electrical measurement and test	
MEAS	DIN EN 61010-2-032: 2013	Sicherheitsbestimmungen für elektrische Mess-, Steuer-, Regel- und Laborgeräte - Teil 2-032: Besondere Anforderungen für handgehaltene und handbediente Stromsonden für elektrische Prüfungen und Messungen  Safety requirements for electrical equipment for measurement, control and laboratory use - Part 2-032: Particular requirements for hand-held and hand-manipulated current sensors for electrical test and measurement	

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MEAS	EN 61010-2-032: 2012	Safety requirements for electrical equipment for measurement, control and laboratory use - Part 2-032: Particular requirements for hand-held and hand-manipulated current sensors for electrical test and measurement	
MEAS	IEC 61010-2-032: 2012 IEC 61010-2-032: 2019/COR1:2020	Safety requirements for electrical equipment for measurement, control and laboratory use - Part 2-032: Particular requirements for hand-held and hand-manipulated current sensors for electrical test and measurement	
MEAS	ANSI/UL 61010-2-032: 2014 UL 61010-2-032:2020	Safety requirements for electrical equipment for measurement, control and laboratory use - Part 2-032: Particular requirements for hand-held and hand-manipulated current sensors for electrical test and measurement	
MEAS	CAN/CSA-C22.2 No. 61010-2-032: 2014  CSA-C22.2 No. 61010-2-032: 2020	Safety requirements for electrical equipment for measurement, control and laboratory use - Part 2-032: Particular requirements for hand-held and hand-manipulated current sensors for electrical test and measurement	

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MEAS	DIN EN 61010-2-033:2012	<p>Sicherheitsbestimmungen für elektrische Mess-, Steuer-, Regel- und Laborgeräte - Teil 2-033: Besondere Anforderungen an handgehaltene Multimeter und andere handgehaltene Messgeräte für den Haushalt und professionellen Gebrauch, geeignet zur Messung von Netzspannungen</p> <p>Safety requirements for electrical equipment for measurement, control, and laboratory use - Part 2-033: Particular requirements for hand-held multimeters and other hand-held meters, for domestic and professional use, capable of measuring mains voltage</p>	
MEAS	EN 61010-2-033: 2012	<p>Safety requirements for electrical equipment for measurement, control, and laboratory use - Part 2-033: Particular requirements for hand-held multimeters and other hand-held meters, for domestic and professional use, capable of measuring mains voltage</p>	

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MEAS	IEC 61010-2-033: 2012  IEC 61010-2-033: 2019	Safety requirements for electrical equipment for measurement, control, and laboratory use - Part 2-033: Particular requirements for hand-held multimeters and other hand-held meters, for domestic and professional use, capable of measuring mains voltage	
MEAS	ANSI/UL 61010-2-033: 2014  UL 61010-2-033:2020	Safety requirements for electrical equipment for measurement, control, and laboratory use - Part 2-033: Particular requirements for hand-held multimeters and other hand-held meters, for domestic and professional use, capable of measuring mains voltage	

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MEAS	CAN/CSA-C22.2 NO. 61010-2-033: 2014  CSA-C22.2 No. 61010-2-033: 2020	Safety requirements for electrical equipment for measurement, control, and laboratory use - Part 2-033: Particular requirements for hand-held multimeters and other hand-held meters, for domestic and professional use, capable of measuring mains voltage	
MEAS	EN IEC 61010-2-034: 2021/A11:2021  DIN EN IEC 61010-2-034-100:2022-03 - Entwurf  DIN EN 61010-2-034: 2015-03 Entwurf	Sicherheitsbestimmungen für elektrische Mess-, Steuer-, Regel- und Laborgeräte – Teil 2-034: Besondere Anforderungen für Prüf- und Messgeräte zur Isolationswiderstandsmessung und Prüfausrüstung für die Spannungsfestigkeit Safety requirements for electrical equipment for measurement, control, and laboratory use - Part 2-034: Particular requirements for measurement equipment for insulation resistance and test equipment for electric strength	
MEAS	UL 61010-2-034:2020	Safety requirements for electrical equipment for measurement, control, and laboratory use - Part 2-034: Particular requirements for measurement equipment for insulation resistance and test equipment for electric strength	

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MEAS	CAN/CSA-C22.2 No. 61010-2-034:2018	Safety requirements for electrical equipment for measurement, control, and laboratory use - Part 2-034: Particular requirements for measurement equipment for insulation resistance and test equipment for electric strength	
MEAS	IEC 61010-2-034: 2017	Sicherheitsbestimmungen für elektrische Mess-, Steuer-, Regel- und Laborgeräte - Teil 2-034: Besondere Anforderungen für Prüf- und Messgeräte zur Isolationswiderstandsmessung und Prüfausrüstung für die Spannungsfestigkeit	
MEAS	DIN EN 61010-2-040: 2006 DIN EN 61010-2-040: 2016	Sicherheitsbestimmungen für elektrische Mess-, Steuer-, Regel- und Laborgeräte - Teil 2-040: Besondere Anforderungen an Sterilisatoren und Reinigungs-Desinfektionsgeräte für die Behandlung medizinischen Materials Safety requirements for electrical equipment for measurement, control and laboratory use - Part 2-040: Particular requirements for sterilizers and washer-disinfectors used to treat medical materials	
MEAS	EN 61010-2-040: 2015 EN 61010-2-040: 2005	Safety requirements for electrical equipment for measurement, control and laboratory use - Part 2-040: Particular requirements for sterilizers and washer-disinfectors used to treat medical materials	

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MEAS	IEC 61010-2-040: 2015 IEC 61010-2-040: 2020	Safety requirements for electrical equipment for measurement, control and laboratory use - Part 2-040: Particular requirements for sterilizers and washer-disinfectors used to treat medical materials	
MEAS	ANSI/UL 61010-2-040:2016 UL 61010-2-040:2016  UL 61010-2-040:2021	Safety requirements for electrical equipment for measurement, control and laboratory use - Part 2-040: Particular requirements for sterilizers and washer-disinfectors used to treat medical materials	
MEAS	CAN/CSA-C22.2 NO. 61010-2-040-07: 2007 CAN/CSA-C22.2 NO. 61010-2-040: 2016 CAN/CSA-C22.2 NO. 61010-2-040: 2021	Safety requirements for electrical equipment for measurement, control and laboratory use - Part 2-040: Particular requirements for sterilizers and washer-disinfectors used to treat medical materials	
MEAS	IEC 61010-2-045: 2000	Safety requirements for electrical equipment for measurement, control, and laboratory use - Part 2-045: Particular requirements for washer disinfectors used in medical, pharmaceutical, veterinary and laboratory fields	

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MEAS	DIN EN 61010-2-051: 2016	Sicherheitsbestimmungen für elektrische Mess-, Steuer-, Regel- und Laborgeräte - Teil 2-051: Besondere Anforderungen an Laborgeräte zum Mischen und Rühren  Safety requirements for electrical equipment for measurement, control, and laboratory use - Part 2-051: Particular requirements for laboratory equipment for mixing and stirring	
MEAS	EN 61010-2-051: 2015	Safety requirements for electrical equipment for measurement, control, and laboratory use - Part 2-051: Particular requirements for laboratory equipment for mixing and stirring	
MEAS	ANSI/UL 61010-2-051:2015  UL 61010-2-051:2019	Safety requirements for electrical equipment for measurement, control, and laboratory use - Part 2-051: Particular requirements for laboratory equipment for mixing and stirring	
MEAS	CAN/CSA-C22.2 No. 61010-2-051:2015  CSA-C22.2 No. 61010-2-051:2019	Safety requirements for electrical equipment for measurement, control, and laboratory use - Part 2-051: Particular requirements for laboratory equipment for mixing and stirring	
MEAS	IEC 61010-2-051: 2015 IEC 61010-2-051: 2018	Safety requirements for electrical equipment for measurement, control, and laboratory use - Part 2-051: Particular requirements for laboratory equipment for mixing and stirring	

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MEAS	DIN EN 61010-2-061:2016-02	Sicherheitsbestimmungen für elektrische Mess-, Steuer-, Regel- und Laborgeräte - Teil 2-061: Besondere Anforderungen an Labor-Atomspektrometer mit thermischer Atomisierung und Ionisation Safety requirements for electrical equipment for measurement, control, and laboratory use - Part 2-061: Particular requirements for laboratory atomic spectrometers with thermal atomization and ionization	
MEAS	EN 61010-2-061: 2015	Safety requirements for electrical equipment for measurement, control, and laboratory use - Part 2-061: Particular requirements for laboratory atomic spectrometers with thermal atomization and ionization	
MEAS	IEC 61010-2-061: 2015 IEC 61010-2-061: 2003  IEC 61010-2-061: 2018	Safety requirements for electrical equipment for measurement, control, and laboratory use - Part 2-061: Particular requirements for laboratory atomic spectrometers with thermal atomization and ionization	
MEAS	ANSI/ UL 61010-2-061:2015  UL 61010-2-061:2019	Safety requirements for electrical equipment for measurement, control, and laboratory use - Part 2-061: Particular requirements for laboratory atomic spectrometers with thermal atomization and ionization	

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MEAS	CAN/CSA-C22.2 No. 61010-2-061:2015-11-01  CSA C22.2 No. 61010-2-061:2019	Safety requirements for electrical equipment for measurement, control, and laboratory use - Part 2-061: Particular requirements for laboratory atomic spectrometers with thermal atomization and ionization	
MEAS	DIN EN 61010-2-081:2004 DIN EN 61010-2-081: 2015	Sicherheitsbestimmungen für elektrische Mess-, Steuer-, Regel- und Laborgeräte - Teil 2-081: Besondere Anforderungen an automatische und semiautomatische Laborgeräte für Analysen und andere Zwecke  Safety requirements for electrical equipment for measurement, control and laboratory use - Part 2-081: Particular requirements for automatic and semi-automatic laboratory equipment for analysis and other purposes	No testing of biological contamination no measurement of ultrasonic pressure
MEAS	EN 61010-2-081 :2002+ A1: 2003 EN 61010-2-081: 2015	Safety requirements for electrical equipment for measurement, control and laboratory use - Part 2-081: Particular requirements for automatic and semi-automatic laboratory equipment for analysis and other purposes	No testing of biological contamination no measurement of ultrasonic pressure

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MEAS	IEC 61010-2-081: 2015  IEC 61010-2-081: 2001 + AMD 1: 2013 IEC 61010-2-081: 2019	Safety requirements for electrical equipment for measurement, control and laboratory use - Part 2-081: Particular requirements for automatic and semi-automatic laboratory equipment for analysis and other purposes	No testing of biological contamination no measurement of ultrasonic pressure
MEAS	ANSI/UL 61010-2-081: 2015 UL 61010-2-081: 2015  UL 61010-2-081:2019	Safety requirements for electrical equipment for measurement, control and laboratory use - Part 2-081: Particular requirements for automatic and semi-automatic laboratory equipment for analysis and other purposes	No testing of biological contamination no measurement of ultrasonic pressure
MEAS	CAN/CSA-C22.2 NO. 61010- 2-081: 2015 CAN/CSA-C22.2 NO. 61010- 2-081:2019	Safety requirements for electrical equipment for measurement, control and laboratory use - Part 2-081: Particular requirements for automatic and semi-automatic laboratory equipment for analysis and other purposes	No testing of biological contamination no measurement of ultrasonic pressure
MEAS	DIN EN 61010-2-091: 2013 + BERICHTIGUNG 1: 2016	Sicherheitsbestimmungen für elektrische Mess-, Steuer-, Regel- und Laborgeräte - Teil 2-091: Besondere Anforderungen für Röntgengeräteschränke Safety requirements for electrical equipment for measurement, control, and laboratory use - Part 2-091: Particular requirements for cabinet x-ray systems	

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MEAS	EN 61010-2-091: 2012+ AC: 2013	Safety requirements for electrical equipment for measurement, control, and laboratory use - Part 2-091: Particular requirements for cabinet x-ray systems	
MEAS	IEC 61010-2-091: 2012  IEC 61010-2-091: 2019	Safety requirements for electrical equipment for measurement, control, and laboratory use - Part 2-091: Particular requirements for cabinet x-ray systems	
MEAS	ANSI/UL 61010-2-091: 2014  UL 61010-2-91:2019	Safety requirements for electrical equipment for measurement, control, and laboratory use - Part 2-091: Particular requirements for cabinet x-ray systems	
MEAS	CAN/CSA-C22.2 No. 61010- 2-091: 2014  CSA-C22.2 No. 61010-2-091: 2019	Safety requirements for electrical equipment for measurement, control, and laboratory use - Part 2-091: Particular requirements for cabinet x-ray systems	

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MEAS	DIN EN IEC 61010-2-120:2019-02	Sicherheitsbestimmungen für elektrische Mess-, Steuer-, Regel- und Laborgeräte - Teil 2-120: Besondere Sicherheitsanforderungen für Maschinen-Aspekte der Geräte Safety requirements for electrical equipment for measurement, control, and laboratory use. Part 2-120. Particular safety requirements for machinery aspects of equipment	
MEAS	EN IEC 61010-2-120:2018	Safety requirements for electrical equipment for measurement, control, and laboratory use. Part 2-120. Particular safety requirements for machinery aspects of equipment	
MEAS	DIN EN 61010-2-130:2018-07 Entwurf	Sicherheitsbestimmungen für elektrische Mess-, Steuer-, Regel- und Laborgeräte - Teil 2-130: Besondere Anforderungen an Geräte, die für den Gebrauch in Bildungseinrichtungen durch Kinder vorgesehen sind Safety requirements for electrical equipment for measurement, control, and laboratory use. Particular requirements for equipment intended to be used in educational establishments by children. Particular requirements for equipment intended to be used in educational establishments by children	

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MEAS	IEC 61010-2-130: 2021	Safety requirements for electrical equipment for measurement, control, and laboratory use. Particular requirements for equipment intended to be used in educational establishments by children. Particular requirements for equipment intended to be used in educational establishments by children	
MEAS	DIN EN 61010-2-201: 2014 VDE 0411-2-201 DIN EN IEC 61010-2-201:2019-04:2019 DIN EN IEC 61010-2-201 Berichtigung 1: 2020 Berichtigung 1:2020-01	Sicherheitsbestimmungen für elektrische Mess-, Steuer-, Regel- und Laborgeräte - Teil 2-201: Besondere Anforderungen für Steuer- und Regelgeräte Safety requirements for electrical equipment for measurement, control, and laboratory use - Part 2-201: Particular requirements for control equipment	
MEAS	EN 61010-2-201: 2013 + AC 2013 EN IEC 61010-2-201:2018	Safety requirements for electrical equipment for measurement, control, and laboratory use - Part 2-201: Particular requirements for control equipment	
MEAS	IEC 61010-2-201: 2017 IEC 61010-2-201: 2013	Safety requirements for electrical equipment for measurement, control, and laboratory use - Part 2-201: Particular requirements for control equipment	

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MEAS	ANSI/UL 61010-2-201: 2017 UL 61010-2-201: 2014  UL 61010-2-201:2018	Safety requirements for electrical equipment for measurement, control, and laboratory use - Part 2-201: Particular requirements for control equipment	
MEAS	CAN/CSA-IEC 61010-2-201: 2014  CAN/CSA-C22.2 No. 61010-2-201:2018	Safety requirements for electrical equipment for measurement, control, and laboratory use - Part 2-201: Particular requirements for control equipment	
MEAS	DIN EN 61010-2-202: 2017-11	Sicherheitsbestimmungen für elektrische Mess-, Steuer-, Regel- und Laborgeräte — Teil 2-202: Besondere Anforderungen für elektrisch betriebene Ventile und Stellantriebe  Safety requirements for electrical equipment for measurement, control and laboratory use - Part 2-202: Particular requirements for electrically operated valve actuators	
MEAS	EN 61010-2-202: 2017	Safety requirements for electrical equipment for measurement, control and laboratory use - Part 2-202: Particular requirements for electrically operated valve actuators	

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MEAS	IEC 61010-2-202: 2016 IEC 61010-2-202: 2020	Safety requirements for electrical equipment for measurement, control and laboratory use - Part 2-202: Particular requirements for electrically operated valve actuators	
MEAS	CAN/CSA-C22.2 No. 61010-2-202:2018-02-01	Safety requirements for electrical equipment for measurement, control and laboratory use - Part 2-202: Particular requirements for electrically operated valve actuators	
<b>2.3. Safety: Safety of Laser Products</b>			
MISC	DIN EN 60825-1:2008 + BERICHTIGUNG 1: 2008 + BERICHTIGUNG 2: 2009 + BEIBLATT 1: 2008 + BEIBLATT 2: 2012 + BEIBLATT 3: 2012 DIN EN 60825-1: 2015 DIN EN 60825-1 Berichtigung 1:2018-11	Sicherheit von Lasereinrichtungen - Teil 1: Klassifizierung von Anlagen und Anforderungen Safety of laser products - Part 1: Equipment classification and requirements	
MISC	EN 60825-1: 2007 + A1:2002 + A2:2001 + A2/AC:2004 EN 60825-1: 2014	Safety of laser products - Part 1: Equipment classification and requirements	
MISC	IEC 60825-1: 2007 + CORRIGENDUM 1: 2008 + INTERPRETATION SHEET 1: 2009 + INTERPRETATION SHEET 2: 2011 IEC 60825-1: 2014	Safety of laser products - Part 1: Equipment classification and requirements	

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MISC	CAN/CSA-E60825-1: 2015	Safety of laser products - Part 1: Equipment classification and requirements	
MISC	DIN EN 60825-2: 2011 + BEIBLATT 1: 2008 + BEIBLATT 2: 2019	Sicherheit von Lasereinrichtungen - Teil 1: Klassifizierung von Anlagen und Anforderungen Safety of laser products - Part 1: Equipment classification and requirements	
MISC	EN 60825-2 :2004 + A1: 2007 + A2: 2010	Safety of laser products - Part 1: Equipment classification and requirements	
MISC	IEC 60825-2: 2005+ AM1 : 2006 + INTERPRETATION SHEET 1:2008 + AM2: 2010  IEC 60825-2 EDITION 3.1: 2007 IEC 60825-2 EDITION 3.2: 2010 IEC 60825-2:2021	Safety of laser products - Part 2: Safety of optical fibre communication systems	
<b>2.4. Safety: Fire Hazard Testing</b>			
---	DIN EN 60695-2-10: 2014  DIN EN IEC 60695-2- 10:2019-04; VDE 0471-2- 10:2019-04 - Entwurf	Prüfungen zur Beurteilung der Brandgefahr - Teil 2-10: Prüfungen mit dem Glühdraht; Glühdrahtprüfeinrichtungen und allgemeines Prüfverfahren  Fire hazard testing - Part 2-10: Glowing/hot-wire based test methods - Glow-wire apparatus and common test procedure	

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---	EN 60695-2-10: 2013	Fire hazard testing - Part 2-10: Glowing/hot-wire based test methods - Glow-wire apparatus and common test procedure	
---	IEC 60695-2-10: 2013	Fire hazard testing - Part 2-10: Glowing/hot-wire based test methods - Glow-wire apparatus and common test procedure	
---	DIN EN 60695-2-11: 2014  DIN EN IEC 60695-2- 11:2019-07 Entwurf	Prüfungen zur Beurteilung der Brandgefahr - Teil 2-11: Prüfungen mit dem Glühdraht; Prüfung mit dem Glühdraht zur Entflammbarkeit von Enderzeugnissen  Fire hazard testing - Part 2-11: Glowing/hot-wire based test methods - Glow-wire flammability test method for end-products	
---	EN 60695-2-11: 2014	Fire hazard testing - Part 2-11: Glowing/hot-wire based test methods - Glow-wire flammability test method for end-products	
---	IEC 60695-2-11:2014	Fire hazard testing - Part 2-11: Glowing/hot-wire based test methods - Glow-wire flammability test method for end-products	

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---	DIN EN 60695-10-2: 2016	Prüfungen zur Beurteilung der Brandgefahr - Teil 10-2: Unübliche Wärme; Kugeldruckprüfung Fire hazard testing - Part 10-2: Abnormal heat - Ball pressure test	
---	EN 60695-10-2: 2014	Fire hazard testing - Part 10-2: Abnormal heat - Ball pressure test	
---	IEC 60695- 10-2: 2014	Fire hazard testing - Part 10-2: Abnormal heat - Ball pressure test	
---	DIN EN 60695-11-3: 2014	Prüfungen zur Beurteilung der Brandgefahr - Teil 11-3: Prüfflammen - 500-W-Prüfflamme - Prüfeinrichtungen und Prüfverfahren zur Bestätigung  Fire hazard testing - Test flames - 500 W flames - Apparatus and confirmational test methods	
---	EN 60695-11-3: 2012	Fire hazard testing - Test flames - 500 W flames - Apparatus and confirmational test methods	
---	IEC 60695-11-3: 2012	Fire hazard testing - Test flames - 500 W flames - Apparatus and confirmational test methods	

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---	DIN EN 60695-11-5: 2017	Prüfungen zur Beurteilung der Brandgefahr - Teil 11-5: Prüfflammen - Prüfverfahren mit der Nadelflamme - Versuchsaufbau, Vorkehrungen zur Bestätigungsprüfung und Leitfaden Fire hazard testing - Part 11-5: Test flames - Needle-flame test method - Apparatus, confirmatory test arrangement and guidance	
---	EN 60695-11-5: 2005	Fire hazard testing - Part 11-5: Test flames - Needle-flame test method - Apparatus, confirmatory test arrangement and guidance	
---	IEC 60695-11-5: 2016	Fire hazard testing - Part 11-5: Test flames - Needle-flame test method - Apparatus, confirmatory test arrangement and guidance	
---	DIN EN 60695-11-10:2014 BERICHTIGUNG 1: 2015	Prüfungen zur Beurteilung der Brandgefahr - Teil 11-10: Prüfflammen; Prüfverfahren mit 50-W-Prüfflamme horizontal und vertikal; Änderung A1 Fire hazard testing - Part 11-10: Test flames - 50 W horizontal and vertical flame test methods	
---	EN 60695-11-10: 2013	Fire hazard testing - Part 11-10: Test flames - 50 W horizontal and vertical flame test methods	
---	IEC 60695-11-10: 2013 + CORRIGENDUM 1: 2014  IEC 60695-11-10: 1999+ AMD 1: 2003	Fire hazard testing - Part 11-10: Test flames - 50 W horizontal and vertical flame test methods	

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---	DIN EN 60695-11-20: 2016	Prüfungen zur Beurteilung der Brandgefahr - Teil 11-20: Prüfflammen; Prüfverfahren mit einer 500-W- Prüfflamme Fire hazard testing - Part 11-20: Test flames - 500 W flame test methods	
---	EN 60695-11-20: 2015+ AC: 2016	Fire hazard testing - Part 11-20: Test flames - 500 W flame test methods	
---	IEC 60695-11-20: 2015 + CORRIGENDUM 1: 2016 IEC 60695-11-20: 1999 + AMD 1: 2003 + CORRIGENDUM 1: 2000	Fire hazard testing - Part 11-20: Test flames - 500 W flame test methods	
---	DIN EN 60695-2-12: 2015 DIN EN 60695-2- 12:2019 Entwurf	Prüfungen zur Beurteilung der Brandgefahr - Teil 2-12: Prüfverfahren mit dem Glühdraht - Prüfung mit dem Glühdraht zur Entflammbarkeit (GWFI) von Werkstoffen Fire hazard testing - Part 2-12: Glowing/hot-wire based test methods - Glow-wire flammability index (GWFI) test method for materials	
---	EN 60695-2-12: 2010 +A1 :2014	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: 2010 + AMD 1: 2014 IEC 60695-2-12 EDITION 2.1: 2014	Fire hazard testing - Part 2-12: Glowing/hot-wire based test methods - Glow-wire flammability index (GWFI) test method for materials	

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---	DIN EN 60695-2-13: 2015 DIN EN 60695-2-13: 2011 DIN EN 60695-2-13:2019 Entwurf	Prüfungen zur Beurteilungen der Brandgefahr - Teil 2-13: Prüfverfahren mit dem Glühdraht - Prüfung mit dem Glühdraht zur Entzündbarkeit (GWIT) von Werkstoffen  Fire hazard testing - Part 2-13: Glowing/hot-wire based test methods - Glow-wire ignition temperature (GWIT) test method for materials	
---	EN 60695-2-13: 2010 + A1: 2014	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: 2010 + CORRIGENDUM 1: 2012 + AM 1: 2014 IEC 60695-2-13 EDITION 2.1: 2014	Fire hazard testing - Part 2-13: Glowing/hot-wire based test methods - Glow-wire ignition temperature (GWIT) test method for materials	
---	UL 94: 2013 ANSI/UL 94: 2013 ANSI/UL 94: 2014 ANSI/UL 94: 2015 ANSI/UL 94: 2016 ANSI/UL 94: 2018 UL 94 Ed. 6 Jun 27, 2020	Tests for Flammability of Plastic Materials for Parts in Devices and Applications	
---	ANSI/UL 94A(2015-01)	Standard for Safety for Tests for Flammability of Plastic Materials for Parts in Devices and Appliances / revision of ANSI/UL 94-2015	
---	ANSI/UL 94B: 2015	Standard for Safety for Tests for Flammability of Plastic Materials for Parts in Devices and Appliances / revision of ANSI/UL 94b-2013	

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---	UL 1581: 2001 ANSI/UL 1581: 2013 ANSI/UL 1581: 2015 ANSI/UL 1581: 2016 ANSI/UL 1581: 2017	Reference standard for electrical wires, cables, and flexible cords	Restrictions: Only Vertical flame, FT1 and cable flame test
---	UL 2556: 2015 UL 2556:2021 ANSI/UL 2556: 2015 ANSI/UL 2556A: 2013	Wire and cable test methods: Only vertical wiring FV-2, VW-1	
---	DIN 75200: 1980	Bestimmung des Brennverhaltens von Werkstoffen der Kraftfahrzeuginnenausstattung Determination of burning behaviour of interior materials in motor vehicles	
---	FMVSS 571.302 STANDARD NO. 302:2013	Flammability of interior materials	
---	ECE-R118	Einheitliche technische Vorschriften über das Brennverhalten und/oder die Eigenschaft von beim Bau von Kraftfahrzeugen bestimmter Klassen verwendeten Materialien, Kraftstoff oder Schmiermittel abzuweisen	
---	ISO 3795: 1989	Straßenfahrzeuge sowie Traktoren und Maschinen für die Land- und Forstwirtschaft - Bestimmung des Brennverhaltens von Werkstoffen der Innenausstattung Road vehicles, and tractors and machinery for agriculture and forestry - Determination of burning behaviour of interior materials	
---	IEC 60112:2003 + A1: 2009 IEC 60112 EDITION 4.1:2009 IEC 60112:2020	Method for the determination of the proof and the comparative tracking indices of solid insulating materials	

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	DIN EN 60112:2010 DIN EN 60112:2016- 10 Entwurf	Verfahren zur Bestimmung der Prüfwahl und der Vergleichszahl der Kriechwegbildung von festen, isolierenden Werkstoffen Method for the determination of the proof and the comparative tracking indices of solid insulating materials	
	EN 60112:2003	Method for the determination of the proof and the comparative tracking indices of solid insulating materials	
<b>2.5. Safety: Installation Equipment</b>			
INST	DIN EN 61800-5-1: 2017  E DIN EN IEC 61800-5- 1:2020-08	Elektrische Leistungsantriebssysteme mit einstellbarer Drehzahl - Teil 5-1: Anforderungen an die Sicherheit - Elektrische, thermische und energetische Anforderungen Adjustable speed electrical power drive systems - Part 5-1: Safety requirements - Electrical, thermal and energy	Restrictions: The partial discharge test according to EN 61800-5-1 is not performed. Only low-voltage up to max. 1kV.
INST	EN 61800-5-1: 2007 + A1: 2017	Adjustable speed electrical power drive systems - Part 5-1: Safety requirements - Electrical, thermal and energy	Restrictions: The partial discharge test according to EN 61800-5-1 is not performed. Only low-voltage up to max. 1kV.
INST	IEC 61800-5-1: 2007 + AMD 1: 2016 IEC 61800-5-1 EDITION 2.1: 2016	Adjustable speed electrical power drive systems - Part 5-1: Safety requirements - Electrical, thermal and energy	Restrictions: The partial discharge test according to EN 61800-5-1 is not performed. Only low-voltage up to max. 1kV.

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INST	UL 61800-5-1: 2012 ANSI/UL 61800-5-1: 2017	Adjustable Speed Electrical Power Drive Systems - Part 5-1: Safety Requirements - Electrical, Thermal and Energy	Restrictions: The partial discharge test according to EN 61800-5-1 is not performed. Only low-voltage up to max. 1kV.
	DIN EN 50178: 1998	Ausrüstung von Starkstromanlagen mit elektronischen Betriebsmitteln	Restrictions: Only low-voltage up to max. 1kV
	EN 50178: 1997	Ausrüstung von Starkstromanlagen mit elektronischen Betriebsmitteln	Restrictions: Only low-voltage up to max. 1kV
INST	DIN EN IEC 62477-1:2019-03 (Entwurf) DIN EN 62477-1:2017-10	Sicherheitsanforderungen an Leistungshalbleiter-Umrichtersysteme und -betriebsmittel - Teil 1: Allgemeines Safety requirements for power electronic converter systems and equipment - Part 1: General	
INST	DIN EN 62477-1:2017	Sicherheitsanforderungen an Leistungshalbleiter-Umrichtersysteme und -betriebsmittel - Teil 1: Allgemeines Safety requirements for power electronic converter systems and equipment - Part 1: General	50178 is replaced by 62477-1
INST	EN 62477-1: 2012 + A11: 2014 + A1: 2017	afety requirements for power electronic converter systems and equipment - Part 1: General	50178 is replaced by 62477-1
INST	IEC 22/294/CD:2018	Safety requirements for power electronic converter systems and equipment - Part 1: General	
INST	IEC 62477-1: 2012 + AMD 1: 2016  IEC 62477-1 EDITION 1.1: 2016	Safety requirements for power electronic converter systems and equipment - Part 1: General	50178 is replaced by 62477-1

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<b>2.6. Safety: Measuring relays and protection equipmen</b>			
CONT	DIN EN 60255-27: 2014 DIN EN IEC 60255-27:2019-02 Entwurf	Messrelais und Schutzeinrichtungen - Teil 27: Anforderungen an die Produktsicherheit Measuring relays and protection equipment - Part 27: Product safety requirements	
CONT	EN 60255-27: 2014	Measuring relays and protection equipment - Part 27: Product safety requirements	
CONT	IEC 60255-27: 2013	Measuring relays and protection equipment - Part 27: Product safety requirements	
CONT	DIN EN 60730-1: 2017 DIN EN IEC 60730-1:2021-03 Entwurf	Automatische elektrische Regel- und Steuergeräte - Teil 1: Allgemeine Anforderungen Automatic electrical controls - Part 1: General requirements	
CONT	EN 60730-1: 2016	Automatic electrical controls - Part 1: General requirements	
CONT	IEC 60730-1: 2013 + CORRIGENDUM 1: 2014 + AMD 1: 2015  IEC 60730-1 EDITION 5.1: 2015 IEC 60730-1:2013/ AMD2:2020	Automatic electrical controls - Part 1: General requirements	
<b>2.7. Safety: Safety requirements for secondary batteries and battery installations / IP</b>			
BATT	DIN EN 50272-2:2001	Sicherheitsanforderungen an Batterien und Batterieanlagen. Stationäre Batterien Safety requirements for secondary batteries and battery installations - Part 2: Stationary batteries	

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BATT	DIN EN 60086-4: 2015 VDE 0509-4	Primärbatterien - Teil 4: Sicherheit von Lithium-Batterien Primary batteries - Part 4: Safety of lithium batteries (IEC 60086-4:2014)	
BATT	EN 60086-4: 2015	Primary batteries - Part 4: Safety of lithium batteries (IEC 60086-4:2014)	
BATT	IEC 60086-4: 2014 IEC 60086-4: 2007	Primary batteries - Part 4: Safety of lithium batteries (IEC 60086-4:2014)	
BATT	UL 60086-4: 2015	Primary batteries - Part 4: Safety of lithium batteries (IEC 60086-4:2014)	
BATT	UL 62133: 2017	Safety for secondary cells and batteries containing alkaline or other non-acid electrolytes - Safety requirements for portable sealed secondary cells, and for batteries made from them, for use in portable applications	
BATT	CAN/CSA-E62133-13: 2013 CAN/CSA-C22.2 NO. 62133:2017	Safety for secondary cells and batteries containing alkaline or other non-acid electrolytes - Safety requirements for portable sealed secondary cells, and for batteries made from them, for use in portable applications	
BATT	EN 62133-1: 2017	Secondary cells and batteries containing alkaline or other non-acid electrolytes - Safety requirements for portable sealed secondary cells, and for batteries made from them, for use in portable applications - Part 1: Nickel systems	

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BATT	EN 62133-2: 2017	Secondary cells and batteries containing alkaline or other non-acid electrolytes - Safety requirements for portable sealed secondary cells, and for batteries made from them, for use in portable applications - Part 2: Lithium systems	
BATT	IEC 62133-1: 2017	Secondary cells and batteries containing alkaline or other non-acid electrolytes - Safety requirements for portable sealed secondary cells, and for batteries made from them, for use in portable applications - Part 1: Nickel systems	
BATT	IEC 62133-2: 2017	Secondary cells and batteries containing alkaline or other non-acid electrolytes - Safety requirements for portable sealed secondary cells, and for batteries made from them, for use in portable applications - Part 2: Lithium systems	

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BATT	EN 62619: 2017	Secondary cells and batteries containing alkaline or other non-acid electrolytes - Safety requirements for secondary lithium cells and batteries, for use in industrial applications	
BATT	IEC 62619: 2017	Secondary cells and batteries containing alkaline or other non-acid electrolytes - Safety requirements for secondary lithium cells and batteries, for use in industrial applications	
BATT	Battery Association of Japan	Manual for transport of lithium / lithium ion batteries	Restrictions Only test 5 (External Short Circuit) and test 7 (Overcharge)
BATT	UN ST/SG/ AC.10/11 Rev 5 AMD1, 2013 Rev 6, 2015 + Amendment 1	United Nations: Recommendations on the Transport of dangerous goods – Manual of Test and Criteria – Section 38.3 Lithium batteries (ST/SG/AC.10/27/Add2)	Restrictions Only Test T5 (External Short Circuit) and Test T7 (Overcharge)
	DIN ETS 300 132-1: 2005 ETS 300132-1: 1996	Anlagentechnik - Stromversorgungsschnittstelle am Eingang von Telekommunikationseinrichtungen - Teil 1: Betrieb mit Wechselstrom (AC), erzeugt aus Gleichstromquellen (DC) Environmental Engineering (EE); Power supply interface at the input to telecommunications equipment; Part 1: Operated by alternating current (ac) derived from direct current (dc) sources	

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	DIN EN 300 132-2: 2012 DIN EN 300132-2: 2017 EN 300132-2: 2016 ETSI 300 132-2: 1996 ETS 300132-2 CORRIGENDUM 1: 1996	Anlagentechnik - Stromversorgungsschnittstelle am Eingang von Telekommunikationseinrichtungen - Teil 2: Betrieb bei -48 V mit Gleichstrom (DC) Environmental Engineering (EE); Power supply interface at the input to telecommunications equipment; Part 2: Operated by direct current (dc)	
	DIN EN 300 132-3: 2005 DIN EN 300132-3-0: 2013 DIN EN 300132-3-1: 2013 ETSI EN 300 132-3	Anlagentechnik - Stromversorgungsschnittstelle am Eingang von Telekommunikationseinrichtungen - Teil 3-0 : Betrieb mit gleichgerichtetem Strom, Wechselstrom oder Gleichstrom bis 400 V – Überblick Environmental Engineering (EE); Power supply interface at the input to telecommunications equipment; Part 3: Operated by rectified current source, alternating current source or direct current source up to 400 V	
	DIN EN 60529:2014	Schutzarten durch Gehäuse (IP-Code) Degrees of protection provided by enclosures (IP Code) IP 1x, 2x, 3x, 4x, 5x, x1, x2, x3, x4, x5, x6, x7, x8	
	EN 60529: 1991 + A1:2000 +A2:2013 + AC:2016 + CORRIGENDUM 1:2019	Degrees of protection provided by enclosures (IP Code) IP 1x, 2x, 3x, 4x, 5x, x1, x2, x3, x4, x5, x6, x7, x8	

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	IEC 60529: 1989 AMD 1:1999 AMD 2:2013  IEC 60529 EDITION 2.1: 2001 + CORRIGENDUM 2: 2007 + CORRIGENDUM 3: 2009  IEC 60529 EDITION 2.2: 2013 + CORRIGENDUM 1 : 2013 + CORRIGENDUM 2: 2015	Degrees of protection provided by enclosures (IP Code) IP 1x, 2x, 3x, 4x, 5x, x1, x2, x3, x4, x5, x6, x7, x8	
	CAN/CSA-C22.2 NO. 60529: 2016	Degrees of protection provided by enclosures (IP Code)	
<b>2.8. Safety: NEBS</b>			
NEBS	Telcordia GR-3108-CORE	Generic Requirements for Network Equipment in the Outside Plant (OSP) Restrictions	Only section 5 (Electrical Requirements)
NEBS	Telcordia GR-63-Core	NEBSTM Requirements: Physical Protection Restrictions	Only Part 4.2 und 5.2.3 needle flame test
NEBS	Telcordia GR-1089-Core	Electromagnetic Compatibility (EMC) and Electrical Safety – Generic Criteria for Network Telecommunications Equipment Chapter 7, 8, 9	
<b>2.9. Safety: Luminaires</b>			
LITE	DIN EN 62471: 2009	Photobiologische Sicherheit von Lampen und Lampensystemen Photobiological safety of lamps and lamp systems	
LITE	EN 62471: 2008	Photobiological safety of lamps and lamp systems	
LITE	IEC 62471: 2006	Photobiological safety of lamps and lamp systems	

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LITE	DIN IEC/TR 62778:2014- 03	Anwendung von IEC 62471 zur Beurteilung der Blaulichtgefahr von Lichtquellen und Leuchten	
LITE	IEC/TR 62778 Ed. 2.0:2014	Application of IEC 62471 for the assessment of blue light hazard to light sources and luminaires	
LITE	DIN EN 13032-1:2012-06	Licht und Beleuchtung - Messung und Darstellung photometrischer Daten von Lampen und Leuchten - Teil 1: Messung und Datenformat; Deutsche Fassung EN 13032- 1:2004 + Korrektur 2007-07 + A1:2012	
LITE	DIN EN 13032-4:2019-11	Licht und Beleuchtung - Messung und Darstellung photometrischer Daten von Lampen und Leuchten - Teil 4: LED-Lampen, -Module und -Leuchten; Deutsche Fassung EN 13032- 4:2015+A1:2019	
LITE	EN 13032-4:2015+A1:2019	Light and lighting - Measurement and presentation of photometric data of lamps and luminaires - Part 4: LED lamps, modules and luminaires	
LITE	DIN EN 61341:2012-08	Verfahren zur Messung der Lichtstärke in Hauptausstrahlungsrichtung und des (der) Ausstrahlwinkel(s) von Reflektorlampen	
LITE	EN 61341:2011	Method of measurement of centre beam intensity and beam angle(s) of reflector lamps (IEC/TR 61341:2010)	
LITE	IEC/TR 61341:2010	Method of measurement of centre beam intensity and beam angle(s) of reflector lamps	
LITE	DIN EN 50285:1999-06	Energieeffizienz von elektrischen Lampen für den Hausgebrauch - Meßverfahren	
LITE	DIN EN 62612:2019-04	LED-Lampen mit eingebautem Vorschaltgerät für Allgemeinbeleuchtung mit Versorgungsspannungen > 50 V - Anforderungen an die Arbeitsweise	
LITE	EN 62612:2013/A2:2018	Self-ballasted LED lamps for general lighting services with supply voltages > 50 V - Performance requirements	

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LITE	IEC 62612:2013 +A1:2015 +A2:2018	Self-ballasted LED lamps for general lighting services with supply voltages > 50 V - Performance requirements	
LITE	DIN EN 62717:2019-12	LED-Module für die Allgemeinbeleuchtung - Anforderungen an die Arbeitsweise (IEC 62717:2014, modifiziert + A1:2015, modifiziert + A2:2019); Deutsche Fassung EN 62717:2017 + A2:2019	
LITE	EN 62717:2017 +A1:2015+ A2:2019	LED modules for general lighting - Performance requirements	
LITE	IEC 62717:2014+AMD1: 2015 +AMD2:2019	LED modules for general lighting - Performance requirements	
<b>2.10. Safety: Plugs and socket-outlets for household and similar purposes</b>			
INST	IEC 60884-1: 2002 + AMD 1: 2006 + AMD 2: 2013 + AMD 2 CORRIGENDUM 1: 2014  IEC 60884-1 EDITION 3.1: 2006 IEC 60884-1 EDITION 3.2: 2013	Plugs and socket-outlets for household and similar purposes - Part 1: General requirements (+ IEC 60884-1 AMD 1)	
INST	IEC 60884-2-5: 1995 IEC 60884-2-5: 2017	Plugs and socket-outlets for household and similar purposes - Part 2: Particular requirements for adaptors	
INST	BS 1363-1+A4: 1995	Specification for rewirable and non- rewirable 13 A fused plugs	
INST	BS 1363-2: 1999 BS 1363-2+A1:2016	13 A plugs, socket-outlets, adaptors and connection units. Specification for 13 A switched and unswitched socket-outlets	

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INST	EN 50075: 1990	Plugs and socket-outlets up to 400 V 25 A; flat non-wirable two pole plugs, 2,5 A 250 V, with cord, for the connection of class-II-equipment for household and similar purposes	
<b>2.11. Safety: E Mobility / Electrical Vehicle</b>			
ELVH	DIN EN 62196-1: 2015  DIN EN IEC 62196-1:2020-12 Entwurf	Stecker, Steckdosen, Fahrzeugkupplungen und Fahrzeugstecker. Konduktives Laden von Elektrofahrzeugen. Allgemeine Anforderungen Plugs, socket-outlets, vehicle couplers and vehicle inlets - Conductive charging of electric vehicles - Part 1: Charging of electric vehicles up to 250 A a.c. and 400 A d.c.	
ELVH	EN 62196-1: 2014	Plugs, socket-outlets, vehicle couplers and vehicle inlets - Conductive charging of electric vehicles - Part 1: Charging of electric vehicles up to 250 A a.c. and 400 A d.c.	
ELVH	IEC 62196-1: 2014	Plugs, socket-outlets, vehicle couplers and vehicle inlets - Conductive charging of electric vehicles - Part 1: Charging of electric vehicles up to 250 A a.c. and 400 A d.c.	
ELVH	DIN EN 61851-1:2012 DIN EN IEC 61851-1:2019-12	Elektrische Ausrüstung von Elektro-Straßenfahrzeugen. Konduktive Ladesysteme für Elektrofahrzeuge. Allgemeine Anforderungen Electric equipment of electric road vehicles - Electric vehicle conductive charging system - Part 1: General requirements	

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ELVH	EN 61851-1: 2011	Electric equipment of electric road vehicles - Electric vehicle conductive charging system - Part 1: General requirements	
ELVH	IEC 61851-1: 2010 IEC 61851-1: 2017	Electric equipment of electric road vehicles - Electric vehicle conductive charging system - Part 1: General requirements	
ELVH	EN 61851-21: 2002	Electric vehicle conductive charging system - Part 21: Electric vehicle requirements for conductive connection to an a.c./d.c. supply	
ELVH	DIN EN 61851-22: 2002	Konduktive Ladesysteme für Elektrofahrzeuge. Wechselstrom-Ladestation für Elektrofahrzeuge Electric vehicle conductive charging system - Part 22: a.c. electric vehicle charging station	
ELVH	EN 61851-22: 2002	Electric vehicle conductive charging system - Part 22: a.c. electric vehicle charging station	
ELVH	IEC 61851-22: 2001	Electric vehicle conductive charging system - Part 22: a.c. electric vehicle charging station	

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<b>2.12. Safety: Low-voltage switchgear and controlgear assemblies</b>			
POW	DIN EN 61439-1: 2011 + BEIBLATT 1: 2014 + BEIBLATT 1 BERICHTIGUNG 1: 2014 + BEIBLATT 2: 2016 DIN EN 61439- 1:2019-04 Entwurf	Niederspannungs- Schaltgerätekombinationen – Teil 1: Allgemeine Festlegungen Low-voltage switchgear and controlgear assemblies – Part 1: General rules	
POW	EN 61439-1: 2011 EN IEC 61439-1:2021	Low-voltage switchgear and controlgear assemblies – Part 1: General rules	
POW	IEC 61439-1: 2011 IEC 61439-1:2020	Low-voltage switchgear and controlgear assemblies – Part 1: General rules	
	DIN EN 61439-7: 2016-10 DIN EN IEC 61439-7: 2021-06 EN IEC 61439-7:2020	Niederspannungs- Schaltgerätekombinationen - Teil 7: Schaltgerätekombinationen für bestimmte Anwendungen wie Marinas, Campingplätze, Marktplätze, Ladestationen für Elektrofahrzeug Low-voltage switchgear and controlgear assemblies — Part 7: Assemblies for specific applications such as marinas, camping sites, market squares, electric vehicles charging stations	
<b>2.13. Safety: Safety of machinery/ Uninterruptible Power Systems (UPS)</b>			
HOUS,INDA	DIN EN ISO 12100: 2011 + BERICHTIGUNG 1: 2013 DIN EN ISO 12100: 1997 ISO 12100: 2010	Sicherheit von Maschinen - Allgemeine Gestaltungsleitsätze - Risikobeurteilung und Risikominderung	
HOUS,INDA	DIN EN 60204-1:2019-06	Sicherheit von Maschinen - Elektrische Ausrüstung von Maschinen - Teil 1: Allgemeine Anforderungen	

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HOUS,INDA	EN 60204-1: 2006 + A1: 2009 + AC: 2010	Sicherheit von Maschinen - Elektrische Ausrüstung von Maschinen - Teil 1: Allgemeine Anforderungen	
HOUS,INDA	IEC 60204-1: 2016 IEC 60204- 1:2016/AMD:2021	Sicherheit von Maschinen - Elektrische Ausrüstung von Maschinen - Teil 1: Allgemeine Anforderungen	
HOUS,INDA	DIN EN IEC 61496-1: 2021-06 IEC 61496-1:2020	Sicherheit von Maschinen – Berührungslos wirkende Schutzeinrichtungen Teil 1: Allgemeine Anforderungen und Prüfungen Safety of machinery - Electro-sensitive protective equipment - Part 1: General requirements and tests	
HOUS,INDA	DIN IEC/TS 61496-4-2: 2015- 06 IEC TS 61496-4-2:2014	Sicherheit von Maschinen - Berührungslos wirkende Schutzeinrichtungen - Teil 4-2: Besondere Anforderungen an Einrichtungen, die bildverarbeitende Schutzeinrichtung (VBPD) verwenden - Zusätzliche Anforderungen bei Verwendung von Testmusterverfahren Safety of machinery - Electro-sensitive protective equipment - Part 4-2: Particular requirements for equipment using vision based protective devices (VBPD) - Additional requirements when using reference pattern techniques (VBPDP)	
	IEC 60664-1:2020-05 Edition 3.0 DIN EN 60664-1:2008 DIN EN 60664-1:2019 Entwurf	Isolationskoordination für elektrische Betriebsmittel in Niederspannungsanlagen – Teil 1: Grundsätze, Anforderungen und Prüfungen Insulation coordination for equipment within low-voltage supply systems–Part 1: Principles, requirements and tests	

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	DIN EN 62262:2022-02 IEC 62262:2002 IEC 62262:2021	Schutzarten durch Gehäuse für elektrische Betriebsmittel (Ausrüstung) gegen äußere mechanische Beanspruchungen (IK-Code) Degrees of protection provided by enclosures for electrical equipment against external mechanical impacts (IK code)	
IND	UL 1740:2018	STANDARD FOR SAFETY Robots and Robotic Equipment	
IND	UL 508A:2018	STANDARD FOR SAFETY Industrial Control Panels	
IND	NFPA 79:2015	Electrical Standard for Industrial Machinery	
OFF	DIN EN 62040-1: 2013 + BERICHTIGUNG 1: 2016 DIN EN IEC 62040-1:2020-07	Unterbrechungsfreie Stromversorgungssysteme (USV) – Teil 1: Allgemeine Anforderungen und Sicherheitsanforderungen. Uninterruptible Power Systems (UPS) – Part 1: General and safety requirements for UPS.	
OFF	EN 62040-1: 2008 + AC: 2009 +A1: 2013	Uninterruptible Power Systems (UPS) – Part 1: General and safety requirements for UPS.	
OFF	IEC 62040-1:2017-07 + CORRIGENDUM 1 :2019	Uninterruptible Power Systems (UPS) – Part 1: General and safety requirements for UPS.	This International Standard is to be read in conjunction with IEC 62477-1:2012.
OFF	DIN EN 62040-3:2011	Unterbrechungsfreie Stromversorgungssysteme (USV) - Teil 3: Methoden zum Festlegen der Leistungs- und Prüfungsanforderungen Uninterruptible power systems (UPS) - Part 3: Method of specifying the performance and test requirements	

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OFF	EN 62040-3: 2011	Uninterruptible power systems (UPS) - Part 3: Method of specifying the performance and test requirements	
OFF	IEC 62040-3: 2011+ CORRIGENDUM 1:2011	Uninterruptible power systems (UPS) - Part 3: Method of specifying the performance and test requirements	
OFF	DIN EN 62040-4:2014	Unterbrechungsfreie Stromversorgungssysteme (USV) - Teil 4: Umweltaspekte - Anforderungen und Berichterstattung Uninterruptible power systems (UPS) - Part 4: Environmental aspects - Requirements and reporting	
OFF	EN 62040-4: 2013	Uninterruptible power systems (UPS) - Part 4: Environmental aspects - Requirements and reporting	
OFF	IEC 62040-4: 2013	Uninterruptible power systems (UPS) - Part 4: Environmental aspects - Requirements and reporting	
<b>3. Environmental Simulation</b>			
<b>3.1. Other Standards</b>			
	Telcordia GR-63-CORE (2012-04)	NEBS Requirements: Physical Protection	Only section 4.6, 5.6 (Acoustic Noise) 5.2 (Fire Test Methods)
<b>Location B: Traunreuter Str. 3, 82538 Gelting</b>			

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<b>1. Environmental Simulation* Flexible accreditation according to category 1</b>			
	Climate (Temperature, Change of Temp., Humidity, Climatic Sequ., Damp Heat)	Temperature: -70 – 180 °C Change of Temperature: ≤ 15 °C/min Relative Humidity: 10 – 98 % Examples for Damp Heat Combinations: 40°C/93%r.H., 65°C/93%r.H., 85°C/85%	IEC 60068-2-1/-2 IEC 60068-2-14 (Nb) IEC 60068-2-30/-38 IEC 60068-2-61 IEC 60068-2-67/-78 MIL STD 810 (501,502, 507) RTCA DO-160 (4, 5, 6) GR-63-CORE (5.1.1/2/4/5)
	Temperature Shock (air-air)	Temperature Shock Chamber Upper Temperature: 40 – 180 °C Lower Temperature: 70 – 150 °C Transfer Time: ≥ 8 s  Two Separate Temperature Chambers Temperature: see respective section above Transfer Time: ≥ 30 s	IEC 60068-2-14 (Na) MIL STD 810 (503)
	Vibration (Sine, Random, Sine on Random)	Frequency Range: 3 – 2000 Hz Sine: Displacement: ≤ 50 mm (peak-peak) Velocity: ≤ 2 m/s Acceleration: ≤ 100 g Random: Displacement: ≤ 52 mm (peak-peak) Velocity: ≤ 3.5 m/s Acceleration: ≤ 50 g <sub>eff</sub> Sine on Random: Within the above limits of Sine and Random (depending on the relative contribution of sine and random in the test profile)	IEC 60068-2-6 IEC 60068-2-64 IEC 60068-2-80 JESD22-B103 MIL STD 810 (514 Procedure I) RTCA DO-160 (8) GR-63-CORE (5.4.2/3)

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	Mechanical Shock	<p>Electro Dynamical Shaker  Displacement: <math>\leq 52</math> mm (peak-peak)  Velocity: <math>\leq 3.5</math> m/s  Acceleration: <math>\leq 100</math> g  Examples of Acceleration/Duration  Combinations Close to the Limit:  100g/6ms, 50g/11ms, 30g/18ms,  5g/30 ms  Shock Shape: Half-Sine, Saw-Tooth,  Trapezoidal</p> <p>Shock Tester  Acceleration: <math>\leq 10000</math> g  Examples of typical  Acceleration/Duration  Combinations: 10000g/0.3ms,  3000g/0.3ms, 1500g/0.5ms,  500g/1ms  Shock Shape: Half-Sine</p>	<p>IEC 60068-2-27  JESD22-B104  MIL STD 810 (516)  MIL STD 883  (2002)  RTCA DO-160 (7)</p>
	Vibration/Shock with Temperature/ Humidity	<p>Frequency Range: 3 – 2000 Hz  Sine:  Displacement: <math>\leq 36</math> mm (peak-peak)  Velocity: <math>\leq 1.6</math> m/s  Acceleration: <math>\leq 39</math> g  Random/Shock:  Displacement: <math>\leq 52</math> mm (peak-peak)  Velocity: <math>\leq 2.65</math> m/s  Acceleration (Random): <math>\leq 35</math> g<sub>eff</sub>  Acceleration (Shock): <math>\leq 100</math> g  Shock Shape: Half-Sine, Saw-Tooth,  Trapezoidal  Sine on Random:  Within the above limits of Sine and  Random (depending on the relative  contribution of sine and random in the  test profile)  Temperature: -70 – 160 °C  Change of Temperature: <math>\leq 15</math> °C/min  Relative Humidity: 10 – 98 %</p>	<p>IEC 60068-2-1/-2/-1-  combined with  IEC 60068-2-6/-27/-  64  IEC 60068-2-53  ISO 16750-3</p>
	Drop	<p>Height: <math>\leq 2</math> m  Surfaces: Hard Wood, Concrete, Steel,  PVC on Concrete</p>	<p>IEC 60068-2-31  GR-63-CORE (5.3)</p>

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	Salt Mist	Salt: NaCl, "Nordlandsalz" (95 % NaCl, 2.5 % MgCl <sub>2</sub> , 2.5 % CaCl <sub>2</sub> ) Salt Concentration: 0 - 5 % Temperature during spraying: RT - 50 °C Climate during non-spraying periods of cyclic tests: see section Climate above	IEC 60068-2-11/-52 ISO 9227 (NSS) MIL STD 810 (509) RTCA DO-160 (14)
	Mixed Flowing Gas	Gas & Concentration: H <sub>2</sub> S: ≤ 1 ppm NO <sub>2</sub> : ≤ 1 ppm Cl <sub>2</sub> : ≤ 100 ppb SO <sub>2</sub> : ≤ 1 ppm Temperature: 25 – 30 °C Relative Humidity: 60 – 85 % Corrosivity Monitoring: Weight gain of copper coupons	IEC 60068-2-60 GR-63-CORE (5.5.2)
	Single Gas	Gas & Concentration: H <sub>2</sub> S: ≤ 50 ppm SO <sub>2</sub> : ≤ 50 ppm Temperature: 25 – 85 °C Relative Humidity: 50 – 90 %	IEC 60068-2-42 IEC 60068-2-43
	Resistance of Surfaces to Chemical Agents	Chemical Agents: Agents that can be legally acquired in small amounts and that can safely be handled (no highly toxic/carcinogenic/explosive/mutagenic/ radioactive substances) Examples: Fuels, Oils and Lubricants, Other Operating Agents, Solvents and Cleaning Agents, Soft Drinks, Cosmetic Products, Artificial Sweat, Liquid Manure Application: Spraying, Splashing, Brushing, Wiping, Pouring, Dipping/Immersing Storage: Climate (see section Climate above) Evaluation: Naked Eye, Microscope	IEC 60068-2-74 MIL STD 810 (504) RTCA DO-160 (11) ISO 16750-5

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<b>2. Environmental Simulation</b>			
<b>2.1. IEC 60068-2-x: Environmental testing / Basic environmental testing procedures</b>			
	IEC 60068-2-1 (2007-03)	Tests A: Cold	
	IEC 60068-2-2 (2007-07)	Tests B: Dry Heat	
	IEC 60068-2-6 (2007-12)	Test Fc: Vibration (sinusoidal)	
	IEC 60068-2-11 (1981-01, 2021-03)	Test Ka: Salt mist	
	IEC 60068-2-13 (1983-01, 2021-03)	Test M: Low air pressure	
	IEC 60068-2-14 (2009-01)	Tests N: Change of temperature	Only Methods Na, Nb
	IEC 60068-2-18 (2000-01) (2017-03)	Test R and guidance: Water	Only Methods Ra 2, Rb 1, Rb 2, Rc 1
	IEC 60068-2-21 (2006-06, 2021-07)	Test U: Robustness of terminations and integral mounting devices	Issue 2021: without Uf <sub>1</sub> , Uf <sub>2</sub>
	IEC 60068-2-27 (2008-02)	Test Ea and guidance: Shock	
	IEC 60068-2-30 (2005-08)	Test Db: Damp heat, cyclic (12 + 12 hour cycle)	
	IEC 60068-2-31 (2008-05)	Test Ec: Rough handling shocks, primarily for equipment-type specimens	Only Drop and topleft, Free fall – Procedure 1
	IEC 60068-2-38 (2009-01, 2021-03)	Test Z/AD: Composite temperature/humidity cyclic test	
	IEC 60068-2-40 (1976-01) (AMD1 1983-07)	Test Z/AM: Combined cold/low air pressure tests	
	IEC 60068-2-41 (1976-01) (AMD1 1983-01)	Test Z/BM: Combined dry heat/low air pressure tests	
	IEC 60068-2-42 (2003-05)	Test Kc: Sulphur dioxide test for contacts and connections	
	IEC 60068-2-43 (2003-05)	Test Kd: Hydrogen sulphide test for contacts and connections	
	IEC 60068-2-52 (1996-01) (CORR1 1996-07) (2017-11)	Test Kb: Salt mist, cyclic (sodium chloride solution)	Issue 2017: without test methods 7 and 8

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	IEC 60068-2-53 (2010-04)	Tests and guidance – Combined climatic (temperature/humidity) and dynamic (vibration/shock) tests	
	IEC 60068-2-55 (2013-02)	Tests and guidance – Loose cargo testing including bounce	
	IEC 60068-2-60 (1995-12) (2015-06)	Test Ke: Flowing mixed gas corrosion test	
	IEC 60068-2-61 (1991-06)	Test Z/ABDM: Climatic sequence	
	IEC 60068-2-64 (2019-10)	Test Fh: Vibration, broad-band random and guidance	without non-Gaussian distrib. of amplitudes
	IEC 60068-2-67 (1995-12, AMD1 2019-07)	Test Cy: Damp heat, steady state, accelerated test primarily intended for components	
	IEC 60068-2-74 (1999-06, AMD1 2018-04)	Test Xc: Fluid contamination	
	IEC 60068-2-78 (2012-10)	Test Cab: Damp heat, steady state	
	IEC 60068-2-80 (2005-05)	Test Fi: Vibration – Mixed mode	
	IEC 60068-2-82 (2007-05) (CORR1 2009-12, 2019-05)	Test XW <sub>1</sub> : Whisker test methods for electronic and electric components	Restriction: Whisker evaluation with optical microscope only
<b>2.2. ETSI EN 300 019-2-x Equipment Engineering (EE) / Equipment Engineering (EE); Environmental conditions and environmental tests for telecommunications equipment; Specification of environmental tests;</b>			
	ETSI EN 300 019 -2-1 V2.3.1 (2017-11)	Storage	
	ETSI EN 300 019 -2-2 V2.4.1 (2017-11)	Transportation	
	ETSI EN 300 019 -2-3 V2.5.1 (2020-10)	Stationary use at weatherprotected locations	without Annex A
	ETSI EN 300 019 -2-4 V2.5.1 (2018-07)	Stationary use at non-weatherprotected locations	
	ETSI EN 300 019 -2-5 V3.0.0 (2002-12)	Ground vehicle installations	
	ETSI EN 300 019 -2-6 V3.0.0 (2002-12)	Ship environments	

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	ETSI EN 300 019 -2-7 V3.0.1 (2003-04)	Portable and non-stationary use	
<b>2.3. Other Standards</b>			
	ISO 9227 (2012-05) (Replaces DIN 50021) (2017-03)	Corrosion tests in artificial atmospheres – Salt spray tests	Only Test NSS
	ASTM B 117 (2019)	Standard Practice for Operating Salt Spray (Fog) Apparatus	
	ISO 6270-2 (2005-07) (Replaces DIN 50017)	Paints and varnishes - Determination of resistance to humidity - Part 2: Procedure for exposing test specimens in condensation-water atmospheres	
	DIN 50018 (2013-05)	Prüfung im Kondenswasser- Wechselklima mit schwefeldioxidhaltiger Atmosphäre	
	ISO 6988 (1985-02)	Metallic and other non-organic coatings; Sulfur dioxide test with general condensation of moisture	
	IEC 60529 (2013-08) ISO 20653 (2013-02)	Degrees of protection provided by enclosures  Road vehicles - Protection of electrical equipment against foreign objects, water and access	Only: IP 5x, 5kx, 6x, 6kx, x3, x4, x4k, x5, x6, x6k, x7, x8 (IP 1x, 2x, 3x, 4x, x1, x2 are included in the scope of the Product Safety Lab, Puchheim)
	NEMA 250 (2008) (2014)	Enclosures for Electrical Equipment (1000V Maximum)	Only 5.4 Test for Protection against Ingress of Water (Rain)
	JESD22-B103 (B 2002-06) (B.01 2016-09)	Vibration, Variable Frequency	
	JESD22-B104 (C 2004-12)	Mechanical Shock	
	IEC 61373 (1999-01, 2010-05)	Railway applications – Rolling stock equipment – Shock and vibration tests	
	ISO 16750-3 (2012-12)	Road vehicles - Environmental conditions and testing for electrical and electronic equipment – Part 3: Mechanical loads	Restrictions: 4.4: excluded 4.5: only according to ISO 20567-1

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	ISO 16750-4 (2010-04)	Road vehicles - Environmental conditions and testing for electrical and electronic equipment — Part 4: Climatic loads	Restriction: Excluding section 5.9
	ISO 16750-5 (2010-04)	Road vehicles - Environmental conditions and testing for electrical and electronic equipment — Part 5: Chemical loads	
	VW 80000 (2013-06, 2017-10) MBN LV 124-2 (2013-08) MBN 10306 (2018-03) GS 95024-3-1 (2013-07, 2019-08)	Elektrische und elektronische Komponenten in Kraftfahrzeugen bis 3,5t - Allgemeine Anforderungen, Prüfbedingungen und Prüfungen Teil II – Umwelanforderungen  Elektrische und elektronische Komponenten in Kraftfahrzeugen Umwelanforderungen und Prüfungen	Restrictions: K-05: only Method Na K-10: without IPx1, IPx2 K-11: excluded L-01: only within the limits of the remainder of the scope VW 80000 (2017-10), 4.9.2+M-07: excluded MBN 10306 (2018-03), 5.6.2+M-07: excluded GS 95024-3-1 (2019-08), 4.6.2+M-07: excluded
	GS 95011-4 (2009-10)	Electronic devices in motor vehicles Dewing test and climate test	
	MBN 10 305-1 (2008-06)	E/E Environmental Testing Part 1: Test Specifications	Only sections: 6.4.3 Chemical Exposure – Cabin Compartment 6.4.4 Chemical Exposure - Outside Cabin Compartment

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	ISO 20567-1 (2005) (2017-01)	Paints and varnishes – Determination of stone-chip resistance of coatings – Part 1: Multi-impact testing	
	DIN 75220 (1992-11)	Alterung von Kfz-Bauteilen in Sonnensimulationsanlagen	
	Telcordia GR-63-CORE (2012-04)	NEBS Requirements: Physical Protection	Restriction: Excluding sections 5.2, 5.4.1, 5.5.3, 5.6
	Telcordia GR-3108-CORE (Iss 4, 2018-07)	Generic Requirements for Network Equipment in the Outside Plant (OSP)	Restriction: Excluding section 4.3.1, 5 (which is included in the scope of the Product Safety department) 6.3.2, 6.4.1, 6.5, 6.6
	MIL-STD-810 (D 1983-07, E 1989-07, F 2000-01, G 2008-10 G w/Change 1 2014-04)	Test Method Standard Environmental Engineering Considerations and Laboratory Tests	Only Methods: 500 (Proced. I, II, without humidity control), 501, 502, 503, 504, 505 (Proced. II), 507, 509 514 (Proced. I, II), 516 (except Proced. VII, VIII)
	MIL-STD-883 (H 2010-02, J 2013-06, J w/Change 5 2015-06, K 2016-04, K w/Change 1 2016-07, K w/Change 2 2017-02) K w/Change 3 2018-05, L 2019-09, MIL-STD-883-2 2019-06)	Test Method Standard Microcircuits  Test Method Standard, Mechanical Test Methods for Microcircuits, Part 2: Test Methods 2000-2999	Only Methods: 2002, 2007

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	NATO AECTP 300 (ED 3, 2006-01)	Climatic Environmental Tests	Only Methods: 302, 303, 304, 305 (only Proced. II), 306, 309, 312 (only Proced. I, II), 314
	NATO AECTP 400 (ED 3, 2006-01)	Mechanical Environmental Tests	Only Methods: 401, 403, 406, 414 (without Proced II)
	RTCA DO-160 (D 1997-07, E 2004-12, F 2007-12, G 2010-12)	Environmental Conditions and Test Procedures for Airborne Equipment	Only Sections: 4 (excluding decompression and overpressure), 5, 6, 7 (excl. Crash Safety Test Proc. 2 (Sustained)), 8, 10 (only Condensing Water Proof Test, Continuous Stream Proof Test), 11, (only Immersion), 14, 24 (excl. Category B)
Batterien / Batteries	UN ST/SG/AC.10/11 (Rev 7, 2019)	United Nations Recommendations on the Transport of dangerous goods Manual of Test and Criteria	Only Section 38.3 Lithium metal and lithium ion batteries, T1, T2, T3, T4, T5, T7*
Batterien / Batteries	IEC 62133-2 (2017-07 AMD1 2021)	Secondary cells and batteries containing alkaline or other non-acid electrolytes - Safety requirements for portable sealed secondary cells, and for batteries made from them, for use in portable applications - Part 2: Lithium systems	Only Sections: 7.3.3, 7.3.8
Batterien / Batteries	IEC 62619 (2017-02)	Secondary cells and batteries containing alkaline or other non-acid electrolytes - Safety requirements for secondary lithium cells and batteries, for use in industrial applications	Only Section 7.2.3

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<b>3. Electromechanical Components</b>			
<b>3.1. IEC 60512-x-x: Connectors for electrical and equipment – Tests and measurements / Electromechanical components for electronic equipment – Basic testing procedures and measuring methods</b>			
	IEC 60512-1-1 (2002-02)	General examination - Test 1a: Visual examination	
	IEC 60512-1-2 (2002-02)	General examination - Test 1b: Examination of dimension and mass	Only Vernier Gauge, Micrometer, Dial Gauge (incl. End- Gauge), Gauges, Test-Pins, Measuring Microscope Balance
	IEC 60512-1-3 (1997-07)	General examination - Section 3: Test 1c - Electrical engagement length	
	IEC 60512-1-4 (1997-08)	General - Section 4: Test 1d: Contact protection effectiveness (scoop-proof)	
	IEC 60512-2-1 (2002-02)	Electrical continuity and contact resistance tests - Test 2a: Contact resistance - Millivolt level method	
	IEC 60512-2-2 (2003-05)	Electrical continuity and contact resistance tests - Test 2b: Contact resistance; Specified test current method	
	IEC 60512-2-3 (2002-02)	Electrical continuity and contact resistance tests - Test 2c: Contact resistance variation	
	IEC 60512-2-5 (2003-05)	Electrical continuity and contact resistance tests - Test 2e: Contact disturbance	
	IEC 60512-2-6 (2002-06)	Electrical continuity and contact resistance tests - Test 2f: Housing (shell) electrical continuity	
	IEC 60512-3-1 (2002-02)	Insulation tests - Test 3a: Insulation resistance	

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	IEC 60512-4-1 (2003-05)	Voltage stress tests - Test 4a: Voltage proof	
	IEC 60512-4-3 (2002-02)	Voltage stress tests - Test 4c: Voltage proof of pre-insulated crimp barrels	
	IEC 60512-5-1 (2002-02)	Current-carrying capacity tests - Test 5a: Temperature rise	
	IEC 60512-5-2 (2002-02)	Current-carrying capacity tests - Test 5b: Current-temperature derating	
	IEC 60512-6-2 (2002-02)	Dynamic stress tests - Test 6b: Bump	
	IEC 60512-6-3 (2002-02)	Dynamic stress tests - Test 6c: Shock	
	IEC 60512-6-4 (2002-02)	Dynamic stress tests - Test 6d: Vibration (sinusoidal)	
	IEC 60512-6-5 (1997-10)	Dynamic stress tests - Section 5: Test 6e: Random vibration	
	IEC 60512-8-1 (2010-06)	Static load tests (fixed connectors) - Test 8a: Static load, transverse	
	IEC 60512-8-2 (2011-04)	Static load tests (fixed connectors) - Test 8b: Static load, axial	
	IEC 60512-8-3 (2018-01)	Static load tests (fixed connectors) - Test 8c: Robustness of actuating lever	
	IEC 60512-9-1 (2010-03)	Endurance tests - Test 9a: Mechanical operation	
	IEC 60512-9-2 (2011-11)	Endurance tests - Test 9b: Electrical load and temperature	
	IEC 60512-9-3 (2006-02) (2011-06)	Endurance tests - Test 9c: Mechanical operation (engaging and separating) with electrical load	
	IEC 60512-9-4 (2011-04)	Endurance tests - Test 9d: Durability of contact retention system and seals (maintenance, ageing)	
	IEC 60512-9-5 (2020-06)	Endurance tests - Test 9e: Current loading, cyclic	
	IEC 60512-10-4 (2003-08)	Impact tests (free components), static load tests (fixed components), endurance test and overload tests - Test 10d: Electrical overload (connectors)	

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	IEC 60512-11-1 (1995-11) (2019-05)	Climatic tests - Section 1: Test 11a: Climatic sequence	
	IEC 60512-11-3 (2002-02)	Climatic tests - Test 11c: Damp heat, steady state	
	IEC 60512-11-4 (2002-02)	Climatic tests - Test 11d: Rapid change of temperature	
	IEC 60512-11-6 (2002-02)	Climatic tests - Test 11f: Corrosion, salt mist	
	IEC 60512-11-7 (2003-05)	Climatic tests - Test 11g: Flowing mixed gas corrosion test	
	IEC 60512-11-9 (2002-02)	Climatic tests - Test 11i: Dry heat	
	IEC 60512-11-10(2002-02)	Climatic tests - Test 11j: Cold	
	IEC 60512-11-11(2002-02)	Climatic tests - Test 11k: Low air pressure	
	IEC 60512-11-12(2002-02)	Climatic tests - Test 11m: Damp heat, cyclic	
	IEC 60512-11-13(2002-02)	Climatic tests - Test 11n: Gas tightness, solderless wrapped connections	
	IEC 60512-11-14(2003-07)	Climatic tests - Test 11p: Flowing single gas corrosion test	
	IEC 60512-13-1 (2006-02)	Mechanical operation tests; Test 13a: Engaging and separating forces	
	IEC 60512-13-2 (2006-02)	Mechanical operation tests; Test 13b: Insertion and withdrawal forces	
	IEC 60512-13-5 (2006-02)	Mechanical operation tests - Test 13e: Polarizing and keying method	
	IEC 60512-14-4 (2006-03)	Sealing tests - Test 14d: Immersion - Waterproof	
	IEC 60512-14-5 (2006-03)	Sealing tests - Test 14e: Immersion at low air pressure	
	IEC 60512-14-6 (2006-03)	Sealing tests - Test 14f: Interfacial sealing	
	IEC 60512-14-7 (1997-10)	Sealing tests - Section 7: Test 14g: Impacting water	

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	IEC 60512-15-1 (2008-05)	Connector tests (mechanical) - Test 15a: Contact retention in insert	
	IEC 60512-15-2 (2018-01)	Connector tests (mechanical) - Test 15b: Insert retention in housing (axial)	Only Method A (Force)
	IEC 60512-15-3 (2008-05)	Connector tests (mechanical) - Test 15c: Insert retention in housing (torsional)	
	IEC 60512-15-4 (2008-05)	Connector tests (mechanical) - Test 15d: Contact insertion, release and extraction force	
	IEC 60512-15-5 (2008-05)	Connector tests (mechanical) - Test 15e: Contact retention in insert, cable nutation	
	IEC 60512-15-6 (2008-05)	Connector tests (mechanical) - Test 15f: Effectiveness of connector coupling devices	
	IEC 60512-15-7 (2008-05)	Connector tests (mechanical) - Test 15g: Robustness of protective cover attachment	
	IEC 60512-15-8 (1995-11)	Mechanical tests on contacts and terminations - Section 8: Test 15h: Contact retention system resistance to tool application	
	IEC 60512-16-1 (2008-06)	Mechanical tests on contacts and terminations - Test 16a: Probe damage	
	IEC 60512-16-2 (2008-06)	Mechanical tests on contacts and terminations - Test 16b: Restricted entry	
	IEC 60512-16-3 (2008-07)	Mechanical tests on contacts and terminations - Test 16c: Contact-bending strength	
	IEC 60512-16-4 (2008-06)	Mechanical tests on contacts and terminations - Test 16d: Tensile strength (crimped connections)	

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Test area	Norm / Standard / Version	Title of standard or procedure (If applicable, indicate deviations / modifications of standard procedures)	Test area / restriction
	IEC 60512-16-5 (2008-07)	Mechanical tests on contacts and terminations - Test 16e: Gauge retention force (resilient contacts)	
	IEC 60512-16-6 (2008-07)	Part 16-6: Mechanical tests on contacts and terminations - Test 16f: Robustness of terminations	
	IEC 60512-16-7 (2008-07)	Mechanical tests on contacts and terminations - Test 16g: Measurement of contact deformation after crimping	
	IEC 60512-16-8 (2008-05)	Mechanical tests on connections and terminations - Test 16h: Insulating grip effectiveness (crimped connections)	
	IEC 60512-16-9 (2008-05)	Mechanical tests on contacts and terminations - Test 16i: Grounding contact spring holding force	
	IEC 60512-16-11(2008-05)	Mechanical tests on contacts and terminations - Test 16k: Stripping force, solderless wrapped connections	
	IEC 60512-16-13(2008-05)	Mechanical tests on contacts and terminations - Test 16m: Un-wrapping, solderless wrapped connections	
	IEC 60512-16-14(2008-07)	Mechanical tests on contacts and terminations - Test 16n: Bending strength, fixed male tabs	
	IEC 60512-16-16(2008-07)	Mechanical tests on contacts and terminations - Test 16p: Torsional strength, fixed male tabs	
	IEC 60512-16-17(2008-07)	Mechanical tests on contacts and terminations - Test 16q: Tensile and compressive strength, fixed male tabs	

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	IEC 60512-16-18(2008-05)	Mechanical tests on contacts and terminations - Test 16r: Deflection of contacts, simulation	
	IEC 60512-16-20(1996-08)	Mechanical tests on contacts and terminations - Section 20: Test 16t: Mechanical strength (wired termination of solderless connections)	
	IEC 60512-16-21(2012-05)	Mechanical tests on contacts and terminations – Test 16u: Whisker test via the application of external mechanical stresses	Restriction: Whisker evaluation with optical microscope only
	IEC 60512-17-1 (2010-06)	Cable clamping tests - Test 17a: Cable clamp robustness	
	IEC 60512-17-2 (2011-04)	Cable clamping tests - Test 17b: Cable clamp resistance to cable rotation	
	IEC 60512-17-3 (2010-06)	Cable clamping tests - Test 17c: Cable clamp resistance to cable pull (tensile)	
	IEC 60512-17-4 (2010-06)	Cable clamping tests - Test 17d: Cable clamp resistance to cable torsion	
	IEC 60512-19-1 (2010-03)	Chemical resistance tests - Test 19a: Fluid resistance of pre-insulated crimp barrels	
	IEC 60512-19-3 (1997-07)	Chemical resistance tests - Section 3: Test 19c: Fluid resistance	
<b>3.2. Connectors for electronic equipment /Connectors for use in d.c. low-frequency analogue and digital high speed data applications</b>			
	IEC 61076-4-100 (2001-10)	Printed board connectors with assessed quality - Detail specification for two-part connectors modules having a grid of 2,5mm for printed boards and backplanes	
	IEC 61076-4-101 (2001-09)	Printed board connectors with assessed quality - Detail specification for two-part connectors modules, having a basic grid of 2,0mm for printed boards and backplanes in accordance with IEC 60917	

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	IEC 61076-4-103 (1999-02)	Printed board connectors with assessed quality - Detail specification for two-part connectors with shielding and a basic grid of 2,5mm.	
	IEC 61076-4-104 (1999-03)	Printed board connectors with assessed quality - Detail specification for two-part modular connectors, basic grid of 2,0 mm, with termination on a multiple grid of 0,5 mm	
	IEC 60603-7 (2008-07) (AMD1 2011-09)	Detail specification for connectors, 8-way, including fixed and free with common mating features, with assessed quality	
	IEC 60603-7-1 (2011-04)	Detail specification for 8-way, shielded free and fixed connectors with common mating features, with assessed quality	Excluding sections 6.4.8/9
	IEC 60603-7-4 (2010-04)	Detail specification for 8-way, unshielded, free and fixed connectors, for data transmissions with frequencies up to 250 MHz	Excluding section 6.5
	IEC 60603-7-7 (2010-05)	Detail specification for 8-way, shielded, free and fixed connectors, for data transmission with frequencies up to 600 MHz (category 7, shielded)	Excluding section 6.5
<b>3.3. Other Standards</b>			
	IEC 60352-2 (2006-02)	Solderless connections – Part 2: Crimped connections – General requirements, test methods and practical guidance	
	IEC 60352-5 (2012-02; 2020-07)	Solderless connections – Part 5: Press-in connections – General requirements, test methods and practical guidance	
	HELLA Norm HN28100-01 (2016-02)	Prüfrichtlinie Einpresstechnik	Without measurement of 3D lengths for whisker test

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	VW 75174 (2010-04, 2018-10) MBN 10384 (2010-11) GS 95006-7-1 (2010-05)	Kfz-Steckverbinder, Prüfvorschrift (LV 214)  Leitungssätze in Kraftfahrzeugen, Steckverbinder, Prüfungen	Restrictions: PG 2, 3, 4, 9, 28, 29: excluded PG 23: without B23.2, B23.4
<b>Location C: Oberaustraße 47, 83026 Rosenheim</b>			
<b>1. Environmental Simulation</b>			
Environmental Simulation	IEC 60068-2-1:2007-03	Environmental testing - Part 2-1: Tests - Test A: Cold	
Environmental Simulation	IEC 60068-2-2:2007-07	Environmental testing - Part 2-2: Tests - Test B: Dry heat	
Environmental Simulation	IEC 60068-2-14:2009-01	Environmental testing - Part 2-14: Tests - Test N: Change of temperature	only test Nb
Environmental Simulation	IEC 60068-2-30:2005-08	Environmental testing - Part 2-30: Tests - Test Db: Damp heat, cyclic (12 h + 12 h cycle)	
Environmental Simulation	IEC 60068-2-38:2009-01	Environmental testing - Part 2-38: Tests - Test Z/AD: Composite temperature/humidity cyclic test	
Environmental Simulation	IEC 60068-2-78:2012-10	Environmental testing - Part 2-78: Tests - Test Cab: Damp heat, steady state	
Environmental Simulation	UN ST/SG/AC.10/11: Rev. 7, 2019	United Nations Recommendations on the Transport of dangerous goods Manual of Test and Criteria	only section 38.3 Lithium metal and lithium ion batteries, T.2 Thermal test

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**Abbreviations used:**

DIN	Deutsches Institut für Normung e.V. – German institute for standardization
EN	Europäische Norm – European Standard
IEC	International Electrotechnical Commission
ISO	International Organization for Standardisation