

Deutsche Akkreditierungsstelle GmbH

Annex to the Accreditation Certificate D-PL-12059-02-01 according to DIN EN ISO/IEC 17025:2018

Period of validity: 2021-03-19 to 2023-11-18

Date of issue: 2021-03-19

Holder of certificate:

**TÜV Rheinland Japan Ltd.
Kansai Technology Assessment Center
Osaka Laboratory
1-3-14 Fukae Minami, Higashinari-ku
OSAKA 537-0002
JAPAN**

Tests in the fields:

**Safety of Electrical Appliances
Batteries
Environmental testing**

Within the scope of accreditation marked with *), the testing laboratory is permitted, without being required to inform and obtain prior approval from DAkkS, to use standards or equivalent testing methods listed here with different issue dates.

The testing laboratory maintains a current list of all testing procedures within the flexible scope of accreditation.

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

*The certificate together with its annex reflects the status at the time of the date of issue. The current status of the scope of accreditation can be found in the database of accredited bodies of Deutsche Akkreditierungsstelle GmbH.
<https://www.dakks.de/en/content/accredited-bodies-dakks>*

Annex to the accreditation certificate D-PL-12059-02-01

| Department | Standard / in house procedure / Version | Title of standard or in house procedure (deviations / modifications of standard) | Test area / reductions |
|--------------------|--|--|---|
| Product Safety* | IEC 60065:2001 + A1:2005 + A2:2010 EN 60065:2002 + A1:2006 + A11:2008 + A2:2010 + A12:2011 DIN EN 60065:2011-10 VDE 0860:2011-10 AS/NZS 60065:2003 | Audio, video and similar electronic apparatus – Safety requirements. | |
| Product Safety* | IEC 60065:2014 DIN EN 60065:2015-11 VDE 0860:2015-11 | Audio, video and similar electronic apparatus – Safety requirements. | |
| Product Safety* | IEC 60335-1:2010 EN 60335-1:2012 DIN EN 60335-1:2012-10 VDE 0700-1:2012-10 | Household and similar electrical appliances – Safety – Part 1: General requirements. | Limitation: Excluding clause 19.11. |
| Product Safety* | IEC 60335-1:2010 +A1:2011+A2:2016 EN 60335-1:2012 + A13:2017 DIN EN 60335-1 + A13:2018-07 VDE 0700-1 + A13:2018-07 | Household and similar electrical appliances – Safety – Part 1: General requirements. | Limitation: Excluding clause 19.11. |
| Product Safety* | IEC 60335-2-28:2002 + A1:2008 EN 60335-2-28:2003 + A1:2008 DIN EN 60335-2-28:2009-02 VDE 0700-28:2009-02 | Household and similar electrical appliances – Safety – Part 2-28: Particular requirements for sewing machines. | |
| Product Safety* | IEC 60335-2-32:2005 + A1:2008 EN 60335-2-32:2003 + A1:2008 DIN EN 60335-2-32:2009-04 VDE 0700-32:2009-04 | Household and similar electrical appliances – Safety – Part 2-32: Particular requirements for massage appliances. | |

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| Product Safety* | IEC 60335-2-32:2005 + A1:2008 + A2:2013 EN 60335-2-32:2003 + A1:2008 + A2:2015 DIN EN 60335-2-32:2015-07 VDE 0700-32:2015-07 | Household and similar electrical appliances – Safety – Part 2-32: Particular requirements for massage appliances. | |
| Product Safety* | IEC 60335-2-32:2019 | Household and similar electrical appliances – Safety – Part 2-32: Particular requirements for massage appliances. | |
| Product Safety* | IEC 60335-2-45:2005 + A1:2008+ A2:2011 EN 60335-2-45:2002 + A1:2008+ A2:2012 DIN EN 60335-2-45:2012-08 VDE 0700-45:2012-08 | Household and similar electrical appliances – Safety – Part 2-45: Particular requirements for portable heating tools and similar appliances. | |
| Product Safety* | IEC 60601-1:2005 + A1:2012 EN 60601-1:2006 + A1:2013 DIN EN 60601-1:2007-07 VDE 0750-1:2007-07 | Medical electrical equipment – Part 1: General requirements for basic safety and essential performance. | Limitation: Excluding Annex L: Insulated winding wires for use without interleaved insulation. |
| Product Safety* | IEC 60601-1 ed.3.1 (IEC 60601-1:2005+A1:2012) EN 60601-1:2006+A1:2013+ A11:2011 DIN EN 60601-1:2013-12 VDE 0750-1:2013-12 | Medical electrical equipment – Part 1: General requirements for basic safety and essential performance. | Excluding Annex L: Insulated winding wires for use without interleaved insulation. |

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| Product Safety* | IEC 60601-2-18:2009-08 EN 60601-2-18:1996 + A1:2000 DIN EN 60601-2-18:2008-08 VDE 0750-2-18:2008-08 | Medical electrical equipment – Part 2-18: Particular requirements for basic safety and essential performance of endoscopic equipment. | |
| Product Safety* | IEC 60825-1:2007 EN 60825-1:2007 DIN EN 60825-1:2008-05 VDE 0837-1:2008-05 | Safety of laser products – Part 1: Equipment classification and requirements. | |
| Product Safety* | IEC 60825-1:2014 EN 60825-1:2014 DIN EN 60825-1 VDE 0837-1:2015-07 | Safety of laser products – Part 1: Equipment classification and requirements. | |
| Product Safety* | IEC 60950-1:2005 + A1:2009+ A2:2013 EN 60950-1:2006 + A11:2009 + A1:2010 + A12:2011 + A2:2013 DIN EN 60950-1:2011-01 VDE 0805-1:2011-01 AS/NZS 60950.1:2015 | Information technology equipment – Safety – Part 1: General requirements. | |
| Product Safety* | IEC 62368-1:2014 EN 62368-1:2014 + AC:2015+ A11:2017 DIN EN 62368-1:2016-05 VDE 0868-1:2016-05 | Audio/video, information and communication technology equipment – Part 1: Safety requirements | |
| Product Safety* | IEC 62368-1:2018 | Audio/Video, information and communication technology equipment – Part 1: Safety requirements | |
| Product Safety* | IEC 61010-1:2010 EN 61010-1:2010 DIN EN 61010-1:2011-07 VDE 0411-1:2011-07 | Safety requirements for electrical equipment for measurement, control and laboratory use – Part 1: General requirements. | |

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| Product Safety* | IEC 61010-1:2010 + A1:2016 DIN EN 61010-1 + A1:2015-04 E VDE 0411-1 + A1:2015-04 | Safety requirements for electrical equipment for measurement, control and laboratory use – Part 1: General requirements. | |
| Product Safety* | IEC 61010-2-010:2003 EN 61010-2-010:2003 DIN EN 61010-2-010:2004-06 VDE 0411-2-010:2004-06 | Safety requirements for electrical equipment for measurement, control and laboratory use – Part 2-010: Particular requirements for laboratory equipment for the heating of materials. | |
| Product Safety* | IEC 61010-2-010:2014 DIN EN 61010-2-010:2015-05 VDE 0411-2-010:2015-05 | Safety requirements for electrical equipment for measurement, control and laboratory use – Part 2-010: Particular requirements for laboratory equipment for the heating of materials. | |
| Product Safety* | IEC 61010-031:2002 + A1:2008 EN 61010-031:2002 + A1:2008 DIN EN 61010-031:2008-08 VDE 0411-031:2008-08 | 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. | |
| Product Safety | IEC 61010-031:2015 DIN EN 61010-031:2016-07 VDE 0411-031:2016-07 | 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. | |
| Product Safety* | IEC 61010-2-032:2012 EN 61010-2-032:2012 DIN EN 61010-2-032:2013-07 VDE 0411-2-032:2013-07 | 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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| Product Safety* | IEC 61010-2-032:2012 DIN EN 61010-2-032:2013-07 VDE 0411-2-032:2013-07 | 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. | |
| Product Safety* | IEC 61010-2-040:2005 EN 61010-2-040:2005 DIN EN 61010-2-040:2006-02 VDE 0411-2-040:2006-02 | 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. | |
| Product Safety* | IEC 61010-2-081:2001 + A1:2003 EN 61010-2-081:2002 + A1:2003 DIN EN 61010-2-081:2004-07 VDE 0411-2-081:2004-07 | 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. | |
| Product Safety* | IEC 61010-2-081:2015 DIN EN 61010-2-081:2018-05 VDE 0411-2-081:2018-05 | 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. | |
| Product Safety* | IEC 61010-2-101:2002 EN 61010-2-101:2002 DIN EN 61010-2-101:2003-09 VDE 0411-2-101:2003-09 | Safety requirements for electrical equipment for measurement, control and laboratory use – Part 2-101: Particular requirements for in vitro diagnostic (IVD) medical equipment. | |
| Product Safety* | IEC 61010-2-101:2015 DIN EN 61010-2-101:2018-04 VDE 0411-2-101:2018-04 | Safety requirements for electrical equipment for measurement, control and laboratory use – Part 2-101: Particular requirements for in vitro diagnostic (IVD) medical equipment. | |

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| Product Safety* | IEC 61010-2-201:2013 EN 61010-2-201:2013 IEC 61010-2-201:2017 | Safety requirements for electrical equipment for measurement, control and laboratory use - Part 2-201: Particular requirements for control equipment | |
| Product Safety* | IEC 61558-1:2005 +A1:2009 EN 61558-1:2005 + A1:2009 DIN EN 61558-1 + A1:2009-11 VDE 0570-1 + A1:2009-11 | Safety of power transformers, power supplies, reactors and similar products – Part 1: General requirements and tests. | Limitations: Excluding Annex K |
| Product Safety* | IEC 61558-1:2005 + A1:2009 EN 61558-1:2005-11 + AC:2006- 08 + A1 :2009-03 (FprEN 61558-1:2017-06) DIN EN 61558-1(VDE 0570-1): 2006-07 + AC: 2008-11 + A1:2009-11 E DIN EN 61558-1 (VDE 0570- 1):2016-06 | Safety of power transformers, power supplies, reactors and similar products – Part 2-1: Particular requirements and tests for separating transformers and power supplies incorporating separating transformers for general applications. | Limitations: Excluding Annex K |
| Product Safety* | IEC 61558-1:2017 | Safety of transformers, reactors, power supply units and combinations thereof - Part 1: General requirements and tests | |
| Product Safety* | IEC 61558-2-1:2007 EN 61558-2-1:2007 DIN EN 61558-2-1:2007-11 VDE 0570-2-1:2007-11 | Safety of power transformers, power supplies, reactors and similar products – Part 2-1: Particular requirements and tests for separating transformers and power supplies incorporating separating transformers for general applications. | |

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| Product Safety* | IEC 61558-2-2:2007 EN 61558-2-2:2007 DIN EN 61558-2-2:2007-11 VDE 0570-2-2:2007-11 | Safety of power transformers, power supplies, reactors and similar products – Partv 2-2: Particular requirements and tests for control transformers and power supplies incorporating control transformers. | |
| Product Safety* | IEC 61558-2-4:2009 EN 61558-2-4:2009 DIN EN 61558-2-4:2009-12 VDE 0570-2-4:2009-12 | Safety of power transformers, power supply units and similar – Part 2-4: Particular requirements for isolating transformers for general use. | |
| Product Safety | IEC 61558-2-6:2009 EN 61558-2-6:2009 DIN EN 61558-2-6:2010-04 VDE 0570-2-6:2010-04 | Safety of power transformers, power supply units and similar – Part 2-6: Particular requirements for safety isolating transformers for general use. | |
| Product Safety* | IEC 61558-2-7:2007 EN 61558-2-7:2007 DIN EN 61558-2-7:2008-06 VDE 0570-2-7:2008-06 | Safety of power transformers, power supplies, reactors and similar products – Part 2-7: Particular requirements and tests for transformers and power supplies for toys. | |
| Product Safety* | IEC 61558-2-17:1997 | Safety of power transformers, power supply units and similar – Part 2-17: Particular requirements for safety isolating transformers for switch mode power supplies. | |
| Product Safety* | IEC 61558-2-16: 2009-06 +A1:2013-08 EN 61558-2-16:2009 + A1:2013 DIN EN 61558-2-16 (VDE 0570-2-16): 2014-06 | Safety of power transformers, power supply units and similar – Part 2-16: Particular requirements for safety isolating transformers for switch mode power supplies. | Limitations: See part 1 and excluding annex BB. |

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| Product Safety* | IEC 61951-1:2003 + A1:2005 EN 61951-1:2003 + A1:2006 DIN EN 61951-1:2006-09 | Secondary cells and batteries containing alkaline or other non-acid electrolytes – Portable sealed rechargeable single cells – Part 1: Nickel-cadmium. | |
| Product Safety* | IEC 61951-1:2017 | Secondary cells and batteries containing alkaline or other non-acid electrolytes – Portable sealed rechargeable single cells – Part 1: Nickel-cadmium. | |
| Product Safety* | IEC 61951-2:2011 EN 61951-2:2011 DIN EN 61951-2 :2012-03 VDE 0510-31:2012-03 | Secondary cells and batteries containing alkaline or other non-acid electrolytes – Portable sealed rechargeable single cells – Part 2: Nickel-metal hydride. | |
| Product Safety* | IEC 61951-2:2017 | Secondary cells and batteries containing alkaline or other non acid electrolytes - Secondary sealed cells and batteries for portable applications - Part 2: Nickel-metal hydride | |
| Product Safety* | IEC 61960:2011 EN 61960:2011 DIN EN 61960:2012-04 | Secondary cells and batteries containing alkaline or other non-acid electrolytes – Secondary lithium cells and batteries for portable applications. | |
| Product Safety* | IEC 61960-3:2017 | Secondary cells and batteries containing alkaline or other non-acid electrolytes – Secondary lithium cells and batteries for portable applications –Part 3: Prismatic and cylindrical lithium secondary cells, and batteries made from them. | |

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| Product Safety* | IEC 62087:2011 EN 62087:2012 DIN EN 62087:2013-08 VDE0868-100:2013-08 | Methods of measurement for the power consumption of audio, video and related equipment. | |
| Product Safety* | IEC 62087:2015 | Audio, video, and related equipment - Determination of power consumption - Part 1: General | |
| Product Safety* | IEC 62133:2012 EN 62133:2013 DIN EN 62133: 2013-10 VDE 0510-8:2013-10 | 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. | |
| Product Safety* | 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. | |
| Product Safety* | 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. | |
| Product Safety* | IEC 62281:2012 EN 62281:2013 DIN EN 6228:2013-10 VDE 0509-6:2013-10 | Safety of primary and secondary lithium cells and batteries during transport. | |
| Product Safety* | IEC 62281:2016 | Safety of primary and secondary lithium cells and batteries during transport. | |

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| Product Safety* | IEC 62281:2019 | Safety of primary and secondary lithium cells and batteries during transport. | |
| Product Safety* | IEC 62301:2011 | Household electrical appliances – Measurement of standby power. | Limitation: Only single phase measurements. |
| Product Safety* | EN 50564:2011 DIN EN 50564:2011-12 VDE 0705-2301:2011-12 | Electrical and electronic household and office equipment – Measurement of low power consumption | Limitation: Only single phase measurements. |
| Product Safety* | IEC 62660-1:2010 EN 62660-1:2011 DIN EN 62660-1:2012-04 VDE 0510-33:2012-04 | Secondary lithium-ion cells for the propulsion of electric road vehicles – Part 1: Performance testing. | |
| Product Safety* | IEC 62660-1:2018 | Secondary lithium-ion cells for the propulsion of electric road vehicles – Part 1: Performance testing. | |
| Product Safety* | IEC 62660-2:2010 EN 62660-2:2011 DIN EN 62660-2:2012-04 VDE 0510-34:2012-04 | Secondary lithium-ion cells for the propulsion of electric road vehicles – Part 2: Reliability and abuse testing. | |
| Product Safety* | IEC 62660-2:2018 | Secondary lithium-ion cells for the propulsion of electric road vehicles – Part 2: Reliability and abuse testing. | |
| Battery | UN Manual of Test and Criteria Rev 5 Amend1 Part 3, Section 38.3 | Lithium Batteries. | |
| Battery | UN Manual of Test and Criteria Rev 6 Amend1 Part 3, Section 38.3 | Lithium metal and lithium ion Batteries. | |

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| Battery | UN Recommendation on the transport of dangerous goods 2017 UN Manual of Test and Criteria Rev 6 Amend1 ST/SG/AC.10/11/Rev.6/ Amend.1 Part 3, Section 38.3 | Lithium metal and lithium ion Batteries. | |
| Battery | UN Recommendation on the transport of dangerous goods 2015 UN Manual of Test and Criteria ST/SG/AC.10/11 Rev 6 Part 3, Section 38.3 +corrigendum 1:2016 +corrigendum 2:2019 | Lithium metal and lithium ion Batteries. | |
| Battery | UN ECE R100.02:2013 + A3:2016 | UN Regulation No. 100 – Uniform Provisions concerning the Approval of Vehicles with regard to specific Requirements for the Electric Power Train. | Limitation: Excluding Annex 7: Determination of hydrogen emissions during the charge procedures of the REESS. Annex 8E - Fire resistance |

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|-------------------|---|--|---|
| Battery | UN ECE R100.02:2013+A1:2014+A2:2016 A3:2016+A4:2019 | UN Regulation No. 100 – Uniform Provisions concerning the Approval of Vehicles with regard to specific Requirements for the Electric Power Train | Limitation: Excluding Annex 7: Determination of hydrogen emissions during the charge procedures of the REESS. Annex 8E - Fire resistance |
| Battery | INMETRO Regulation No. 199:04.06.2015 | INMETRO Regulation No. 199: Adjustments and explanations to lead-acid batteries for motor-vehicles regulation (Translation). | |
| Battery | INMETRO Regulation No. 239:13.07.2012 | INMETRO Regulation No. 239: Quality technical regulation for lead-acid batteries for automotive vehicles and motorcycles (Translation). | |
| Battery | INMETRO Regulation No. 299:13.07.2012 | INMETRO Regulation No. 299: Lead-acid batteries for automotive vehicles (Translation). | |
| Battery | INMETRO Regulation No.301:20.05.2014 | INMETRO Regulation No. 301: Conformity assessment requirements for automotive components (Translation). | |
| Battery | ABNT NBR 15940:22.09.2013 | ABNT NBR 15940: Batteries lead-acid for use in automachine vehicles of four or more wheels – Specification and test methods (Original in Portuguese language). | |

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|------------------------|--|---|-----------------------------------|
| Battery | ABNT NBR 15940:22.09.2013 | ABNT NBR 15940: Lead-acid battery for use in automotive road vehicles with four or more wheels – Specification and test method (Translation). | |
| Battery | ABNT NBR 15940:2016-08-23 | Lead-acid batteries for use in vehicles of four or more wheels - Specification and test | |
| Battery | ABNT NBR 15941:03.11.2012 | ABNT NBR 15941: Batteries lead-acid for motorcycles, quadricycle and tricycles – Specification and test methods (Original in Portuguese language). | |
| Battery | ABNT NBR 15941:03.11.2012 | ABNT NBR 15941: Lead-acid batteries for motorcycles, tricycles and quadricycles – Specification and test methods (Translation, see enclosure 5.10). | |
| Environmental testing* | UN Regulation No. 136: 2016 | Uniform provisions concerning the approval of vehicles of category L with regard to specific requirements for the electric power train | |
| Environmental testing* | IEC 60068-2-1: 2007 DIN EN 60068-2-1:2008 | Environmental testing - Part 2-1: Tests - Test A: Cold | |
| Environmental testing* | IEC 60068-2-2: 2007 DIN EN 60068-2-2:2008 | Environmental testing - Part 2-2: Tests - Test B: Dry heat | |
| Environmental testing* | IEC 60068-2-14: 2009 DIN EN 60068-2-14:2010 | Environmental testing - Part 2-14: Tests - Test N: Change of temperature | Limitation: Excluding test Nc |

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| Environmental testing* | IEC 60068-2-30: 2005 DIN EN 60068-2-30:2006 | Environmental testing - Part 2-30: Tests - Test Db: Damp heat, cyclic (12 h + 12 h cycle) | |
| Environmental testing* | IEC 60068-2-78: 2012 DIN EN 60068-2-78:2014 | Environmental testing – Part 2-78: Tests – Test Cab: Damp heat, steady state | |
| Environmental testing* | IEC 61373: 2010 DIN EN 61373:2011 | Railway applications - Rolling stock equipment - Shock and vibration tests | |
| Environmental testing* | IEC 60068-2-31:2008 DIN EN 60068-2-31:2009 | Environmental testing - Part 2-31: Tests - Test Ec: Rough handling shocks, primarily for equipment-type specimens | |
| Environmental testing* | IEC 60068-2-6:2007 DIN EN 60068-2-6:2008 | Environmental testing - Part 2-6: Tests - Test Fc: Vibration (sinusoidal) | |
| Environmental testing* | IEC 60068-2- 64:2008+AMD1:2019 DIN EN 60068-2-64:2009 | Environmental testing - Part 2-64: Tests - Test Fh: Vibration, broadband random and guidance | |
| Environmental testing* | IEC 60068-2-27:2008 DIN EN 60068-2-27:2010 | Environmental testing - Part 2-27: Tests - Test Ea and guidance: Shock | |