

List of accredited activities conducted under the flexible scope Date: 17th May 2021

Based on DAkkS rule, 71 SD 0 002

Molex CVS Bochum GmbH / Molex CVS Lab Meesmannstrasse 103 44807 Bochum

Registration number of the DAkkS Certificate: PL-20827-01-01

Fachbereich	Norm oder Prüfverfahren / Ausgabestand	Titel der Norm oder des Prüfverfahrens	Einschränkungen zum Prüfverfahren
Department	Standard or Test Method / Date of issue	Title of the Standard or the Test Method	Limits of the Test Method
	,	EMC Basic Standards	
EMC*	EN 61000-4-2: 1995 EN 61000-4-2: 2009	Electromagnetic compatibility (EMC) — Part 4-2: Testing and measurement techniques — Electrostatic discharge immunity test	
EMC*	EN 61000-4-3: 2006 +A1: 2008 +A2: 2010 EN IEC 61000-4-3:2020	Electromagnetic compatibility (EMC) Part 4-3: Testing and measurement techniques - Radiated, radio-frequency, electromagnetic field immunity test	Max. Fieldstrength E = 10V/m
EMC*	EN 61000-4-6: 2007 EN 61000-4-6: 2009 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 Generic Standards	
EMC*	DIN EN 61000-6-2: 2006 +Ber1:2011 DIN EN IEC 61000-6-2: 2019	Elektromagnetische Verträglichkeit (EMV) – Teil 6-2: Fachgrundnormen – Störfestigkeit für Industriebereiche (IEC 61000-6-2:2005); Deutsche Fassung EN 61000-6-2:2005	Die folgenden Standards sind ausgenommen: EN/IEC 61000-4-4 EN/IEC 61000-4-5 EN/IEC 61000-4-8
EMC*	DIN EN 61000-6-3: 2011 +Ber1: 2012	Elektromagnetische Verträglichkeit (EMV) - Teil 6-3: Fachgrundnormen - Störaussendung für Wohnbereich, Geschäfts- und Gewerbebereiche sowie Kleinbetriebe (IEC	Die folgenden Standards sind ausgenommen: EN/IEC 61000-3-2



		61000-6-3:2006 + A1:2010); Deutsche Fassung EN 61000-6-3:2007 + A1:2011	EN/IEC 61000-3-3 EN/IEC 61000-3-11 EN/IEC 61000-3-12
	•	EMC Product Standards	
EMC*	EN 50498: 2010	Electromagnetic compatibility (EMC) — Product family standard for aftermarket electronic equipment in vehicles	
EMC*	EN 55011:2009 +A1:2010 EN 55011:2016 + A1: 2017 + A11: 2020	Industrial, scientific and medical equipment — Radio-frequency disturbance characteristics — Limits and methods of measurement	Max. Distance d = 3m No in situ measurements
EMC*	CISPR11:2015 +A1: 2016 +A2: 2019	Industrial, scientific and medical equipment — Radio-frequency disturbance characteristics — Limits and methods of measurement	Max. Distance d = 3m
EMC*	CISPR 16-2-1: Edition 3.0 (2014) +COR1:2020	Specification for radio disturbance and immunity measuring apparatus and methods - Part 2-1: Methods of measurement of disturbances and immunity - Conducted disturbance measurements	No in situ measurements
EMC*	CISPR 16-2-3: Edition 3.0 (2010) +A1:2010 +A2:2014 Edition 4.0 (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	
EMC*	CISPR 22: Edition 5.2 (2006) Edition 6.0 (2008)	Information technology equipment — Radio disturbance characteristics — Limits and methods of measurement	Max. Distance d = 3m
EMC*	EN 55024: 2010 +A1:2015	Information technology equipment - Immunity characteristics - Limits and methods of measurement	The following standards are excluded: EN 61000-4-4, EN 61000-4-5, EN 61000-4-11, EN 61000-4-8
EMC*	CISPR 25: Edition 2.0 (2002) Edition 3.0 (2008) +COR1:2009 Edition 4.0 (2016) + Cor1:2017	Radio disturbance characteristics for the protection of receivers used on board vehicles, boats, and on devices — Limits and methods of measurement	



EMC*	EN 55032:2015 +AC:2016 +A11:2020	Electromagnetic compatibility of multimedia equipment — Emission requirements	
EMC*	ISO 7637-1: 2002 +A1:2008 ISO 7637-1: 2015	Road vehicles - Electrical disturbances from conduction and coupling - Part 1: Definitions and general considerations	
EMC*	ISO 7637-2: 2004 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: 2007 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	
EMC*	ISO 10605: 2007 ISO 10605: 2008 +CORR1: 2010 +A1:2014	Road vehicles – Test methods for electrical disturbances from electrostatic discharge	
EMC*	ISO 11452-1: 2005 +A1:2008 ISO 11452-1: 2015	Road vehicles Component test methods for electrical disturbances from narrowband radiated electromagnetic energy Part 1: General principles and terminology	
EMC*	ISO 11452-2: 1995 ISO 11452-2: 2004 ISO 11452-2: 2019	Road vehicles – Component test method for electrical disturbances from narrowband radiated electromagnetic energy - Part 2: Absorber-lined shielded enclosure	
EMC*	ISO 11452-4: 2005 +CORR1:2009 ISO 11452-4: 2011 ISO 11452-4: 2020	Road vehicles – Component test method for electrical disturbances from narrowband radiated electromagnetic energy, Part 4: Bulc current injection (BCI)	
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 method for electrical disturbances from narrowband radiated electromagnetic energy - Part 9: Portable transmitters	
EMC*	ISO 16750-1: 2006 ISO 16750-1: 2018	Road vehicles. Environmental conditions and testing for electrical and electronic equipment. Part 1: General	



EMC*	ISO 16750-2: 2010 ISO 16750-2: 2012	Road vehicles Environmental conditions and testing for electrical and electronic equipment Part 2: Electrical loads	
		Radio Standards	
Radio*	ETSI EN 300 328: v2.1.1 (2016) v2.2.2 (2019)	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	
Radio*	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	The following tests are excluded: Receiver adjacent channel selectivity, Receiver Blocking or desensitation
Radio*	ETSI EN 300 440: v2.1.1 (2017) v2.2.1 (2018)	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	Testing of Spurious Emission (Radiated and Conducted) only
Radio*	ETSI EN 301 489-1: v2.1.1 (2017) v2.2.1 (2019) v2.2.3 (2019)	Electromagnetic compatibility and Radio spectrum Matters (ERM); ElectroMagnetic Compatibility (EMC) standard for radio equipment and services; Part 1: Common technical requirements	The following standards are excluded: EN 61000-3-2, EN 61000-3-3, EN 61000-3-11, EN 61000-4-4, EN 61000-4-5, EN 61000-4-11
Radio*	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	
Radio*	ETSI EN 301 489-17: v3.1.1 (2017) v3.2.0 (2017) v3.2.2 (2019) v3.2.4 (2020)	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	



Radio*	ETSI EN 301 489-19: v2.1.0 (2017) v2.1.1 (2019) v2.2.0 (2020)	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	
Radio*	ETSI EN 301 489-52: 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	
Radio*	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	Testing of Radiated Spurious Emission only
Radio*	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	
Radio*	ETSI EN 301 908-1: v11.1.1 (2016) v11.1.7 (2019) v13.1.1 (2019)	IMT cellular networks; Harmonised Standard covering the essential requirements of article 3.2 of the Directive 2014/53/EU; Part 1: Introduction and common requirements	
Radio*	ETSI EN 303 413 v1.1.1 (2017) v1.2.1 (2021)	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	
Radio*	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	



Radio/Audio *	ETSI TS 126 131: V12.4.0 (2015)	Universal Mobile Telecommunications System (UMTS); LTE; Terminal acoustic characteristics for telephony; Requirements	Testing of 2G and 3G only
Radio/Audio *	ETSI TS 126 132: V12.7.0 (2015)	Universal Mobile Telecommunications System (UMTS); LTE; Speech and video telephony terminal acoustic test specification	Testing of 2G and 3G only
Radio/Health *	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)	
Radio/Health *	EN 62311:2008 EN 62311:2020	Assessment of electronic and electrical equipment related to human exposure restrictions for electromagnetic fields (0 Hz - 300 GHz)	EMF calculation (Annex A) and measurements for E-/H-field (Annex F) only
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	T	Environmental Standards	
Environment *	EN 60068-2-1:2007	Environmental testing - Part 2-1: Tests - Test A: Cold	
Environment *	EN 60068-2-2:2007	Environmental testing - Part 2-2: Tests - Test B: Dry heat	
Environment *	DIN EN 60068-2-5:2011	Umgebungseinflüsse – Teil 2-5: Prüfverfahren – Prüfung Sa: Nachgebildete Sonnenbestrahlung in Bodennähe und Leitfaden zur Sonnenstrahlung (IEC 60068-2-5:2010 + corrigendum Dec. 2010); Deutsche Fassung EN 60068-2-5:2011	
Environment *	EN 60068-2-6:2008	Environmental testing - Part 2-6: Tests - Test Fc: Vibration (sinusoidal)	
Environment *	EN 60068-2-11:1999	Environmental testing - Part 2: Tests; test Ka: Salt mist	
Environment *	EN 60068-2-14:2009	Environmental testing - Part 2-14: Tests - Test N: Change of temperature	
Environment *	EN 60068-2-27:2009	Environmental testing - Part 2-27: Tests - Test Ea and guidance: Shock	
Environment *	EN 60068-2-30:2005	Environmental testing - Part 2-30: Tests - Test Db: Damp heat, cyclic (12 h + 12 h cycle)	
Environment *	EN 60068-2-38:2009	Environmental testing - Part 2-38: Tests - Test Z/AD: Composite temperature/humidity cyclic test	
Environment *	EN 60068-2-53:2010	Environmental testing - Part 2-53: Tests and guidance: Combined climatic (temperature/humidity) and dynamic (vibration/shock) tests	



Environment *	EN 60068-2-64:2008 +A1:2019	Environmental testing - Part 2-53: Tests and guidance: Combined climatic (temperature/humidity) and dynamic (vibration/shock) tests	
Environment *	EN 60068-2-67:1996 +A1:2019	Environmental testing - Part 2: Tests; test Cy: Damp heat, steady state, accelerated test primarily intended for components	
Environment *	EN 60068-2-78:2002 EN 60068-2-78:2013	Environmental testing - Part 2-78: Tests - Test Cab: Damp heat, steady state	



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Based on DAkkS SD 0 002_e and EA-2/15 M:2019

Molex CVS Bochum GmbH / Molex CVS Lab Meesmannstrasse 103 44807 Bochum

Registration number of the DAkkS Certificate: PL-20827-01-02

Technical field	Standard / in house procedure / Version	Title of standard or in house procedure (deviations / modifications of standard)	Test area / reductions
	Electron	nagnetic Compatibility (EMC)	
EMC	ICES-Gen Issue 1 July 2018	General Requirements for Compliance of Interference-Causing Equipment	
EMC	ICES-003 Issue 7 Published: October 2020	Information Technology Equipment (Including Digital Apparatus) - Limits and Methods of Measurement	
	Radi	o Equipment and Systems	
TC	ANSI C63.4:2014 + 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 Stand alone or in combination with: CFR 47 FCC Part 15, Unintentional Radiators CB Receiver Superregenerative Receiver All other receivers subject to part 15 TV interface device Cable system terminal device Class B personal computers and peripherals CPU boards and internal power supplies used with Class B personal computers Class B personal computers assembled using authorized CPU boards or power supplies	Frequency (max. assessed): 40 GHz



Technical field	Standard / in house procedure / Version	Title of standard or in house procedure (deviations / modifications of standard)	Test area / reductions
ТС	ANSI C63.10:2013	American National Standard for Testing of Unlicensed Wireless Devices Stand alone or in combination with: CFR 47 FCC Part 15 Intentional Radiators below 26.5 GHz - except Part 15D and Part 15E (DFS) • Intentional Radiators KDB 789033	Frequency (max. assessed): 40 GHz
ТС	ANSI C63.26:2015	American National Standard for Compliance Testing of Transmitters Used in Licensed Radio Services	Frequency (max. assessed): 40 GHz
		Stand alone or in combination with: - Frequency Allocations and Radio Treaty Matters - General Rules and Regulations	
тс	RSS-Gen Issue 5 April 2018 + Amendment 1 (March 2019) + Amendment 2 (February 2021)	General Requirements for Compliance of Radio Apparatus	Frequency (max. assessed): 40 GHz
тс	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	
тс	RSS-132 Issue 3 January 2013	Cellular Telephone Systems Operating in the Bands 824-849 MHz and 869-894 MHz	
тс	RSS-133 Issue 6 January 2018 Amendment	2GHz Personal Communications Services	
тс	RSS-139 Issue 3 July 2015	Advanced Wireless Services (AWS) Equipment Operating in the Bands 1710- 1780 MHz and 2110-2180 MHz	
тс	RSS-192 Issue 4 May 2020	Flexible Use Broadband Equipment Operating in the Band 3450-3650 MHz	



Technical field	Standard / in house procedure / Version	Title of standard or in house procedure (deviations / modifications of standard)	Test area / reductions
ТС	RSS-195 Issue 2 April 2014	Wireless Communication Service (WCS) Equipment Operating in the Bands 2305- 2320 MHz and 2345-2360 MHz	
тс	RSS-199 Issue 3 December 2016	Broadband Radio Service (BRS) Equipment Operating in the Band 2500– 2690 MHz	
TC	RSS-210 Issue 10 December 2019	Licence-Exempt Radio Apparatus: Category I Equipment	Exclusion: Annex G
ТС	RSS-216 Issue 2 January 2016 + Amendment 1 (September 2020)	Wireless Power Transfer Devices	
ТС	RSS-247 Issue 2 February 2017	Digital Transmission Systems (DTSs), Frequency Hopping Systems (FHSs) and Licence-Exempt Local Area Network (LE- LAN) Devices	Without DFS
	Specific Absorption R	ate (SAR) & Human Exposure to EM-Fields	
EMC	RSS-102 (RF Exp.) Issue 5 March 2015 + Amendment 1 (February 2021)	Radio Frequency (RF) Exposure Compliance of Radiocommunication Apparatus (All Frequency Bands) (RF Exposure Evaluation)	
EMC	RSS-102 (NS) Issue 5 March 2015 + Amendment 1 (February 2021)	Radio Frequency (RF) Exposure Compliance of Radiocommunication Apparatus (All Frequency Bands) (Nerve Stimulation)	