EMC STANDARDS



Directives and Guidelines

2014/30/EU*EMV	Directive 2014/30/EU of the European parliament and of the council of 26
	February 2014 on the harmonisation of the laws of the Member States
	relating to electromagnetic compatibility
ILAC-P10	ILAC Policy on Metrological Traceability of Measurement Results
ILAC-P9	LAC Policy for Participation in Proficiency Testing Activities
EA-3/01	EA Conditions for the use of Accreditation Symbols, Logos and other claims of
	accreditation and reference to the EA MLA Signatory status (rev05)

Emission and Immunity (international)

CISPR 11	Industrial, scientific and medical equipment - Radio-frequency disturbance
	characteristics - Limits and methods of measurement
CISPR 14-1	Electromagnetic compatibility - Requirements for household appliances,
	electric tools and similar apparatus - Part 1: Emission
CISPR 32	Electromagnetic compatibility of multimedia equipment – Emission
	requirements
CISPR 14-2	Electromagnetic compatibility – Requirements for household appliances,
	electric tools and similar apparatus – Part 2: Immunity – Product family
	standard

Basic Standards (international)

IEC 61000-3-2	Electromagnetic compatibility (EMC) – Part 3-2: Limits – Limits for harmonic
	current emissions (equipment input current ≤ 16 A per phase)
IEC 61000-3-3	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 ≤ 16 A per phase and not subject to
	conditional connection
JEC C1000 4.3	Electromagnetic compatibility (EMC) – Part 4-2: Testing and measurement
IEC 61000-4-2	techniques – Electrostatic discharge immunity test
IFC C1000 4.3	Electromagnetic compatibility (EMC) – Part 4-3: Testing and measurement
IEC 61000-4-3	techniques – Radiated, radio-frequency electromagnetic field immunity test
IEC 61000-4-4	Electromagnetic compatibility (EMC) – Part 4-4: Testing and measurement
IEC 61000-4-4	techniques – Electrical fast transient/burst immunity test
IEC 61000-4-5	Electromagnetic compatibility (EMC) - Part 4-5: Testing and measurement
IEC 61000-4-3	techniques - Surge immunity test
	Electromagnetic compatibility (EMC) – Part 4-6: Testing and measurement
IEC 61000-4-6	techniques – Immunity to conducted disturbances, induced by radio-
	frequency fields
IEC 61000 4 9	Electromagnetic compatibility (EMC) – Part 4-8: Testing and measurement
IEC 61000-4-8	techniques – Power frequency magnetic field immunity test
	Electromagnetic compatibility (EMC) - Part 4-11: Testing and measurement
IEC 61000-4-11	techniques - Voltage dips, short interruptions and voltage variations immunity
	tests for equipment with input current up to 16 A per phase
IEC 61000-4-13	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 STANDARDS



Product Family Standards (international)

IEC 60601-1-2	Medical electrical equipment – Part 1-2: General requirements for basic safety and essential performance – Collateral Standard: Electromagnetic disturbances – Requirements and tests IEC
IEC 61326-1	Electrical equipment for measurement, control and laboratory use – EMC requirements – Part 1: General requirements
IEC 61547	Equipment for general lighting purposes – EMC immunity requirements
IEC 62233	Measurement methods for electromagnetic fields of household appliances and similar apparatus with regard to human exposure
EN 50121-3-2	Railway applications – Electromagnetic compatibility – Part 3-2: Rolling stock – Apparatus
EN 50121-4	Railway applications – Electromagnetic compatibility – Part 4: Emission and immunity of the signalling and telecommunications apparatus

Emission and Immunity (Europe)

EN 55011	Industrial, scientific and medical equipment – Radio-frequency disturbance characteristics – Limits and methods of measurement
EN 55014-1	Electromagnetic compatibility – Requirements for household appliances, electric tools and similar apparatus – Part 1: Emission
EN IEC 55015	Limits and methods of measurement of radio disturbance characteristics of electrical lighting and similar equipment
EN 55024	Information technology equipment – Immunity characteristics – Limits and methods of measurement
EN 55032	Electromagnetic compatibility of multimedia equipment – Emission requirements
EN 55014-2	Electromagnetic compatibility – Requirements for household appliances, electric tools and similar apparatus – Part 2: Immunity – Product family standard

Basic Standards (Europe)

EN IEC 61000-3-2	Electromagnetic compatibility (EMC) – Part 3-2: Limits – Limits for harmonic current emissions (equipment input current ≤16 A per phase)
EN 61000-3-3	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 ≤16 A per phase and not subject to conditional connection
EN 61000-4-2	Electromagnetic compatibility (EMC) – Part 4-2: Testing and measurement techniques – Electrostatic discharge immunity test
EN 61000-4-3	Electromagnetic compatibility (EMC) – Part 4-3: Testing and measurement techniques – Radiated, radio-frequency, electromagnetic field immunity test
EN 61000-4-4	Electromagnetic compatibility (EMC) – Part 4-4: Testing and measurement techniques – Electrical fast transient/burst immunity test
EN 61000-4-5	Electromagnetic compatibility (EMC) – Part 4-5: Testing and measurement techniques – Surge immunity test
EN 61000-4-6	Electromagnetic compatibility (EMC) – Part 4-6: Testing and measurement techniques – Immunity to conducted disturbances, induced by radio-frequency fields

EMC STANDARDS



EN 61000-4-8	Electromagnetic compatibility (EMC) – Part 4-8: Testing and measurement
	techniques – Power frequency magnetic field immunity test
EN 61000-4-11	Electromagnetic compatibility (EMC) – Part 4-11: Testing and measurement
	techniques – Voltage dips, short interruptions and voltage variations
	immunity tests for equipment with input current up to 16 A per phase
EN 61000-4-13	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

Product Family Standards (Europe)

EN 60601-1-2	Medical electrical equipment – Part 1-2: General requirements for basic safety
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	requirements – Part 1: General requirements
EN 61547	Equipment for general lighting purposes - EMC immunity requirements
EN 62233	Measurement methods for electromagnetic fields of household appliances
	and similar apparatus with regard to human exposure

Generic Standards (Europe)

EN IEC 61000-6-1	Electromagnetic compatibility (EMC) – Part 6-1: Generic standards – Immunity
	standard for residential, commercial and light-industrial environments
EN IEC 61000-6-2	Electromagnetic compatibility (EMC) – Part 6-2: Generic standards – Immunity
	standard for industrial environments
EN 61000-6-3	Electromagnetic compatibility (EMC) – Part 6-3: Generic standards – Emission
	standard for equipment in residential environments
EN IEC 61000-6-4	Electromagnetic compatibility (EMC) – Part 6-4: Generic standards – Emission
	standard for industrial environments

Standards for Radio Equipment and Services (RED)

ETSI EN 301 489-1	ElectroMagnetic Compatibility (EMC) standard for radio equipment and services; Part 1: Common technical requirements; Harmonised Standard for ElectroMagnetic Compatibility
ETSI EN 301 489-3	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
EN 301489-7	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)
ETSI EN 301 489-17	ElectroMagnetic Compatibility (EMC) standard for radio equipment and services; Part 17: Specific conditions for Broadband Data Transmission Systems; Harmonised Standard for ElectroMagnetic Compatibility