

CERTIFICATE OF ACCREDITATION



ACT NZ Limited Trading As Auckland Lab

Client Number 9748

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Authorised Representative

Mr Sanjeev Danda
Deputy Managing Director

Programme

Electrical Testing Laboratory

Accreditation Number 1353

Initial Accreditation Date 30 March 2020

Conformance Standard

ISO/IEC 17025:2017


General requirements for the competence of testing and calibration laboratories

Laboratory Services Summary

- 3.60 Environmental Tests
- 3.80 Approval Tests on Electrical Appliances
- 3.85 Performance Tests on Electrical Appliances and Accessories

Key Technical Personnel

- Mr Chris Fan 3.80
- Mr Arunkumar Kamaraj 3.60, 3.80
- Mr John Liu 3.60, 3.80, 3.85

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3.60 Environmental Tests

(a) Cold tests

Test A: Cold to the following standards:

- AS 60068.2.1
- EN 60068-2-1
- IEC 60068-2-1

(b) Dry heat tests

Test B: Dry heat tests to the following standards:

- AS 60068.2.2
- EN 60068-2-2
- IEC 60068-2-2

(c) Damp heat tests

Test Cab: Damp heat tests to the following standards:

- AS 60068.2.78
- EN 60068-2-78
- IEC 60068-2-78

(d) Impact tests

Test Eh. Hammer tests to the following standards:

- AS 60068.2.75
- EN 60068-2-75
- IEC 60068-2-75

Degrees of protection provided by enclosures for electrical equipment against external mechanical impacts to the following standards:

- EN 62262
- IEC 62262

(e) Vibration tests

Test Fc: Vibration (sinusoidal) testing to the following standards:

- AS 60068.2.6
- EN 60068-2-6
- IEC 60068-2-6

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(i) Corrosion tests

Test Ka: Salt mist to the following standards:

- AS 60068.2.11
- EN 60068-2-11
- IEC 60068-2-11

Test Kb: Salt mist, cyclic (sodium chloride solution) to the following standards:

- AS 60068.2.52
- EN 60068-2-52
- IEC 60068-2-52

Other corrosion testing standards:

- ASTM B117 Operating Salt Spray (Fog) Apparatus
- ASTM D1654 Evaluation of Painted or Coatings Specimens Subjected to Corrosive Environments (neutral only)
- ISO 9227 Corrosion tests in artificial atmospheres – Salt spray tests

(m) Solar radiation tests

Test S: Simulated solar radiation at ground level and guidance for solar radiation testing and weathering to the following standards:

- AS 60068.2.5
- EN 60068-2-5
- IEC 60068-2-5

Other solar radiation testing standards:

- ASTM G151 Exposing Nonmetallic Materials in Accelerated Test Devices that Use Laboratory Light Sources
- ASTM G154 Operating Fluorescent Ultraviolet (UV) Lamp Apparatus for Exposure of Materials
- ASTM G155 Operating Xenon Arc Lamp Apparatus for Exposure of Materials
- ASTM D2565 Xenon-arc Exposure of Plastics Intended for Outdoor Applications
- ISO 4892-1 Plastics – Methods of exposure to laboratory light sources – General guidance
- ISO 4892-2 Xenon-arc lamps
- ISO 4892-3 Fluorescent UV lamps
- ISO 16474-2 Paints and varnishes - Methods of exposure to laboratory light sources – Xenon -arc lamps
- ISO 16474-3 Fluorescent UV lamps

The following test methods used in conjunction with environmental exposure tests:

- ISO 178 Plastics – Determination of flexural properties
- ISO 179 Plastics – Determination of Charpy impact properties – Non-instrumented impact test (up to 7.5 J)

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UN 38.3 Recommendations on the Transport of Dangerous Goods – Manual of Tests and Criteria – Lithium metal and lithium ion batteries

3.80 Approval Tests on Electrical Appliances

The following tests are excluded from the scope of accreditation where called up in test standards listed below:

Arc-tracking resistance, Izod impact test, EMC emission and EMC immunity, Impulse test, Short-circuit tests >10 kA, Shock tests, Flammable Refrigerant tests, Photometric tests and electronic controls using software for safety purposes to Annex R of IEC 60335 Part 1 and Annex H of IEC 60730 Part 1 (and equivalent EN AS/NZS standards).

Marking, instructions and AS/NZS National Variations can be tested for any National or International test standards.

Australian Standards

- AS 5347 Button/coin batteries and consumer goods that use button/coin batteries - Safety for consumers
- AS 60204.1 Electrical equipment of machines – General requirements
- AS 60529 Degrees of protection provided by enclosures for electrical equipment (IP Code)
- AS 60598.2.4 Portable general purpose luminaires
- AS 60598.2.22 Emergency lighting
- AS 60669.1 Switches for household and similar fixed electrical installations – General Requirements
- AS 60974.1 Arc welding equipment, Part 1: Welding power sources
- AS 60974.6 Arc welding equipment, Part 6: Limited duty portable arc welding and allied process power sources
- AS 61010.1 Safety requirements for electrical equipment for measurement, control, and laboratory use
- AS 61347.2.13 d.c. or a.c. supplied electronic controlgear for LED modules

New Zealand Standards

- NZS 6110 Floor and ceiling heating systems

Australian / New Zealand Standards

- AS/NZS 1125 Conductors in insulated electrical cables and flexible cords
- AS/NZS 1359.5 Rotating electrical machines – General requirements Three-phase cage induction motors – High efficiency and minimum energy performance standards requirements. Method B
- AS/NZS 1660.1 Test methods for electric cables, cords and conductors Method 1: Conductors and metallic components
- AS/NZS 1660.2.1 Test methods for electric cables, cords and conductors Method 2.1: Insulation, extruded semi-conductive screens and non-metallic sheaths – Methods for general application
- AS/NZS 1660.2.2 Methods specific to elastomeric, XLPE and XLPVC materials

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AS/NZS 1660.2.3	Methods specific to PVC and halogen-free thermoplastic materials
AS/NZS 1660.2.5	Methods specific to cables above 1 kV
AS/NZS 1660.3	Electrical tests
AS/NZS 1660.5.6	Fire tests. Test for vertical flame propagation for a single insulated wire or cable
AS/NZS 2053.1	Conduits and fittings for electrical installations – General requirements
AS/NZS 2053.2	Rigid plain conduits and fittings of insulating material
AS/NZS 2442.1	Performance of household electrical appliances – Rotary clothes dryers Part 1: Energy consumption and performance
AS/NZS 2442.2	Performance of household electrical appliances – Rotary clothes dryers Part 2: Energy labelling requirements
AS/NZS 3100	General requirements for electrical equipment
AS/NZS 3102	Electrical duct heaters
AS/NZS 3105	Electrical portable outlet devices
AS/NZS 3112	Plugs and sockets (excluding clauses 2.13.9 & 2.13.13)
AS/NZS 3113	Ceiling roses
AS/NZS 3117	Bayonet lampholders
AS/NZS 3119	Lampholder adaptors
AS/NZS 3120	Cord extension sockets
AS/NZS 3121	Insulating mouldings
AS/NZS 3122	Socket –outlet adaptors
AS/NZS 3127	Cord-line switches
AS/NZS 3133	Air break switches
AS/NZS 3136	Electrical equipment for spa-baths and spa and swimming pools
AS/NZS 3140	Edison-type screw lampholders
AS/NZS 3160	Hand-held portable electric tools (excluding clause 18.8 atomised spray test)
AS/NZS 3161	Thermostats and energy regulators
AS/NZS 3190	Residual current devices (current operated earth leakage devices) excluding clauses 8.13 (Test No 17), 8.14 (Test No 18) and 8.16 (Test No 20)
AS/NZS 3191	Electrical flexible cords
AS/NZS 3197	Portable electrical control or conditioning devices
AS/NZS 3199	Cord extension sets
AS/NZS 3439.1	Low-voltage switchgear and controlgear assemblies
AS/NZS 3439.4	Particular requirements for assemblies for construction sites
AS/NZS 3808	Insulating and sheathing materials for electric cables
AS/NZS 3820	Essential safety requirements for low voltage electrical equipment
AS/NZS 4024.1204	Safety of machinery – Electrical equipment of machines
AS/NZS 4325.1	Compression and mechanical connectors for power cables with copper or aluminium conductors – Test methods and requirements
AS/NZS 4665.1	Performance of external power supplies – Test method and energy performance mark
AS/NZS 4665.2	Performance of external power supplies – Minimum energy performance standard (MEPS)
AS/NZS 4692.1	Electric water heaters – Energy consumption, performance and general requirements (energy consumption tests)
AS/NZS 4692.2	Electric water heaters – Minimum Energy Performance Standards (MEPS) requirements and energy labelling
AS/NZS 4763	Portable inverters

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AS/NZS 5000.1	Electric cables – polymeric insulated – for working voltages $\geq 0.6/1$ (1.2) kV
AS/NZS 5000.2	Electric cables – polymeric insulated – for working voltages $\geq 450/750$ V
AS/NZS 5000.3	Electric cables – polymeric insulated – multicore control cables
AS/NZS 5813.1	Computers – Measurement of energy and performance – Methods
AS/NZS 5813.2	Computers – MEPS and energy rating labels
AS/NZS 5814.1	Internal power supplies – Measurement of energy and performance – Methods of measurement of energy performance
AS/NZS 5815.1	Computer monitors – Measurement of energy and performance – Methods
AS/NZS 5815.2	Computer monitors – MEPS and energy rating labels
AS/NZS 60065	Audio, video and similar electronic apparatus – Safety Requirements (excluding Annex B telecoms testing)
AS/NZS 60227.5	PVC insulated cables $\leq 450/750$ V – Part 5: Flexible cables (cords)
AS/NZS 60245.4	Rubber insulated cables $\leq 450/750$ V – Part 4: Cords and flexible cables
AS/NZS 60320.1	Appliance couplers for household and similar general purposes General requirements (limited clauses 10.1, 10.2 and 13.4 only)
AS/NZS 60332.1.1	Tests on electric and optical fibre cables under fire conditions – Part 1.1: Test for vertical flame propagation for a single insulated wire or cable – Apparatus
AS/NZS 60332.1.2	Procedure for 1 kW pre-mixed flame
AS/NZS 60332.1.3	Procedure for determination of flaming droplets/particles
AS/NZS 60335.1	Safety of household and similar electrical appliances – General requirements
AS/NZS 60335.2.2	Vacuum cleaners and water suction cleaning appliances
AS/NZS 60335.2.3	Electric irons
AS/NZS 60335.2.5	Dishwashers (clauses 7, 25 & National variations only)
AS/NZS 60335.2.6	Stationary cooking ranges, hobs, ovens and similar appliances
AS/NZS 60335.2.7	Washing machines
AS/NZS 60335.2.8	Shavers, hair clippers and similar appliances
AS/NZS 60335.2.9	Grills, toasters and similar portable cooking appliances
AS/NZS 60335.2.10	Floor treatment machines and wet scrubbing machines
AS/NZS 60335.2.11	Tumble dryers
AS/NZS 60335.2.12	Warming plates and similar appliances
AS/NZS 60335.2.13	Deep fat fryers, frying pans and similar appliances
AS/NZS 60335.2.14	Kitchen machines
AS/NZS 60335.2.15	Appliances for heating liquids
AS/NZS 60335.2.16	Food waste disposers
AS/NZS 60335.2.17	Blankets, pads and similar flexible heating appliances
AS/NZS 60335.2.21	Storage water heaters
AS/NZS 60335.2.23	Appliances for skin and hair care
AS/NZS 60335.2.24	Refrigerating appliances and ice-cream appliances and ice-makers
AS/NZS 60335.2.25	Microwave ovens (excluding clause 32)
AS/NZS 60335.2.27	UV and IR radiation skin treatment appliances
AS/NZS 60335.2.29	Battery chargers
AS/NZS 60335.2.30	Room heaters
AS/NZS 60335.2.31	Range hoods
AS/NZS 60335.2.32	Massage appliances
AS/NZS 60335.2.35	Instantaneous water heaters
AS/NZS 60335.2.40	Electrical heat pumps, air-conditioners and dehumidifiers
AS/NZS 60335.2.41	Pumps

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AS/NZS 60335.2.43	Clothes dryers and towel rails
AS/NZS 60335.2.45	Portable heating tools and similar appliances
AS/NZS 60335.2.52	Oral hygiene appliances (clauses 7, 30.2 and National Variations only)
AS/NZS 60335.2.53	Sauna heating appliances
AS/NZS 60335.2.54	Surface-cleaning appliances employing liquids
AS/NZS 60335.2.55	Electrical appliances for use with aquariums and garden ponds
AS/NZS 60335.2.59	Insect killers (excluding clause 32 radiation, toxicity and similar hazards)
AS/NZS 60335.2.60	Whirlpool baths and whirlpool spas
AS/NZS 60335.2.65	Air-cleaning appliances
AS/NZS 60335.2.69	Wet and dry vacuum cleaners, including power brush, for industrial and commercial use (excluding clause 22.35 + need to sub contract clauses 21.102 to 21.106)
AS/NZS 60335.2.70	Milking machines
AS/NZS 60335.2.73	Fixed immersion heaters
AS/NZS 60335.2.75	Commercial dispensing appliances and vending machines
AS/NZS 60335.2.77	Pedestrian controlled mains-operated lawnmowers, excluding clauses: 20 (Stability & mechanical hazards), 21 (Mechanical strength) and 22 (Construction)
AS/NZS 60335.2.78	Outdoor barbecues
AS/NZS 60335.2.79	High pressure cleaners and steam cleaners
AS/NZS 60335.2.80	Electric fans
AS/NZS 60335.2.82	Amusement machines and personal service machines
AS/NZS 60335.2.84	Toilets
AS/NZS 60335.2.85	Fabric steamers
AS/NZS 60335.2.89	Commercial refrigerating appliances with an incorporated or remote refrigerant condensing unit or compressor (excluding clause 22 test for flammable refrigerants)
AS/NZS 60335.2.91	Walk-behind and hand-held lawn trimmers and lawn edge trimmers
AS/NZS 60335.2.95	Drives for vertically moving garage doors for residential use
AS/NZS 60335.2.96	Flexible sheet heating elements for room heaters (excl. endurance test)
AS/NZS 60335.2.97	Drives for rolling shutter awnings blinds and similar equipment
AS/NZS 60335.2.98	Humidifiers
AS/NZS 60335.2.100	Hand-held mains-operated garden blowers, vacuums and blower vacuums
AS/NZS 60335.2.101	Vaporizers
AS/NZS 60335.2.102	Particular requirements for gas, oil and solid-fuel burning appliances with electrical connections
AS/NZS 60335.2.103	Drives for gates, doors and windows
AS/NZS 60335.2.106	Heated carpets and for heating units for room heating installed under removable floor coverings
AS/NZS 60335.2.107	Robotic battery powered electrical lawnmowers
AS/NZS 60335.2.109	UV radiation water treatment
AS/NZS 60335.2.114	Self-balancing personal transport devices for use with batteries containing alkaline or other non-acid electrolytes
AS/NZS 60335.2.115	Skin beauty care appliances
AS/NZS 60335.2.116	Furniture with electrically motorised parts
AS/NZS 60598.1	Luminaires – General requirements and tests
AS/NZS 60598.2.1	Fixed general purpose luminaires
AS/NZS 60598.2.2	Recessed luminaires

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AS/NZS 60598.2.3	Road and street lighting (excluding clause 3.6.7 load calculation verification of structural design)
AS/NZS 60598.2.4	Portable general purpose luminaires
AS/NZS 60598.2.5	Floodlights
AS/NZS 60598.2.6	Luminaires with built-in transformers or convertors for filament lamps
AS/NZS 60598.2.7	Portable luminaires for garden use
AS/NZS 60598.2.8	Handlamps
AS/NZS 60598.2.9	Photo and film luminaires (non-professional)
AS/NZS 60598.2.10	Portable child-appealing luminaires
AS/NZS 60598.2.11	Aquarium luminaires
AS/NZS 60598.2.12	Mains socket-outlet mounted nightlights
AS/NZS 60598.2.13	Ground-recessed luminaires
AS/NZS 60598.2.17	Luminaires for stage lighting, television, film, and photographic studios (outdoor and indoor)
AS/NZS 60598.2.18	Luminaires for swimming pools and similar applications
AS/NZS 60598.2.19	Air handling luminaires
AS/NZS 60598.2.20	Lighting chains
AS/NZS 60598.2.22	Emergency lighting
AS/NZS 60598.2.23	Extra-low-voltage lighting systems for ELV light sources
AS/NZS 60598.2.25	Luminaires for use in clinical areas of hospitals and health care buildings
AS/NZS 60601.1	Medical electrical equipment – Part 1: General requirements for basic safety and essential performance
AS/NZS 60669.1	Switches for household and similar fixed electrical installations – General Requirements
AS/NZS 60669.2.1	Electronic switches
AS/NZS 60695.1	Fire hazard testing – Guidance for assessing the fire hazard of electrotechnical products
AS/NZS 60695.2 (Part 2.10-2.13)	Fire test methods for solid insulating materials and non-metallic enclosures used in electrical equipment
AS/NZS 60730	Automatic electrical controls
AS/NZS 60745.1	Safety of hand-held motor operated electric tools – General requirements
AS/NZS 60745.2.1	Drills (Drills and impact drills)
AS/NZS 60745.2.2	Screwdrivers
AS/NZS 60745.2.3	Grinders and polishers
AS/NZS 60745.2.4	Sanders and polishers
AS/NZS 60745.2.5	Circular saws
AS/NZS 60745.2.6	Hammers
AS/NZS 60745.2.8	Shears and nibblers
AS/NZS 60745.2.9	Tappers
AS/NZS 60745.2.11	Reciprocating saws (jig and sabre saws)
AS/NZS 60745.2.12	Concrete vibrators
AS/NZS 60745.2.13	Chain saws (excluding clauses 19 – mechanical hazards and 21 –construction)
AS/NZS 60745.2.14	Planers
AS/NZS 60745.2.16	Tackers
AS/NZS 60745.2.17	Routers and trimmers
AS/NZS 60745.2.18	Strapping tools
AS/NZS 60745.2.19	Joiners

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AS/NZS 60745.2.20	Band saws
AS/NZS 60745.2.21	Drain cleaners
AS/NZS 60745.2.22	Cut-off machines
AS/NZS 60745.2.23	Die grinders and small rotary tools
AS/NZS 60898.1	Electrical accessories – Circuit-breakers for overcurrent protection for household and similar installations – Circuit breakers for a.c. operation (National variations only)
AS/NZS 60950.1	Safety of information technology equipment – General requirements (excluding connections to telecommunications equipment)
AS/NZS 60968	Self ballasted lamps for general lighting services – Safety requirements (National variations only)
AS/NZS 61008.1	Residual current operated circuit-breakers without integral overcurrent protection for household and similar uses (RCCBs) – General rules (National variations only)
AS/NZS 61009.1	Residual current operated circuit-breakers with integral overcurrent protection for household and similar uses (RCCBs) – General rules (National variations only)
AS/NZS 61058.1	Switches for appliances (National variations only)
AS/NZS 61184	Bayonet lampholders (clauses 14.2 humidity conditioning tests, 14.3 insulation and electric strength tests, 17 creepage distances and clearances, 19.2 resistance to heat, fire and tracking only)
AS/NZS 61347.1	Lamp controlgear
AS/NZS 61347.2.2	d.c. or a.c. supplied electronic step-down converters for filament lamps
AS/NZS 61347.2.3	a.c. supplied electronic ballasts for fluorescent lamps
AS/NZS 61347.2.11	Miscellaneous electronic circuits used with luminaires
AS/NZS 61347.2.13	d.c. or a.c. supplied electronic controlgear for LED modules
AS/NZS 61386.1	Conduit systems for cable management – General requirements
AS/NZS 61386.21	Rigid conduit systems
AS/NZS 61439.1	LV switchgear and controlgear assemblies – General rules
AS/NZS 61439.2	Power switchgear and control gear assemblies
AS/NZS 61439.3	Distribution boards intended to be operated by ordinary persons (DBO)
AS/NZS 61439.4	Assemblies for construction sites (ACS)
AS/NZS 61439.5	Assemblies for power distribution in public networks
AS/NZS 61439.6	Busbar trunking systems (busways) Clauses 10.13 & 10.101 flammability are excluded
AS/NZS 61439.7	Assemblies for specific applications such as marinas, camping sites, market squares, electric vehicle charging stations
AS/NZS 61558.1	Safety of power transformers, power supply units and similar – General Requirements and tests
AS/NZS 61558.2.4	Isolating transformers for general use
AS/NZS 61558.2.6	Safety isolating transformers for general use
AS/NZS 61558.2.16	Switch mode power supply units and transformers for switch mode power supply units
AS/NZS 61558.2.17	Transformers for switch mode power supplies
AS/NZS 62087.1	Power consumption of AV and related equipment – Methods of measurement
AS/NZS 62087.2.2	Power consumption of AV and related equipment – MEPS and energy rating label requirements for television sets
AS/NZS 62115	Electric toys – Safety (excluding Clause 20 and Annex E)

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AS/NZS 62301	Household electrical appliances – Measurement of standby power
AS/NZS 62368.1	Audio/video, information and communication technology equipment
AS/NZS 62560	Part 1: Safety requirements Self-ballasted LED-lamps for general lighting services by voltage > 50 V – Safety specifications (National variations only)
AS/NZS 62841.1	Electric motor-operated hand-held tools, transportable tools and lawn and garden machinery – Safety – Part 1: General requirements
AS/NZS 62841.2.1	Hand-held drills and impact drills
AS/NZS 62841.2.2	Hand-held screwdrivers and impact wrenches
AS/NZS 62841.2.3	Hand-held grinders, disk-type polishers and disc-type sanders
AS/NZS 62841.2.4	Hand-held sanders and polishers other than disc type
AS/NZS 62841.2.5	Hand-held circular saws
AS/NZS 62841.2.6	Hand-held hammers
AS/NZS 62841.2.8	Hand-held shears and nibblers
AS/NZS 62841.2.9	Hand-held tappers and threaders
AS/NZS 62841.2.10	Hand-held mixers
AS/NZS 62841.2.11	Hand-held reciprocating saws
AS/NZS 62841.2.14	Hand-held planers
AS/NZS 62841.2.16	Hand-held tackers (excluding clause 18.12)
AS/NZS 62841.2.17	Hand-held routers
AS/NZS 62841.2.21	Hand-held drain cleaners
AS/NZS 62841.3.1	Transportable table saws
AS/NZS 62841.3.4	Transportable bench grinders
AS/NZS 62841.3.9	Transportable mitre saws
AS/NZS 62841.3.10	Transportable cut-off machines
AS/NZS 62841.3.13	Transportable drills
AS/NZS 62841.4.1	Chain saws
AS/NZS 62841.4.2	Hedge trimers

IEC or EN Standards

IEC EN 60034-1	Rotating electrical machines – Rating and performance
IEC EN 60034-2-1	Determining losses and efficiency from tests (excl. machines for traction vehicles)
IEC EN 60065	Audio, video and similar electronic apparatus – Safety Requirements (excluding Annex B telecoms testing)
IEC EN 60204-1	Electrical equipment of machines – General requirements
IEC EN 60227-5	PVC insulated cables ≤450/750 V – Part 5: Flexible cables (cords)
IEC EN 60245-4	Rubber insulated cables ≤450/750 V – Part 4: Cords and flexible cables
IEC EN 60332-1-1	Tests on electric and optical fibre cables under fire conditions – Part 1.1: Test for vertical flame propagation for a single insulated wire or cable – Apparatus
IEC EN 60332-1-2	Procedure for 1 kW pre-mixed flame
IEC EN 60332-1-3	Procedure for determination of flaming droplets/particles
IEC EN 60335-1	Safety of household and similar electrical appliances – General requirements
IEC EN 60335-2-2	Vacuum cleaners and water suction cleaning appliances
IEC EN 60335-2-3	Electric irons
IEC EN 60335-2-6	Stationary cooking ranges, hobs, ovens and similar appliances
IEC EN 60335-2-7	Washing machines

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IEC EN 60335-2-8	Shavers, hair clippers and similar appliances
IEC EN 60335-2-9	Grills, toasters and similar portable cooking appliances
IEC EN 60335-2-10	Floor treatment machines and wet scrubbing machines
IEC EN 60335-2-11	Tumble dryers
IEC EN 60335-2-12	Warming plates and similar appliances
IEC EN 60335-2-13	Deep fat fryers, frying pans and similar appliances
IEC EN 60335-2-14	Kitchen machines
IEC EN 60335-2-15	Appliances for heating liquids
IEC EN 60335-2-16	Food waste disposers
IEC EN 60335-2-17	Blankets, pads and similar flexible heating appliances
IEC EN 60335-2-21	Storage water heaters
IEC EN 60335-2-23	Appliances for skin or hair care
IEC EN 60335-2-24	Refrigerating appliances and ice-cream appliances and ice-makers
IEC EN 60335-2-25	Microwave ovens (excluding clause 32)
IEC EN 60335-2-27	UV and IR radiation skin treatment appliances
IEC EN 60335-2-29	Battery chargers
IEC EN 60335-2-30	Room heaters
IEC EN 60335-2-31	Range hoods
IEC EN 60335-2-32	Massage appliances
IEC EN 60335-2-35	Instantaneous water heaters
IEC EN 60335-2-36	Commercial electric cooking ranges, ovens, hobs and hob elements
IEC EN 60335-2-37	Commercial electric deep fat fryers
IEC EN 60335-2-38	Commercial electric griddles and griddle grills
IEC EN 60335-2-40	Electrical heat pumps, air-conditioners and dehumidifiers
IEC EN 60335-2-41	Pumps
IEC EN 60335-2-42	Commercial electric forced convection ovens, steam cookers and steam-convection ovens
IEC EN 60335-2-43	Clothes dryers and towel rails
IEC EN 60335-2-45	Portable heating tools and similar appliances
IEC EN 60335-2-47	Commercial electric boiling pans
IEC EN 60335-2-48	Commercial electric grillers and toasters
IEC EN 60335-2-49	Commercial electric appliances for keeping food and crockery warm
IEC EN 60335-2-50	Commercial electric bains-marie
IEC EN 60335-2-54	Surface-cleaning appliances employing liquids
IEC EN 60335-2-55	Electrical appliances for use with aquariums and garden ponds
IEC EN 60335-2-59	Insect killers (excluding clause 32 radiation, toxicity and similar hazards)
IEC EN 60335-2-60	Whirlpool baths and whirlpool spas
IEC EN 60335-2-65	Air-cleaning appliances
IEC EN 60335-2-69	Wet and dry vacuum cleaners, including power brush, for industrial and commercial use (excluding clause 22.35 + need to sub contract clauses 21.102 to 21.106)
IEC EN 60335-2-70	Milking machines
IEC EN 60335-2-73	Fixed immersion heaters
IEC EN 60335-2-75	Commercial dispensing appliances and vending machines
IEC EN 60335.2.77	Pedestrian controlled mains-operated lawnmowers, excluding clauses 20 (Stability & mechanical hazards), 21 (Mechanical strength) and 22 (Construction)
IEC EN 60335-2-78	Outdoor barbecues

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IEC EN 60335-2-79	High pressure cleaners and steam cleaners
IEC EN 60335-2-80	Electric fans
IEC EN 60335-2-82	Amusement machines and personal service machines
IEC EN 60335-2-84	Toilets
IEC EN 60335-2-89	Commercial refrigerating appliances with incorporated or remote refrigerant condensing unit or compressor (excluding clause 22 test for flammable refrigerants)
IEC EN 60335-2-95	Drives for vertically moving garage doors for residential use
IEC EN 60335-2-96	Flexible sheet heating elements for room heating (excl. endurance test)
IEC EN 60335-2-98	Humidifiers
IEC EN 60335-2-100	Hand-held mains-operated garden blowers, vacuums and blower vacuums
IEC EN 60335-2-101	Vaporizers
IEC EN 60335-2-102	Safety – Particular requirements for gas, oil and solid-fuel burning appliances with electrical connections
IEC EN 60335-2-103	Drives for gates, doors and windows
IEC EN 60335-2-106	Heated carpets and for heating units for room heating installed under removable floor coverings
IEC EN 60335-2-107	Robotic battery powered electrical lawnmowers
IEC EN 60335-2-109	UV radiation water treatment
IEC EN 60335-2-114	Self-balancing personal transport devices for use with batteries containing alkaline or other non-acid electrolytes
IEC EN 60335-2-115	Skin beauty care appliances
IEC EN 60335-2-116	Furniture with electrically motorised parts
IEC EN 60519-1	Installations for electroheating and electromagnetic processing – General requirements
IEC EN 60529	Degrees of protection provided by enclosures for electrical equipment
IEC EN 60598-1	Luminaires – General requirements and tests
IEC EN 60598-2-1	Fixed general purpose luminaires
IEC EN 60598-2-2	Recessed luminaires
IEC EN 60598-2-3	Road and street lighting (excluding clause 3.6.7 load calculation verification of structural design)
IEC EN 60598-2-4	Portable general purpose luminaires
IEC EN 60598-2-5	Floodlights
IEC EN 60598-2-6	Luminaires with built-in transformers or convertors for filament lamps
IEC EN 60598-2-8	Handlamps
IEC EN 60598-2-9	Photo and film luminaires (non-professional)
IEC EN 60598-2-10	Portable child-appealing luminaires
IEC EN 60598-2-11	Aquarium luminaires
IEC EN 60598-2-12	Mains socket-outlet mounted nightlights
IEC EN 60598-2-13	Ground-recessed luminaires
IEC EN 60598-2-17	Luminaires for stage lighting, television, film, and photographic studios (outdoor and indoor)
IEC EN 60598-2-18	Luminaires for swimming pools and similar applications
IEC EN 60598-2-19	Air handling luminaires
IEC EN 60598-2-20	Lighting chains
IEC EN 60598-2-22	Emergency lighting
IEC EN 60598-2-23	Extra-low-voltage lighting systems for ELV light sources

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IEC EN 60598-2-25	Luminaires for use in clinical areas of hospitals and health care buildings
IEC EN 60601-1	Medical electrical equipment – Part 1: General requirements for basic safety and essential performance
IEC EN 60601-2-52	Medical beds
IEC EN 60669-2-1	Electronic switches
IEC EN 60730-1	Automatic controls for household and similar use – General requirements
IEC EN 60745-1	Safety of hand-held motor operated electric tools – General requirements
IEC EN 60745-2-1	Drills (Drills and impact drills)
IEC EN 60745-2-2	Screwdrivers
IEC EN 60745-2-3	Grinders and polishers
IEC EN 60745-2-4	Sanders and polishers
IEC EN 60745-2-5	Circular saws
IEC EN 60745-2-6	Hammers
IEC EN 60745-2-8	Shears and nibblers
IEC EN 60745-2-9	Tappers
IEC EN 60745-2-11	Reciprocating saws (jig and sabre saws)
IEC EN 60745-2-12	Concrete vibrators
IEC EN 60745-2-13	Chain saws (excluding clauses 19 – mechanical hazards and 21 –construction)
IEC EN 60745-2-14	Planers
IEC EN 60745-2-16	Tackers
IEC EN 60745-2-17	Routers and trimmers
IEC EN 60745-2-18	Strapping tools
IEC EN 60745-2-19	Joiners
IEC EN 60745-2-20	Band saws
IEC EN 60745-2-21	Drain cleaners
IEC EN 60745-2-22	Cut-off machines
IEC EN 60745-2-23	Die grinders and small rotary tools
IEC EN 60800	Heating cables with a rated voltage of 300/500 V for comfort heating and prevention of ice formation (excluding clauses 8.2.17 & 8.2.18)
IEC EN 60811-1-1	Common test methods for insulating and sheathing materials of electric cables – Part 1: Methods for general application – Section 1: Measurement of thickness and overall dimensions – Tests for determining the mechanical properties
IEC EN 60950-1	Safety of information technology equipment–General requirements (excluding connections to telecommunications equipment)
IEC EN 60974-1	Arc welding equipment, Part 1: Welding power sources
IEC EN 60974-6	Arc welding equipment, Part 6: Limited duty portable arc welding and allied process power sources
IEC EN 61010-1	Safety requirements for electrical equipment for measurement, control, and laboratory use
IEC EN 61010-2-101	In vitro diagnostic (IVD) medical equipment
IEC EN 61010-2-201	Control equipment
IEC EN 61347-2-11	Miscellaneous electronic circuits used with luminaires
IEC EN 61347-2-13	d.c. or a.c. supplied electronic controlgear for LED modules
IEC EN 61439-1	LV switchgear and controlgear assemblies – General rules
IEC EN 61439-2	Power switchgear and control gear assemblies
IEC EN 61439-3	Distribution boards intended to be operated by ordinary persons (DBO)
IEC EN 61439-4	Assemblies for construction sites (ACS)

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IEC EN 61439-5	Assemblies for power distribution in public networks
IEC EN 61439-6	Busbar trunking systems (busways) Clauses 10.13 & 10.101 flammability are excluded
IEC EN 61439-7	Assemblies for specific applications such as marinas, camping sites, market squares, electric vehicle charging stations
IEC EN 61558-1	Safety of power transformers, power supply, reactors and similar products – General requirements and tests (excluding insulated winding wire tests in Annex K)
IEC EN 61558-2-4	Isolating transformers for general use
IEC EN 61558-2-6	Safety isolating transformers for general use
IEC EN 61558-2-16	Switch mode power supply units and transformers for switch mode power supply units
IEC EN 61558-2-17	Transformers for switch mode power supplies
IEC EN 61851-1	Electric vehicle conductive charging system – Part 1: General Requirements (excluding clauses 6.3,12.7 and Annex A and B)
IEC EN 62109-1	Safety of power converter for use in photovoltaic power systems
IEC EN 62109-2	Safety of power converter for use in photovoltaic power systems – Inverters
IEC EN 62115	Electric toys – Safety (excluding Clause 20 and Annex E)
IEC EN 62133-2	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
IEC EN 62196-1	Plugs, socket-outlets, vehicle connectors and vehicle inlets – Conductive charging of electric vehicles – General requirements
IEC EN 62196-2	Dimensional compatibility requirements for AC pin and contact-tube accessories
IEC EN 62208	Empty enclosures for low-voltage switchgear and controlgear assemblies – General requirements
IEC 62301	Household electrical appliances – Measurement of standby power
IEC EN 62368-1	Audio/video, information and communication technology equipment Part 1: Safety requirements
IEC EN 62841-1	Electric motor-operated hand-held tools, transportable tools and lawn and garden machinery – Safety – Part 1: General requirements
IEC EN 62841-2-1	Hand-held drills and impact drills
IEC EN 62841-2-2	Hand-held screwdrivers and impact wrenches
IEC EN 62841-2-4	Hand-held sanders and polishers other than disc type
IEC EN 62841-2-5	Circular saws
IEC EN 62841-2-8	Shears and nibblers
IEC EN 62841-2-9	Tappers and threaders
IEC EN 62841-2-10	Mixers
IEC EN 62841-2-11	Reciprocating saws
IEC EN 62841-2-14	Planers
IEC EN 62841-2-16	Tackers (excluding clause 18.12)
IEC EN 62841-2-17	Routers
IEC EN 62841-2-21	Drain cleaners
IEC EN 62841-3-1	Transportable table saws
IEC EN 62841-3-4	Transportable bench grinders
IEC EN 62841-3-9	Transportable mitre saws
IEC EN 62841-3-10	Transportable cut-off machines

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IEC EN 62841-3-13	Transportable drills
IEC EN 62841-4-1	Chain saws
IEC EN 62841-4-2	Hedge trimers
IEC EN 62893-1	Charging cables for electric vehicles for rated voltages up to and including 0.6/1 kV - General requirements
IEC EN 62893-3	Cables for AC charging according to modes 1, 2 and 3 of IEC 61851-1 of rated voltages up to and including 450/750 V
BS EN Standards	
BS EN 60034-1	Rotating electrical machines – Rating and performance
BS EN 60034-2-1	Determining losses and efficiency from tests (excl. machines for traction vehicles)
BS EN 60065	Audio, video and similar electronic apparatus – Safety Requirements (excluding Annex B telecoms testing)
BS EN 60204-1	Electrical equipment of machines – General requirements
BS EN 60227-5	PVC insulated cables ≤450/750 V – Part 5: Flexible cables (cords)
BS EN 60332-1-1	Tests on electric and optical fibre cables under fire conditions – Part 1.1: Test for vertical flame propagation for a single insulated wire or cable – Apparatus
BS EN 60332-1-2	Procedure for 1 kW pre-mixed flame
BS EN 60332-1-3	Procedure for determination of flaming droplets/particles
BS EN 60335-1	Safety of household and similar electrical appliances – General requirements
BS EN 60335-2-2	Vacuum cleaners and water suction cleaning appliances
BS EN 60335-2-3	Electric irons
BS EN 60335-2-6	Stationary cooking ranges, hobs, ovens and similar appliances
BS EN 60335-2-7	Washing machines
BS EN 60335-2-8	Shavers, hair clippers and similar appliances
BS EN 60335-2-9	Grills, toasters and similar portable cooking appliances
BS EN 60335-2-10	Floor treatment machines and wet scrubbing machines
BS EN 60335-2-11	Tumble dryers
BS EN 60335-2-12	Warming plates and similar appliances
BS EN 60335-2-13	Deep fat fryers, frying pans and similar appliances
BS EN 60335-2-14	Kitchen machines
BS EN 60335-2-15	Appliances for heating liquids
BS EN 60335-2-16	Food waste disposers
BS EN 60335-2-17	Blankets, pads and similar flexible heating appliances
BS EN 60335-2-21	Storage water heaters
BS EN 60335-2-23	Appliances for skin or hair care
BS EN 60335-2-24	Refrigerating appliances and ice-cream appliances and ice-makers
BS EN 60335-2-25	Microwave ovens (excluding clause 32)
BS EN 60335-2-27	UV and IR radiation skin treatment appliances
BS EN 60335-2-29	Battery chargers
BS EN 60335-2-30	Room heaters
BS EN 60335-2-31	Range hoods
BS EN 60335-2-32	Massage appliances
BS EN 60335-2-35	Instantaneous water heaters
BS EN 60335-2-36	Commercial electric cooking ranges, ovens, hobs and hob elements
BS EN 60335-2-37	Commercial electric deep fat fryers

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BS EN 60335-2-38	Commercial electric griddles and griddle grills
BS EN 60335-2-40	Electrical heat pumps, air-conditioners and dehumidifiers
BS EN 60335-2-41	Pumps
BS EN 60335-2-42	Commercial electric forced convection ovens, steam cookers and steam-convection ovens
BS EN 60335-2-43	Clothes dryers and towel rails
BS EN 60335-2-45	Portable heating tools and similar appliances
BS EN 60335-2-47	Commercial electric boiling pans
BS EN 60335-2-48	Commercial electric grillers and toasters
BS EN 60335-2-49	Commercial electric appliances for keeping food and crockery warm
BS EN 60335-2-50	Commercial electric bains-marie
BS EN 60335-2-54	Surface-cleaning appliances employing liquids
BS EN 60335-2-55	Electrical appliances for use with aquariums and garden ponds
BS EN 60335-2-59	Insect killers (excluding clause 32 radiation, toxicity and similar hazards)
BS EN 60335-2-60	Whirlpool baths and whirlpool spas
BS EN 60335-2-65	Air-cleaning appliances
BS EN 60335-2-69	Wet and dry vacuum cleaners, including power brush, for industrial and commercial use (excluding clause 22.35 + need to sub contract clauses 21.102 to 21.106)
BS EN 60335-2-70	Milking machines
BS EN 60335-2-73	Fixed immersion heaters
BS EN 60335-2-75	Commercial dispensing appliances and vending machines
BS EN 60335-2-77	Pedestrian controlled mains-operated lawnmowers, excluding clauses 20 (Stability & mechanical hazards), 21 (Mechanical strength) and 22 (Construction)
BS EN 60335-2-78	Outdoor barbecues
BS EN 60335-2-79	High pressure cleaners and steam cleaners
BS EN 60335-2-80	Electric fans
BS EN 60335-2-82	Amusement machines and personal service machines
BS EN 60335-2-84	Toilets
BS EN 60335-2-89	Commercial refrigerating appliances with incorporated or remote refrigerant condensing unit or compressor (excluding clause 22 test for flammable refrigerants)
BS EN 60335-2-95	Drives for vertically moving garage doors for residential use
BS EN 60335-2-96	Flexible sheet heating elements for room heating (excl. endurance test)
BS EN 60335-2-98	Humidifiers
BS EN 60335-2-100	Hand-held mains-operated garden blowers, vacuums and blower vacuums
BS EN 60335-2-101	Vaporizers
BS EN 60335-2-102	Safety – Particular requirements for gas, oil and solid-fuel burning appliances with electrical connections
BS EN 60335-2-103	Drives for gates, doors and windows
BS EN 60335-2-106	Heated carpets and for heating units for room heating installed under removable floor coverings
BS EN 60335-2-107	Robotic battery powered electrical lawnmowers
BS EN 60335-2-109	UV radiation water treatment
BS EN 60335-2-114	Self-balancing personal transport devices for use with batteries containing alkaline or other non-acid electrolytes
BS EN 60335-2-115	Skin beauty care appliances

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BS EN 60335-2-116	Furniture with electrically motorised parts
BS EN 60519-1	Installations for electroheating and electromagnetic processing – General requirements
BS EN 60529	Degrees of protection provided by enclosures for electrical equipment
BS EN 60598-1	Luminaires – General requirements and tests
BS EN 60598-2-1	Fixed general purpose luminaires
BS EN 60598-2-2	Recessed luminaires
BS EN 60598-2-3	Road and street lighting (excluding clause 3.6.7 load calculation verification of structural design)
BS EN 60598-2-4	Portable general purpose luminaires
BS EN 60598-2-5	Floodlights
BS EN 60598-2-6	Luminaires with built-in transformers or convertors for filament lamps
BS EN 60598-2-8	Handlamps
BS EN 60598-2-9	Photo and film luminaires (non-professional)
BS EN 60598-2-10	Portable child-appealing luminaires
BS EN 60598-2-11	Aquarium luminaires
BS EN 60598-2-12	Mains socket-outlet mounted nightlights
BS EN 60598-2-13	Ground-recessed luminaires
BS EN 60598-2-17	Luminaires for stage lighting, television, film, and photographic studios (outdoor and indoor)
BS EN 60598-2-18	Luminaires for swimming pools and similar applications
BS EN 60598-2-19	Air handling luminaires
BS EN 60598-2-20	Lighting chains
BS EN 60598-2-22	Emergency lighting
BS EN 60598-2-23	Extra-low-voltage lighting systems for ELV light sources
BS EN 60598-2-25	Luminaires for use in clinical areas of hospitals and health care buildings
BS EN 60669-2-1	Electronic switches
BS EN 60730-1	Automatic controls for household and similar use – General requirements
BS EN 60745-1	Safety of hand-held motor operated electric tools – General requirements
BS EN 60745-2-1	Drills (Drills and impact drills)
BS EN 60745-2-2	Screwdrivers
BS EN 60745-2-3	Grinders and polishers
BS EN 60745-2-4	Sanders and polishers
BS EN 60745-2-5	Circular saws
BS EN 60745-2-6	Hammers
BS EN 60745-2-8	Shears and nibblers
BS EN 60745-2-9	Tappers
BS EN 60745-2-11	Reciprocating saws (jig and sabre saws)
BS EN 60745-2-12	Concrete vibrators
BS EN 60745-2-13	Chain saws (excluding clauses 19 – mechanical hazards and 21 –construction)
BS EN 60745-2-14	Planers
BS EN 60745-2-16	Tackers
BS EN 60745-2-17	Routers and trimmers
BS EN 60745-2-18	Strapping tools
BS EN 60745-2-19	Joiners
BS EN 60745-2-20	Band saws
BS EN 60745-2-21	Drain cleaners

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BS EN 60745-2-22	Cut-off machines
BS EN 60745-2-23	Die grinders and small rotary tools
BS EN 60811-1-1	Common test methods for insulating and sheathing materials of electric cables – Part 1: Methods for general application – Section 1: Measurement of thickness and overall dimensions – Tests for determining the mechanical properties
BS EN 60950-1	Safety of information technology equipment–General requirements (excluding connections to telecommunications equipment)
BS EN 60974-1	Arc welding equipment, Part 1: Welding power sources
BS EN 60974-6	Arc welding equipment, Part 6: Limited duty portable arc welding and allied process power sources
BS EN 61010-1	Safety requirements for electrical equipment for measurement, control, and laboratory use
BS EN 61010-2-101	In vitro diagnostic (IVD) medical equipment
BS EN 61010-2-201	Control equipment
BS EN 61347-2-11	Miscellaneous electronic circuits used with luminaires
BS EN 61347-2-13	d.c. or a.c. supplied electronic controlgear for LED modules
BS EN 61439-1	LV switchgear and controlgear assemblies – General rules
BS EN 61439-2	Power switchgear and control gear assemblies
BS EN 61439-3	Distribution boards intended to be operated by ordinary persons (DBO)
BS EN 61439-4	Assemblies for construction sites (ACS)
BS EN 61439-5	Assemblies for power distribution in public networks
BS EN 61439-6	Busbar trunking systems (busways) Clauses 10.13 & 10.101 flammability are excluded
BS EN 61439-7	Assemblies for specific applications such as marinas, camping sites, market squares, electric vehicle charging stations
BS EN 61558-1	Safety of power transformers, power supply, reactors and similar products – General requirements and tests (excluding insulated winding wire tests in Annex K)
BS EN 61558-2-4	Isolating transformers for general use
BS EN 61558-2-6	Safety isolating transformers for general use
BS EN 61558-2-16	Switch mode power supply units and transformers for switch mode power supply units
BS EN 61558-2-17	Transformers for switch mode power supplies
BS EN 62109-1	Safety of power converter for use in photovoltaic power systems
BS EN 62109-2	Safety of power converter for use in photovoltaic power systems – Inverters
BS EN 62115	Electric toys – Safety (excluding Clause 20 and Annex E)
BS EN 62301	Household electrical appliances – Measurement of standby power
BS EN 62368-1	Audio/video, information and communication technology equipment Part 1: Safety requirements
BS EN 62841-1	Electric motor-operated hand-held tools, transportable tools and lawn and garden machinery – Safety – Part 1: General requirements
BS EN 62841-2-1	Hand-held drills and impact drills
BS EN 62841-2-2	Hand-held screwdrivers and impact wrenches
BS EN 62841-2-4	Hand-held sanders and polishers other than disc type
BS EN 62841-2-5	Circular saws
BS EN 62841-2-8	Shears and nibblers
BS EN 62841-2-9	Tappers and threaders

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- BS EN 62841-2-10 Mixers
- BS EN 62841-2-11 Reciprocating saws
- BS EN 62841-2-14 Planers
- BS EN 62841-2-16 Tackers (excluding clause 18.12)
- BS EN 62841-2-17 Routers
- BS EN 62841-2-21 Drain cleaners
- BS EN 62841-3-1 Transportable table saws
- BS EN 62841-3-4 Transportable bench grinders
- BS EN 62841-3-9 Transportable mitre saws
- BS EN 62841-3-10 Transportable cut-off machines
- BS EN 62841-3-13 Transportable drills
- BS EN 62841-4-1 Chain saws
- BS EN 62841-4-2 Hedge trimers

Other Standards

ASTM Standards

ASTM F88/F88M-15 Seal Strength of Flexible Barrier Materials

Brazilian Standards

ABNT NBR NM 60335-1 Safety of household and similar electrical appliances – General requirements

Canadian Standards

- CAN/CSA-C22.2 NO. 60335-1 Safety of household and similar electrical appliances – General requirements
- CAN/CSA-C22.2 NO. 60335-2-15 Appliances for heating liquids
- CSA E60335-2-65 Air-cleaning appliances
- CAN/CSA-C22.2 NO. 60601-1 Medical electrical equipment – Part 1: General requirements for basic safety and essential performance
- CAN/CSA-C22.2 NO. 60601-2-52 Medical beds
- CAN/CSA-C22.2 NO. 60950-1 Safety of information technology equipment – General requirements (excluding connections to telecommunications equipment)
- CAN/CSA-C22.2 NO. 61010-1 Safety requirements for electrical equipment for measurement, control, and laboratory use
- CSA C22.2 AV, information and communication technology equipment – Safety requirements
- CAN/CSA-C22.2 NO. 62841-1 Electric motor-operated hand-held tools, transportable tools and lawn and garden machinery – Safety – Part 1: General requirements

Chinese Standards

GB 4793-1 Safety requirements for electrical equipment for measurement, control, and laboratory use

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Gulf Country Standards

- GSO IEC 60335-1 Safety of household and similar electrical appliances – General requirements
- GSO IEC 60335-2-49 Commercial electric hot cupboards
- GSO IEC 60335-2-89 Commercial refrigerating appliances with incorporated or remote refrigerant condensing unit or compressor (excluding clause 22 test for flammable refrigerants)
- GSO IEC 60745-1 Safety of hand-held motor operated electric tools – General requirements
- GSO IEC 60745-2-1 Drills (Drills and impact drills)
- GSO IEC 60950-1 Safety of information technology equipment – General requirements (excluding connections to telecommunications equipment)
- GSO IEC 62368-1 Audio/video, information and communication technology equipment
Part 1: Safety requirements

Indian Standards

- IS/IEC 61010-1 Safety requirements for electrical equipment for measurement, control, and laboratory use
- IS/IEC 62368-1 Audio/video, information and communication technology equipment
Part 1: Safety requirements

Japanese Standards


- JIS C 9335-1 Safety of household and similar electrical appliances – General requirements
- JIS C 9335-2-9 Grills, toasters and similar portable cooking appliances
- JIS C 1010-1 Safety requirements for electrical equipment for measurement, control, and laboratory use
- JIS C 8147-1 Lamp controlgear
- JIS C 8147-2-3 a.c. supplied electronic ballasts for fluorescent lamps
- JIS C 62841-1 Electric motor-operated hand-held tools, transportable tools and lawn and garden machinery – Safety – Part 1: General requirements
- JIS C 62368-1 Audio/video, information and communication technology equipment
Part 1: Safety requirements

South Korean Standards

- KC 60335-1 Safety of household and similar electrical appliances – General requirements
- KC 60335-2-9 Grills, toasters and similar portable cooking appliances
- KC 60745-1 Safety of hand-held motor operated electric tools – General requirements
- KC 62368-1 Audio/video, information and communication technology equipment
Part 1: Safety requirements

Malaysian Standards

- MS IEC 60950-1 Safety of information technology equipment – General requirements (excluding connections to telecommunications equipment)
- MS IEC 60335-1 Safety of household and similar electrical appliances – General requirements
- MS IEC 60745-1 Safety of hand-held motor operated electric tools – General requirements
- MS IEC 60745-2-1 Drills (Drills and impact drills)

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South African Standards

- SANS 60335-1 Safety of household and similar electrical appliances – General requirements
- SANS 61010-1 Safety requirements for electrical equipment for measurement, control, and laboratory use
- SANS 62841-1 Electric motor-operated hand-held tools, transportable tools and lawn and garden machinery – Safety – Part 1: General requirements
- SANS 62368-1 Audio/video, information and communication technology equipment Part 1: Safety requirements

Saudi Arabian Standards


- SASO IEC 60335-1 Safety of household and similar electrical appliances – General requirements
- SASO IEC 60335-2-49 Commercial electric hot cupboards
- SASO IEC 60335-2-89 Commercial refrigerating appliances with incorporated or remote refrigerant condensing unit or compressor (excluding clause 22 test for flammable refrigerants)
- SASO IEC 60745-1 Safety of hand-held motor operated electric tools – General requirements
- SASO IEC 60745-2-1 Drills (Drills and impact drills)
- SASO GSO IEC 60950-1 Safety of information technology equipment – General requirements (excluding connections to telecommunications equipment)
- SASO 62115 Electric toys – Safety (excluding Clause 20 and Annex E)
- SASO IEC 62368-1 AV, information and communication technology equipment – Safety requirements

Thailand Standards

- TIS 62368 Part 1-2563 Audio/video, information and communication technology equipment – Part 1: Safety requirements (Except for Power supply for mobile phones and tablets, effective October 17th, 2023)

UL Standards

- UL 94 Standard for Tests for Flammability of Plastic Materials for Parts in Devices and Appliances
- UL 4200A Products Incorporating Button Batteries or Coin Cell Batteries
- UL 60335-1 Safety of household and similar electrical appliances – General requirements
- UL 60601-1 Medical electrical equipment – Part 1: General requirements for basic safety and essential performance
- UL 60950-1 Safety of information technology equipment – General requirements (excluding connections to telecommunications equipment)
- UL 61010-1 Safety requirements for electrical equipment for measurement, control, and laboratory use
- UL 62368-1 AV, information and communication technology equipment – Safety requirements
- UL 62841-1 Electric motor-operated hand-held tools, transportable tools and lawn and garden machinery – Safety – Part 1: General requirements
- UL 62841-2-1 Hand-held drills and impact drills
- UL 62841-2-4 Hand-held sanders and polishers other than disc type

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ACT NZ Limited Trading As Auckland Lab
Electrical Testing Laboratory

Accreditation Number 1353

SCOPE OF ACCREDITATION

3.85 Performance Tests on Electrical Appliances and Accessories

Performance tests on fire detection and alarm systems in accordance with the standards listed below. Note, this is equivalent to work carried out under the Applied Physics Accreditation Class of Test 6.35 (a) Fire detection and alarm systems.

Testing of smoke, flame, CO or combination detectors and radio transmitting devices are excluded as is electromagnetic interference and immunity tests, radio transmission tests and sulphur dioxide corrosion endurance tests.

In accordance with NZS 4512:2010 Fire Detection and Alarm Systems in Buildings Parts 1, 2, 3 and Appendices D, E and F only, as below

- Part 1 General
- Part 2 Design and Construction – Multi-Zone Fire Alarm Systems
- Part 3 Design and Construction – Single-Zone Fire Alarm Systems
- Appendix D Specification for heat actuated fire detectors,
- Appendix E Specification for manual call points,
- Appendix F Audible alerting signals;

but excluding clauses: 216.2, 216.3, 216.4 & 222

In accordance with NZS 4512:2021 Fire Detection and Alarm Systems in Buildings Sections 1, 2, 3 and Appendices E, F and G only, as below

- Section 1 General
- Section 2 Design and Construction – Multi-Zone Fire Alarm Systems
- Section 3 Design and Construction – Single-Zone Fire Alarm Systems
- Appendix E Specification for heat actuated fire detectors,
- Appendix F Specification for manual call points,
- Appendix G Audible alerting signals;

but excluding clauses: 2.16.2, 2.16.3, 2.16.4, 2.16.5, 2.21.1, 2.21.2, 2.24, E 10 & F 10

In accordance with AS 4428.4-2016 Fire detection, warning, control and intercom systems - Control and indicating equipment Part 4: Emergency intercom control and indicating equipment, excluding clause 16.13

In accordance with AS 4428.16:2020 Fire detection, warning, control and intercom systems Part 16: Emergency warning control and indicating equipment, excluding clause 18.16

In accordance with AS 7240.2-2018 or ISO 7240-2:2017 Fire Detection and Alarm Systems Part 2 Fire detection control and indicating equipment, excluding clause 5.8

In accordance with AS 7240.4-2018 or ISO 7240-4:2017 Fire Detection and Alarm Systems Part 4 Power supply equipment, excluding clause 6.10 EMC immunity testing

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SCOPE OF ACCREDITATION

In accordance with AS ISO 7240.11:2018 Fire Detection and Alarm Systems Part 11 Manual Call Points, excluding clauses 5.13 & 5.18

In accordance with AS 7240.13-2021 or ISO 7240-13:2020 Fire Detection and Alarm Systems Part 13 Compatibility assessment of system components, excluding clause 4.2.5 b and related clauses

In accordance with AS ISO 7240.17:2021 Fire Detection and Alarm Systems Part 17 Transmission path isolators, excluding clauses 5.8 & 5.13

In accordance with AS ISO 7240.18:2018 Fire Detection and Alarm Systems Part 18 Input/output devices, excluding clauses 5.7, 5.8 & 5.12

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