



INTERNATIONAL
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CERTIFICATE OF ACCREDITATION

This is to attest

CSA GROUP TESTING & CERTIFICATION (THAILAND) LTD

700/951, MOO 3, NONG KAKHA SUBDISTRICT, PANTHONG DISTRICT,
CHONBURI PROVINCE, 20160, THAILAND

Testing Laboratory TL-1443

has met the requirements of AC89, *IAS Accreditation Criteria for Testing Laboratories*, and has demonstrated compliance with ISO/IEC Standard 17025:2017, *General requirements for the competence of testing and calibration laboratories*. This organization is accredited to provide the services specified in the scope of accreditation.

Effective Date October 12, 2026



International Accreditation Service
Issued under the authority of IAS management

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SCOPE OF ACCREDITATION

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CSA GROUP TESTING & CERTIFICATION (THAILAND) LTD

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Accredited to ISO/IEC 17025:2017

Effective Date October 12, 2026

FIELDS OF TESTING	MATERIAL/MATRIX	DETERMINANT(S)/ANALYTE(S)	METHOD REFERENCE
Electrical	Electrical appliances for household and similar purposes	- Marking and instructions, - Protection against access to live parts, - Starting of motor-operated appliances, - Power input and current, - Heating, - Leakage current and electric strength at operating temperature, - Transient overvoltage - Moisture resistance, - Leakage current and electric strength, - Overload protection of transformers and associated circuits, - Endurance, - Abnormal operation, - Stability and mechanical hazards, - Mechanical strength, - Construction, - Internal wiring, - Components,	IEC 60335-1 UL 60335-1 AS/NZS 60335.1

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FIELDS OF TESTING	MATERIAL/MATRIX	DETERMINANT(S)/ANALYTE(S)	METHOD REFERENCE
Electrical (cont'd.)	Electrical appliances for household and similar purposes (cont'd.)	- Supply connection and external flexible cords, - Terminals for external conductors, - Provision for earthing, - Screws and connections, - Clearances, creepage distances, and solid insulation, - Resistance to heat and fire, Resistance to rusting	IEC 60335-1 UL 60335-1 AS/NZS 60335.1 (cont'd.)
	Refrigerating appliances, Ice-cream appliances and Ice makers	- Marking and instructions, - Protection against access to live parts, - Starting of motor-operated appliances, - Power input and current, - Heating, - Leakage current and electric strength at operating temperature, - Transient overvoltage, - Moisture resistance, - Leakage current and electric strength, - Overload protection of transformers and associated circuits, - Endurance, - Abnormal operation, - Stability and mechanical hazards, - Mechanical strength,	IEC 60335-2-24 AS/NZS 60335.2.24

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Electrical (cont'd.)	Refrigerating appliances, Ice-cream appliances and Ice makers (cont'd.)	- Construction, - Internal wiring, - Components, - Supply connection and external flexible cords, - Terminals for external conductors, - Provision for earthing, - Screws and connections, - Clearances, creepage distances, and solid insulation, - Resistance to heat and fire, resistance to rusting	IEC 60335-2-24 AS/NZS 60335.2.24 (cont'd.)
	Microwave ovens, including combination microwave ovens	- Marking and instructions, - Protection against access to live parts, - Starting of motor-operated appliances, - Power input and current, - Heating, - Leakage current and electric strength at operating temperature, - Transient overvoltage, - Moisture resistance, - Leakage current and electric strength, - Overload protection of transformers and associated circuits, - Endurance, - Abnormal operation,	IEC 60335-2-25 AS/NZS 60335.2.25

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Electrical (cont'd.)	Microwave ovens, including combination microwave ovens (cont'd.)	- Stability and mechanical hazards, - Mechanical strength, - Construction, - Internal wiring, - Components, - Supply connection and external flexible cords, - Terminals for external conductors, - Provision for earthing, - Screws and connections, - Clearances, creepage distances, and solid insulation, - Resistance to heat and fire, resistance to rusting	IEC 60335-2-25 AS/NZS 60335.2.25 (cont'd.)
	Electrical heat pumps, Air-conditioners and Dehumidifiers	- Marking and instructions, - Protection against access to live parts, - Starting of motor-operated appliances, - Power input and current, - Heating, - Leakage current and electric strength at operating temperature, - Transient overvoltage, - Moisture resistance, - Leakage current and electric strength, - Overload protection of transformers	IEC 60335-2-40 UL 60335-2-40 AS/NZS 60335.2.40

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Electrical (cont'd.)	Electrical heat pumps, Air-conditioners and Dehumidifiers (cont'd.)	and associated circuits, - Endurance, - Abnormal operation, - Stability and mechanical hazards, - Mechanical strength, - Construction, - Internal wiring, - Components, - Supply connection and external flexible cords, - Terminals for external conductors, - Provision for earthing, - Screws and connections, - Clearances, creepage distances, and solid insulation, - Resistance to heat and fire, Resistance to rusting	IEC 60335-2-40 UL 60335-2-40 AS/NZS 60335.2.40 (cont'd.)
	Non-ducted air conditioners and heat pumps	Capacity and efficiency testing using the indoor air-enthalpy method	ISO 5151 AS/NZS ISO 5151
	Ducted air-conditioners and air-to-air heat pumps	Capacity and efficiency testing using the indoor air-enthalpy method	ISO 13253
	Multiple split-system air conditioners and air-to-air heat pumps	Capacity and efficiency testing using the indoor air-enthalpy method	ISO 15042
	Non-ducted air conditioners and heat pumps	Capacity and efficiency testing using the indoor air-enthalpy method	JIS B 8615-1
	Multiple split-system air conditioners and air-to-air heat pumps	Capacity and efficiency testing using the indoor air-enthalpy method	AS/NZS 3823.1.4
	Household refrigerating appliances	General test conditions, instrumentation and test setup requirements	IEC 62552-1 AS/NZS IEC 62552.1

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Electrical (cont'd.)			
	Household refrigerating appliances	Performance testing: cooling and freezing tests	IEC 62552-2 AS/NZS IEC 62552.2
	Household refrigerating appliances	Determination of energy consumption	IEC 62552-3 AS/NZS IEC 62552.3
Gas	Outdoor cooking gas appliances	- Input Rating, - Combustion Test, - Main burner ignition time, - Construction, - Temperature Test, - Rain test, - Wind Test	CSA/ANSI Z21.58 CSA 1.6
	Outdoor cooking specialty gas appliances	- Input Rating, - Combustion Test, - Drip tray temperature, - Load Test, - Wall and floor temperatures, - Handle temperature test, - Rain Test, - Wind Test	CSA/ANSI Z21.89 CSA 1.18
	Outdoor decorative gas appliances	- Input Rating, - Combustion Test, - Wall, floor, and ceiling temperatures, - Rain Test, - Wind Test, - Burner durability, - Appliance Structure	ANSI Z21.97 CSA 2.41
	Gas-fired outdoor infrared patio heaters	- Input Rating, - Combustion Test, - Temperature of walls, floors, ceilings and components, - Rain Test,	CSA/ANSI Z83.26 CSA 2.37

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Gas (cont'd.)		- Wind Test, - Appliance Stability	
Environmental	Non-heat dissipating and heat dissipating material	Test A: Cold	IEC 60068-2-1
	Non-heat dissipating and heat dissipating material	Test B: Dry heat	IEC 60068-2-2
	Components, equipment and other articles	Test F: Vibration (sinusoidal)	IEC 60068-2-6
	Electrical and electronic equipment for road vehicles	Environmental stresses tests - mechanical loads, - Vibration, Mechanical Shock	ISO 16750-3
	Electrical and electronic equipment for road vehicles	- Environmental stresses tests - climatic loads Test at constant temperature, Temperature step test, Temperature cycling test, - Salt spray test, - Humidity heat cyclic test, Damp heat steady state test, Dust test	ISO 16750-4
	Transportation coatings	Xenon-arc exposure with enhanced light and water exposure	ASTM D7869
	Automotive exterior materials	Accelerated exposure using a controlled-irradiance xenon-arc apparatus	SAE J2527
	Automotive interior trim components	Accelerated exposure using a controlled-irradiance xenon-arc apparatus	SAE J2412

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Environmental (cont'd.)	Automotive parts	Weatherability test - climate performance (UV Weathering) - Accelerated weather ability test, - Accelerated light resistance test	JIS D 0205
	Metals and coated specimens	Salt spray exposure testing	ISO 9227
	Metals and coated specimens	Salt spray (fog) exposure testing	ASTM B117
	Enclosures of electrical equipment	Degrees of Protection (IP Code)	IEC 60529
	Enclosures of electrical equipment on road vehicles	Degrees of protection (IP code) for road vehicle electrical equipment	ISO 20653
Mechanical	Plastics	- Tensile Strength, - Tensile Stress at Yield, - Tensile Stress at Break, - Tensile Strain at Yield, - Tensile Strain at Break, - Nominal Tensile Strain at Break, - Tensile Modulus, - Poisson's Ratio	ISO 527-1
	Plastics	- Tensile Strength, - Tensile Stress at Yield, - Tensile Stress at Break, - Tensile Strain at Yield, - Tensile Strain at Break, - Nominal Tensile Strain at Break, - Tensile Modulus, - Poisson's Ratio	ISO 527-2

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Mechanical (cont'd.)	Metallic materials	- Yield Strength, - Yield Point Elongation, - Tensile Strength, - Elongation After Fracture, - Reduction of Area, - Uniform Elongation, - Young's Modulus, - Poisson's Ratio	ASTM E8/E8M

