

Name: Technology Services China of HARTING (Zhuhai) Manufacturing Co., Ltd.

Address: No.19, Phase 1, Chuangxin Silu, Zhuhai, Guangdong, China

Registration No. CNAS L11131

Accreditation Criteria: ISO/IEC 17025:2017 and relevant requirements of CNAS

Effective Date: 2024-08-08 Expiry Date: 2030-06-24

SCHEDULE 3 ACCREDITED TESTING SCOPE

№	Test Object	Item/Parameter		Standard or Method	Note	Effective Date
		№	Item/ Parameter			
1	Electromechanical components for electronic equipment	1	Visual examination	Electromechanical components for electronic equipment--Basic testing procedures and measuring methods--Part 2:General examination, electrical continuity and contact resistance tests, insulation tests and voltage stress tests GB/T 5095.2-1997 1		2024-08-08
		2	Insulation resistance	Electromechanical components for electronic equipment--Basic testing procedures and measuring methods--Part 2:General examination, electrical continuity and contact resistance tests, insulation tests and voltage stress tests GB/T 5095.2-1997 11		2024-08-08
		3	Voltage proof	Electromechanical components for electronic equipment. Basic testing procedures and measuring methods. Part 2: General examination, electrical continuity and contact resistance tests, insulation tests and voltage stress tests GB/T 5095.2-1997 12		2024-08-08
		4	Insertion and withdrawal forces	Electromechanical components for electronic equipmentBasic testing procedures and measuring methodsPart 7:Mechanical operating tests and sealing tests GB/T 5095.7-1997 2	Accredited only for: 4N-19000N	2024-08-08
		5	Contact resistance	Electromechanical components for electronic equipment--Basic testing procedures and measuring methods--Part 2:General		2024-08-08



No. CNAS L11131

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				examination, electrical continuity and contact resistance tests, insulation tests and voltage stress tests GB/T 5095.2-1997 3		
2	Electromechanical components for electronic equipment	1	Temperature rise	Electromechanical components for electronic equipment. Basic testing procedures and measuring methods. Part 3: Current-carrying capacity tests GB/T 5095.3-1997	Accredited only for 5a temperature rise	2024-08-08
		2	Current-temperature derating	Electromechanical components for electronic equipment. Basic testing procedures and measuring methods. Part 3: Current-carrying capacity tests GB/T 5095.3-1997	Accredited only for 5b Current-temperature derating	2024-08-08
		3	Mechanical operation	Electromechanical components for electronic equipment. Basic testing procedures and measuring methods. Part 5: Impact tests (free components), static load tests (fixed components), endurance tests and overload tests GB/T 5095.5-1997	Accredited only for 9a mechanical operation	2024-08-08
		4	Salt mist	Electromechanical components for electronic equipment--Basic testing procedures and measuring methods--Part 6:Climatic tests and soldering tests GB/T 5095.6-1997	Accredited only for 11f salt spray corrosion	2024-08-08
		5	Dry heat	Electromechanical components for electronic equipment--Basic testing procedures and measuring methods--Part 6:Climatic tests and soldering tests GB/T 5095.6-1997	Accredited only for 11i dry heat. Chamber max size:800x800x900mm ; Temperature: -55℃ ~ 125℃.	2024-08-08



No. CNAS L11131

第 2 页 共 14 页

The scope of the accreditation in Chinese remains the definitive version.

№	Test Object	Item/Parameter		Standard or Method	Note	Effective Date
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		6	Cold	Electromechanical components for electronic equipment--Basic testing procedures and measuring methods--Part 6:Climatic tests and soldering tests GB/T 5095.6-1997	Accredited only for 11j cold. Chamber max size:800x800x900mm ; Temperature: -55℃ ~ 125℃.	2024-08-08
		7	Rapid change of temperature	Electromechanical components for electronic equipment--Basic testing procedures and measuring methods--Part 6:Climatic tests and soldering tests GB/T 5095.6-1997	Accredited only for 11d rapid change of temperature . Chamber size:400x450x600mm ;Temperature: -55℃ ~ 220℃	2024-08-08
3	Connectors for electronic equipment	1	Visual examination	Connectors for electronic equipment - Tests and measurements - Part 1-1: General examination - Test 1a: Visual examination IEC 60512-1-1 (2002-02)		2024-08-08
		2	Contact resistance	Connectors for electronic equipment - Tests and measurements - Part 2-1: Electrical continuity and contact resistance tests - Test 2a: Contact resistance - millivolt level method IEC 60512-2-1(2002-02)	Only measurements: 1mΩ~	2024-08-08



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No. CNAS L11131

The scope of the accreditation in Chinese remains the definitive version.

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				Connectors for electronic equipment - Tests and measurements - Part 2-2: Electrical continuity and contact resistance tests - Test 2b: Contact resistance - Specified test current method IEC 60512-2-2 (2003-05)	100kΩ Only measurements: 0.01mΩ~30kΩ.	2024-08-08
		3	Insulation resistance	Connectors for electronic equipment – Tests and measurements – Part 3-1: Insulation tests – Test 3a: Insulation resistance IEC 60512-3-1(2002-02)	Only measurements: 1MΩ~100TΩ	2024-08-08
		4	Voltage proof	Connectors for electronic equipment – Tests and measurements – Part 4-1: Voltage stress tests – Test 4a: Voltage proof IEC 60512-4-1(2003-05)	Only measurements: AC: (0.5~20)kV; DC: (0.5~6)kV	2024-08-08
		5	Insertion and withdrawal forces	Connectors for electronic equipment - Tests and measurements - Part 13-2: Mechanical operation tests - Test 13b: Insertion and withdrawal forces IEC 60512-13-2 (2006-02)	Accredited only for: (4~19000) N	2024-08-08
		6	Tensile strength (crimped connections)	Connectors for electronic equipment – Tests and measurements – Part 16-4: Mechanical tests on contacts and terminations – Test 16d: Tensile strength (crimped connections) IEC 60512-16-4 (2008-06)	Accredited only for: (4~19000) N	2024-08-08
		7	Cold	Connectors for electronic equipment - Tests and measurements - Part 11-10: Climatic tests - Test 11j: Cold IEC 60512-11-10	Accredited only for:	2024-08-08

No. CNAS L11131

第 4 页 共 14 页



The scope of the accreditation in Chinese remains the definitive version.

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		№	Item/ Parameter			
				(2002-02)	Max size of appliance 800mmx800mmx900mm, Temperature: -55°C ~ normal temperature	
		8	Dry heat	Connectors for electronic equipment - Tests and measurements - Part 11-9: Climatic tests - Test 11i: Dry heat IEC 60512-11-9 (2002-02)	Accredited only for: Max size of appliance 800mmx800mmx900mm, Temperature: normal temperature ~ 125°C.	2024-08-08
		9	Steady damp heat	Connectors for electronic equipment - Tests and measurements - Part 11-3: Climatic tests - Test 11c: Damp heat, steady state IEC 60512-11-3 (2002-02)	Accredited only for: Max size of appliance 800mmx800mmx900mm, Temperature: (25~55)	2024-08-08



No. CNAS L11131

第 5 页 共 14 页

The scope of the accreditation in Chinese remains the definitive version.

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					°C;Relative humidity:85%~98%	
		10	Cyclic damp heat	Connectors for electronic equipment - Tests and measurements - Part 11-12: Climatic tests - Test 11m: Damp heat, cyclic IEC 60512-11-12 (2002-02)	Accredited only for: Max size of appliance 800mmx800mmx900mm, Temperature: (25~55) °C;Relative humidity:85%~98%	2024-08-08
		11	Rapid change of temperature	Connectors for electronic equipment - Tests and measurements - Part 11-4: Climatic tests - Test 11d: Rapid change of temperature IEC 60512-11-4 (2002-02)	Accredited only for: Test Na, Max size of appliance 400mmx450mmx600mm;Temperature: (- 55~125) °C	2024-08-08
		12	Salt mist	Connectors for electronic equipment - Tests and measurements - Part 11-6: Climatic tests - Test 11f: Corrosion, salt mist IEC 60512-11-6 (2002-02)	Accredited only for : NSS test	2024-08-08

No. CNAS L11131

第 6 页 共 14 页

The scope of the accreditation in Chinese remains the definitive version.



在线扫码获取验证

№	Test Object	Item/Parameter		Standard or Method	Note	Effective Date
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		13	Impulse withstand test	Connectors - Safety requirements and tests IEC 61984(2008-10) 7.3.12 a)	Only measurements: Uimp (0.5~24) kV	2024-08-08
		14	Climatic sequence	Connectors for electrical and electronic equipment - Tests and measurements-Part 11-1:Climatic tests- Test 11a - Climatic sequence IEC 60512-11-1 Edition 2.2019-05	Except for low air pressure. Accredited only for: Max size of appliance 800mmx800mmx900mm, Temperature: (-55 ~125) °C;Relative humidity:85%~98%.	2024-08-08
		15	Temperature rise	Connectors for electronic equipment - Tests and measurements - Part 5-1: Current-carrying capacity tests - Test 5a: Temperature rise IEC 60512-5-1 (2002-02)		2024-08-08
		16	Current-temperature derating	Connectors for electronic equipment - Tests and measurements - Part 5-2: Current-carrying capacity tests - Test 5b: Current-temperature derating IEC 60512-5-2 (2002-02)		2024-08-08
		17	Mechanical operation	Connectors for electronic equipment - Tests and measurements - Part 9-1: Endurance tests - Test 9a: Mechanical operation IEC 60512-9-1 (2010-03)		2024-08-08



No. CNAS L11131

第 7 页 共 14 页

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4	Electric and electronic products	1	Cold	Environmental testing for electric and electronic products - Part 2: Test methods -- Tests A: Cold GB/T 2423.1-2008	Accredited only for: Max size of appliance 800mmx800mmx900mm, Temperature: -55℃ ~ normal temperature	2024-08-08
				Environmental testing - Part 2-1: Tests - Test A: Cold IEC 60068-2-1 (2007-03)	Accredited only for: Max size of appliance 800mmx800mmx900mm, Temperature: -55℃ ~ normal temperature	2024-08-08
		2	Dry heat	Environmental testing for electric and electronic products--Part 2: Test methods--Tests B: Dry heat GB/T 2423.2-2008	Accredited only for: Max size of appliance 800mmx800mmx900mm, Temperature	2024-08-08



在线扫码获取验证

No. CNAS L11131

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					e: normal temperature ~ 125°C.	
				Environmental testing - Part 2-2: Tests - Test B: Dry heat IEC 60068-2-2 (2007-07)	Accredited only for: Max size of appliance 800mmx800mmx900mm, Temperature: normal temperature ~ 125°C.	2024-08-08
		3	Steady damp heat	Environmental testing--Part 2: Test methods--Test Cab: Damp heat, steady state GB/T 2423.3-2016	Accredited only for: Max size of appliance 800mmx800mmx900mm, Temperature: 25°C ~ 55°C;Relative humidity:85%~98%	2024-08-08
				Environmental testing - Part 2-78: Tests - Test Cab: Damp heat, steady state IEC 60068-2-78 (2012-10)	Accredited only for: Max size of	2024-08-08



No. CNAS L11131

第 9 页 共 14 页

The scope of the accreditation in Chinese remains the definitive version.

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					appliance 800mmx800mmx900mm, Temperature: 25°C ~ 55°C;Relative humidity:85%~98%	
		4	Cyclic damp heat	Environmental testing for electric and electronic products--Part 2: Test method--Test Db: Damp heat, cyclic (12 h + 12 h cycle) GB/T 2423.4-2008	Accredited only for: Max size of appliance 800mmx800mmx900mm, Temperature: 25°C ~ 55°C;Relative humidity:85%~98%	2024-08-08
				Environmental testing - Part 2-30: Tests - Test Db: Damp heat, cyclic (12 h + 12 h cycle) IEC 60068-2-30 (2005-08)	Accredited only for: Max size of appliance 800mmx800mmx900mm,	2024-08-08



在线扫码获取验证

No. CNAS L11131

The scope of the accreditation in Chinese remains the definitive version.

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					Temperature: 25°C ~ 55°C;Relative humidity:85%~98%	
		5	Rapid change of temperature	Environmental testing -- Part 2: Test methodes -- Test N: Change of temperature GB/T 2423.22-2012	Accredited only for: Test Na, Max size of appliance 400mmx450mmx600mm;Temperature - 55°C~125°C	2024-08-08
				Environmental testing - Part 2-14: Tests - Test N: Change of temperature IEC 60068-2-14 (2023-07)	Accredited only for: Test Na, Max size of appliance 400mmx450mmx600mm;Temperature - 55°C~125°C	2024-08-08
		6	Salt mist	Envrionmental testing for electric and electronic products -- Part 2: Test methods -- Test Ka: Salt mist GB/T 2423.17-2008	Accredited only for	2024-08-08



在线扫码获取验证

No. CNAS L11131

The scope of the accreditation in Chinese remains the definitive version.

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					:NSS test	
				Corrosion tests in artificial atmospheres - Salt spray tests ISO 9227 (2022-11)	Accredited only for :NSS test	2024-08-08
				Environmental testing - Part 2-11: Tests - Test Ka: Salt mist IEC 60068-2-11 (2021-03)	Accredited only for NSS test	2024-08-08
		7	Climatic sequence	Environmental testing--Part 2: Test methods--Test Z/ABDM: Climatic sequence GB/T 2423.45-2012	Except for low air pressure. Accredited only for: Max size of appliance 800mmx800mmx900mm, Temperature: -55℃ ~ 125℃;Relative humidity:85%~98%	2024-08-08
				Environmental testing - Part 2: Test methods - Test Z/ABDM: Climatic sequence IEC 60068-2-61 (1991-06)	Except for low air pressure. Accredited only for: Max size of	2024-08-08



在线扫码获取验证

No. CNAS L11131

The scope of the accreditation in Chinese remains the definitive version.

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					appliance 800mmx800mmx900mm, Temperature: -55°C ~ 125°C; Relative humidity: 5%~98%	
		8	IP code	Degrees of protection provided by enclosure (IP code) GB/T 4208-2017	Accredited only for :IPX5, IPX6, IPX7, IPX8, IPX9 (small enclosures largest dimension < 250 mm), IP6X	2024-08-08
				Degrees of protection provided by enclosures (IP code) IEC 60529 (2013-08)	Accredited only for :IPX5, IPX6, IPX7, IPX8, IPX9 (small	2024-08-08



在线扫码获取验证

No. CNAS L11131

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					enclosures largest dimension < 250 mm), IP6X	
5	Electric and electronic products enclosure coating	1	Cross cut	Paints and Varnishes - Cross-cut test ISO 2409 (2020-08)	Except for 8.3 cutting the coating using a motor-driven tool	2024-08-08
		2	Condensation water	Paints and varnishes – Determination of resistance to humidity – Part 2: Condensation (in-cabinet exposure with heated water reservoir) ISO 6270-2 (2017-11)	Accredited only for: CH test; Temperature 40°C, Relative humidity 100%	2024-08-08



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No. CNAS L11131

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