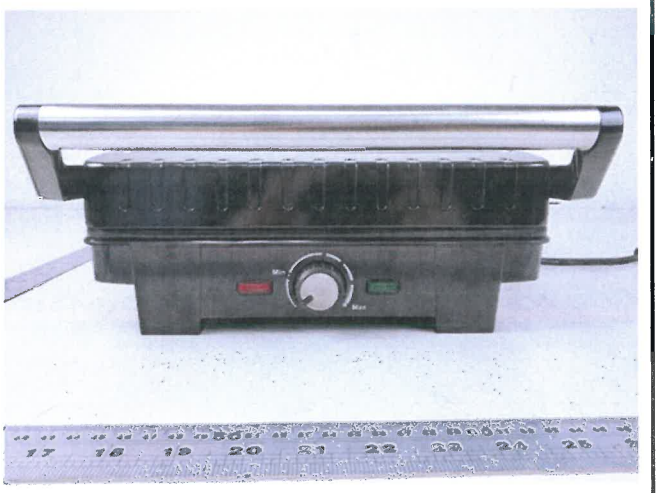
Prüfbericht-Nr.: *Test Report No.:*	**50091469 003**	**Auftrags-Nr.:** *Order No.:*	1160044969	Seite 1 von 12 *Page 1 of 12*
Kunden-Referenz-Nr.: *Client Reference No.:*	N/A	**Auftragsdatum:** *Order date:*	11.04.2018	
Auftraggeber: *Client:*	NINGBO BAKELON ELECTRICAL APPLIANCE CO., LTD.			
Prüfgegenstand: *Test item:*	Contact grill			
Bezeichnung / Typ-Nr.: *Identification / Type No.:*	ZM-902B			
Auftrags-Inhalt: *Order content:*	Type Test			
Prüfgrundlage: *Test specification:*	EN 60335-1:2012+A11 EN 60335-2-9: 2003+A1+A2+A12+A13 EN 62233: 2008 AfPS GS 2014:01 Par. 3.1			

Wareneingangsdatum: *Date of receipt:*	24.04.2018
Prüfmuster-Nr.: *Test sample No.:*	A000730123
Prüfzeitraum: *Testing period:*	26.04.2018 – 07.05.2018
Ort der Prüfung: *Place of testing:*	TÜV Rheinland /CCIC (Ningbo) Co., Ltd.
Prüflaboratorium: *Testing laboratory:*	TÜV Rheinland /CCIC (Ningbo) Co., Ltd.
Prüfergebnis*: *Test result*:*	Pass



geprüft von / *tested by*:

2018.05.09	Wanda Xuan/PE	Wanda Xuan
Datum *Date*	**Name / Stellung** *Name / Position*	**Unterschrift** *Signature*

kontrolliert von / *reviewed by*:

09.05.2018	William Gui/TC	William Gui
Datum *Date*	**Name / Stellung** *Name / Position*	**Unterschrift** *Signature*

Sonstiges / *Other*:
Construction of ZM-902B was changed,details refer to photo documentaion.
Attachment 1: Test equipment list (1 page)

Zustand des Prüfgegenstandes bei Anlieferung: *Condition of the test item at delivery:*	Prüfmuster vollständig und unbeschädigt *Test item complete and undamaged*

* Legende:	1 = sehr gut	2 = gut	3 = befriedigend	4 = ausreichend	5 = mangelhaft
	P(ass) = entspricht o.g. Prüfgrundlage(n)		F(ail) = entspricht nicht o.g. Prüfgrundlage(n)	N/A = nicht anwendbar	N/T = nicht getestet
Legend:	*1 = very good*	*2 = good*	*3 = satisfactory*	*4 = sufficient*	*5 = poor*
	P(ass) = passed a.m. test specification(s)		*F(ail) = failed a.m. test specification(s)*	*N/A = not applicable*	*N/T = not tested*

V04

TEST REPORT
IEC 60335-2-9
Safety of household and similar electrical appliances
Part 2: Particular requirements for grills, toasters and similar cooking appliances

Report Number. ..... :	See cover page
Date of issue ..... :	See cover page
Total number of pages ..... :	See cover page
Name of Testing Laboratory preparing the Report ..... :	TÜV Rheinland /CCIC (Ningbo) Co., Ltd.
Applicant's name ..... :	NINGBO BAKELON ELECTRICAL APPLIANCE CO., LTD.
Address ..... :	NO. 88 XIANTAN ROAD, LANGXIA VILLAGE, LANGXIA STREET YUYAO CITY, ZHEJIANG 315480 P. R. China
Test specification:	
Standard ..... :	IEC 60335-2-9:2002 (Fifth edition) + A1:2004 + A2:2006 in conjunction with IEC 60335-1:2010 (Fifth Edition)
Test procedure ..... :	GS and CE-LVD
Non-standard test method ..... :	N/A
Test Report Form No. ..... :	IEC60335_2_9K
Test Report Form(s) Originator .... :	LCIE
Master TRF ..... :	Dated 2014-08

If this Test Report Form is used by non-IECEE members, the IECEE/IEC logo and the reference to the CB Scheme procedure shall be removed.

This report is not valid as a CB Test Report unless signed by an approved CB Testing Laboratory and appended to a CB Test Certificate issued by an NCB in accordance with IECEE 02.

General disclaimer:

The test results presented in this report relate only to the object tested.
This report shall not be reproduced, except in full, without the written approval of the Issuing CB Testing Laboratory. The authenticity of this Test Report and its contents can be verified by contacting the NCB, responsible for this Test Report.

Test item description .....:	Contact grill
Trade Mark .....:	N/A
Manufacturer.....:	NINGBO BAKELON ELECTRICAL APPLIANCE CO., LTD. NO. 88 XIANTAN ROAD, LANGXIA VILLAGE, LANGXIA STREET YUYAO CITY, ZHEJIANG 315480 P. R. China
Model/Type reference.....:	ZM-902B
Ratings.....:	AC 220-240V; 50/60Hz; Class I,2200W

Responsible Testing Laboratory (as applicable), testing procedure and testing location(s):

☒	**Testing Laboratory:**	TÜV Rheinland /CCIC (Ningbo) Co., Ltd.	
Testing location/ address ..... :		3F,Building C13, R&D Park, No.32 Lane 299 Guanghua Road, National Hi-Tech Zone, Ningbo 315048 China	
☐	**Associated Testing Laboratory:**		
Testing location/ address ..... :			
Tested by (name, function, signature) ..... :		See cover page	
Approved by (name, function, signature) .. :		See cover page	
☐	**Testing procedure: TMP/CTF Stage 1:**		
Testing location/ address ..... :			
Tested by (name, function, signature) ..... :			
Approved by (name, function, signature) .. :			
☐	**Testing procedure: WMT/CTF Stage 2:**		
Testing location/ address ..... :			
Tested by (name + signature)..... :			
Witnessed by (name, function, signature) . :			
Approved by (name, function, signature) .. :			
☐	**Testing procedure: SMT/CTF Stage 3 or 4:**		
Testing location/ address ..... :			
Tested by (name, function, signature) ..... :			
Witnessed by (name, function, signature) . :			
Approved by (name, function, signature) .. :			
Supervised by (name, function, signature) :			

List of Attachments (including a total number of pages in each attachment):

See cover page

Summary of testing: Pass

Tests performed (name of test and test clause):	**Testing location:**
ZM-902B was subjected to tests of Cl. 11,13, 30.2.1 EK1AG2 Rev.9 was considered Reasonable foreseeable use is covered by the standard and related EK decision applied.	TÜV Rheinland /CCIC (Ningbo) Co., Ltd. 3F,Building C13, R&D Park, No.32 Lane 299 Guanghua Road, National Hi-Tech Zone, Ningbo 315048 China

Summary of compliance with National Differences

List of countries addressed:

DE(DE=Germany)

EUROPEAN GROUP DIFFERENCES

The product fulfils the requirements of EN 60335-1:2012+A11 EN 60335-2-9:2003+A1+A2+A12+A13, EN 62233:2008, AfPS GS 2014:01

Copy of marking plate

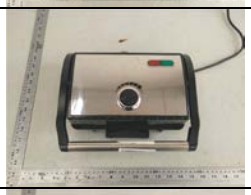
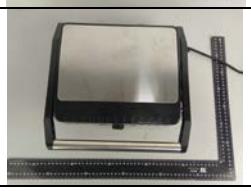
Refer to test report 50091469 001-002

Test item particulars .....:	
Classification of installation and use.....:	Portable appliance
Supply Connection.....:	Supply cord fitted with a plug (Type Y attachment)
.....:	
Possible test case verdicts:	
- test case does not apply to the test object ..... :	N/A
- test object does meet the requirement..... :	P (Pass)
- test object does not meet the requirement..... :	F (Fail)
Testing ..... :	
Date of receipt of test item ..... :	See cover page
Date (s) of performance of tests ..... :	See cover page
General remarks:	
"(See Enclosure #)" refers to additional information appended to the report. "(See appended table)" refers to a table appended to the report. **Throughout this report a ☒ comma / ☐ point is used as the decimal separator.**	
Manufacturer's Declaration per sub-clause 4.2.5 of IECEE 02:	
The application for obtaining a CB Test Certificate includes more than one factory location and a declaration from the Manufacturer stating that the sample(s) submitted for evaluation is (are) representative of the products from each factory has been provided .....:	☐ **Yes** ☒ **Not applicable**
When differences exist; they shall be identified in the General product information section.	
Name and address of factory (ies).....:	Same as applicant

General product information:

Contact grill is intended for household and indoor use only. All models are fitted with a thermostat and thermal link

Difference between all models refer to below table:

Model name	Appearance	Thermostat	Metal cover	Open position
ZM-708		fixed	No	One
ZM-708B		Adjustable	Yes	One
ZM-709B		Adjustable	Yes	Two
ZM-800B		Adjustable	Yes	Two
ZM-801B		Adjustable	Yes	Two
ZM-902B		Adjustable	Yes	Two

Amendment 1:
Issue Co-license

Amendment 2:

Construction of ZM-902B was changed, details see photo documentation

IEC 60335-2-9			
Clause	Requirement + Test	Result - Remark	Verdict
11	HEATING		P
11.1	No excessive temperatures in normal use		P
	Compliance for toasters is also checked by the test of 11. 101 (IEC 60335-2-9)		N/A
	For ovens, rotary grills, rotisseries and cookers, compliance is also checked by the test of 11.Z101. (EN 60335-2-9)		N/A
	For contact grills, waffle irons, sandwich makers, radiant grills, raclette grills, griddles, barbecues, hot plates, candy floss, popcorn makers, compliance is also checked by the test of 11.Z102. (EN 60335-2-9)	Contact grill	P
	For breadmakers and food dehydrators, compliance is also checked by the test of 11.Z103. (EN 60335-2-9)		N/A
	For toasters, compliance is also checked by test of 11.Z104. (EN 60335-2-9)		N/A
	For roasters, compliance is also checked by test of 11.Z105. (EN 60335-2-9)		N/A
	For all other types of appliances, compliance is checked by submitting the appliance to the tests of the nearest mentioned relevant type of appliance. (EN 60335-2-9)		N/A
11.2	The appliance is held, placed or fixed in position as described ..... :	(see appended table)	P
	Radiant grills and raclette grills that are loaded from the front, rotary grills, ovens, breadmakers, cookers and hotplates are placed with their backs as near as possible to one of the walls of the test corner and away from the other wall ..... (IEC 60335-2-9)		P
11.3	Temperature rises, other than of windings, determined by thermocouples		P
	Temperature rises of windings determined by resistance method, unless		N/A
	the windings are non-uniform or it is difficult to make the necessary connections		N/A
	If magnetic field of an induction hotplate unduly influences the results, temperature rises can be determined using platinum resistances or equivalent means (IEC 60335-2-9)		N/A
	For flat surfaces, temperature rises are measured using the probe of figure Z101(or any measuring instrument giving the same results), applied with a force of 4 N ± 1 N. ..... (EN 60335-2-9)		P
11.4	Heating appliances operated under normal operation at 1.15 times rated power input (W) .... :	2754,8W	P

IEC 60335-2-9			
Clause	Requirement + Test	Result - Remark	Verdict
	If the temperature rise limits are exceeded in appliances incorporating motors, transformers or electronic circuits, and if the power input is lower than the rated power input, the test is repeated with the appliance supplied at 1,06 times rated voltage ..... (IEC 60335-2-9)		N/A
11.5	Motor-operated appliances operated under normal operation at most unfavourable voltage between 0.94 and 1.06 times rated voltage (V) ..... :		N/A
11.6	Combined appliances operated under normal operation at most unfavourable voltage between 0.94 and 1.06 times rated voltage (V) ..... :		N/A
11.7	Tests carried out in compliance with the paragraphs N° 1 to 11 (IEC 60335-2-9)		P
11.8	Temperature rises monitored continuously and not exceeding the values in table 3 ..... :	(see appended table)	P
	If the temperature rise of a motor winding exceeds the value of table 3, or		N/A
	if there is doubt with regard to classification of insulation,		N/A
	tests of Annex C are carried out		N/A
	Sealing compound does not flow out		N/A
	Protective devices do not operate, except		P
	components in protective electronic circuits tested for the number of cycles specified in 24.1.4		N/A
	For radiant grills, rotary grills, raclette grills, hotplates and cookers, instead of 65 K, the temperature rise of the wall of the test corner shall not exceed 75 K. (IEC 60335-2-9)		N/A
	When an appliance connector incorporates a thermostat, the temperature rise limit for the pins of the inlet does not apply (IEC 60335-2-9)		N/A
	The temperature rise limits of motors, transformers, components of electronic circuit and parts directly influenced by them may be exceeded when the appliance is operated at 1,15 times rated power input (IEC 60335-2-9)		N/A
	Cheese used in sandwich toasting attachments doesn't flow into places where it can give rise to a hazard, such as reducing clearances or creepage distances below the values specified in Clause 29 (IEC 60335-2-9).		N/A

IEC 60335-2-9			
Clause	Requirement + Test	Result - Remark	Verdict
11.101	The toaster in which the bread is inserted through the top are operated for three cycles under normal operation at rated power input. (IEC 60335-2-9).		N/A
	The temperature rise of accessible surfaces of metallic sides that are at a height lower than 25mm below the top surface shall not exceed 90K (IEC 60335-2-9).		N/A
11.Z101	Ovens, rotary grills, rotisseries and cookers are supplied at rated power and operated under normal operation. (EN 60335-2-9)		N/A
	All heating units that can be connected to the supply mains at the same time during normal use are switched on. .....(EN 60335-2-9)		N/A
	Ovens are operated without accessories (EN 60335-2-9)		N/A
	Temperature rise of the surfaces not exceeding the values of table Z101 (EN 60335-2-9)		N/A
11.Z102	For contact grills, waffle irons, sandwich makers, radiant grills, raclette grills and griddles, barbecues, hot plates, candy floss, popcorn makers, the temperature rise limits in Table Z101 apply. The appliance is supplied at rated power and operated under normal operation. (EN 60335-2-9)	Contact grill	P
11.Z103	For breadmakers, the temperature rise limits for other surfaces in table Z101 apply. (EN 60335-2-9)		N/A
	For breadmakers and food dehydrators, the temperature rise limits in Table Z101 apply. The appliance is supplied at rated power and operated under normal operation. (EN 60335-2-9)		N/A
11.Z104	For toasters, the temperature rise limits in Table Z101 apply. The appliance is operated for three cycles at rated power and operated under normal operation. (EN 60335-2-9)		N/A
11.Z105	For roasters, the temperature rise limits in Table Z101 apply. The appliance is supplied at rated power and operated under normal operation. (EN 60335-2-9)		N/A
13	LEAKAGE CURRENT AND ELECTRIC STRENGTH AT OPERATING TEMPERATURE		P
13.1	Leakage current not excessive and electric strength adequate		P
	Heating appliances operated at 1.15 times the rated power input (W) ..... :	2754,8W	P
	Motor-operated appliances and combined appliances supplied at 1.06 times the rated voltage (V) ..... :		N/A
	Protective impedance and radio interference filters disconnected before carrying out the tests		N/A

IEC 60335-2-9			
Clause	Requirement + Test	Result - Remark	Verdict
	grill incorporated in oven, oven or grill operated most unfavourable (IEC 60335-2-9).		N/A
13.2	For class 0, class II and class III appliances, leakage current measured by means of the circuit described in figure 4 of IEC 60990	Class II construction	P
	For other appliances, a low impedance ammeter may be used		P
	Leakage current measurements..... :	(see appended table)	P
	If earthed metal between live parts and surface of glass-ceramic (or similar) of hotplate, leakage current between live parts and each of vessels in turn connected to earthed metal not exceeding 0,75 mA (IEC 60335-2-9)		N/A
	If no earthed metal between live parts and surface of glass-ceramic (or similar) of hotplate, leakage current between live parts and each of vessels in turn not exceeding 0,25 mA (IEC 60335-2-9)		N/A
13.3	The appliance is disconnected from the supply		P
	Electric strength tests according to table 4..... :	(see appended table)	P
	test voltage of 1000V if earthed metal between live parts and surface of glass-ceramic (or similar) of hotplate (IEC 60335-2-9).		N/A
	test voltage of 3000 V if no earthed metal between live parts and surface of glass-ceramic (or similar) of hotplate (IEC 60335-2-9).		N/A
	No breakdown during the tests		P
30	RESISTANCE TO HEAT AND FIRE		P
30.2.1	Parts for which the glow-wire test cannot be carried out need to meet the requirements in ISO 9772 for material classified HBF	Heat insulation cotton applied	P

11.8	**TABLE: Heating test** (contact grill function)		P
	Test voltage (V).....:	264,8	—
	Ambient (°C).....:	24,2	—

Thermocouple locations	**Max. temperature rise measured, Δ T (K)**	**Max. temperature rise limit, Δ T (K)**
Power cord	18,4	50
Test corner	20,2	65
Base plastic enclosure(inside)	63,5	Cl.30.1
Indicator cover	37,9	Cl.30.1
Top plastic enclosure(inside)	80,7	Cl.30.1
Electric box cover	13,1	Cl.30.1
Ambient of thermostat	90,9	T-25=225
Internal wire	96,7	T-25=155
Handle	2,3	35
Knob	30,1	60
Clip of oil box	15,5	60
Metal cover	22,3	For reference
Centre of heating surface	137,9	For reference

11.8	**TABLE: Heating test** (griddle function)		P
	Test voltage (V).....:	264,8	—
	Ambient (°C).....:	23,7	—

Thermocouple locations	**Max. temperature rise measured, Δ T (K)**	**Max. temperature rise limit, Δ T (K)**
Power cord	18,2	50
Test corner	9,4	65
Base plastic enclosure(inside)	43,5	Cl.30.1
Indicator cover	30,2	Cl.30.1
Top plastic enclosure(inside)	53,0	Cl.30.1
Electric box cover	13,6	Cl.30.1
Ambient of thermostat	78,1	T-25=225
Internal wire	78,2	T-25=155
Handle	1,9	35
Knob	22,7	60
Clip of oil box	12,4	60
Centre of heating surface	93,8	For reference

11.8	**TABLE: Heating test, resistance method**					N/A
	Test voltage (V).....:					—
	Ambient, t1 (°C).....:					—
	Ambient, t2 (°C).....:					—
Temperature rise of winding		**R1 (Ω)**	**R2 (Ω)**	**Δ T (K)**	**Max. Δ T (K)**	**Insulation class**
Supplementary information:						

11.Z102	TABLE: Temperature rise limits for surface (contact grill function)		
	Ambient (°C): 23,7		
	Test voltage (V):248,7		
		dT (K)	Max. dT (K)
Plastic surface		61,3	65
Metal surface		23,7	45
Remark:most unfavourable value recorded			

11.Z102	TABLE: Temperature rise limits for surface (griddle function)		
	Ambient (°C): 23,4		
	Test voltage (V):248,7		
		dT (K)	Max. dT (K)
Plastic surface		44,5	65
Metal surface		16,6	45
Remark:most unfavourable value recorded			

13.2	**TABLE: Leakage current**		P
	Heating appliances: 1.15 x rated input (W)...:	2754,8W	—
	Motor-operated and combined appliances: 1.06 x rated voltage (V).....:	-	—
Leakage current between		**I (mA)**	**Max. allowed I (mA)**
L/N-earthing parts		0,006	0,75
L/N-plastic enclosure		0,007	0,35 peak

13.3	**TABLE: Dielectric strength**		P
Test voltage applied between:		**Test potential applied (V)**	**Breakdown / flashover (Yes/No)**
L/N-earthing parts		1000	No
L/N-plastic enclosure		3000	No

END OF TEST REPORT

TÜVRheinland®
Precisely Right.

Measurement Equipment List

Testing Start Date 26.04.2018
Testing end date 07.05.2018

Project Manager Wanda Xuan

Test Report Number 50091469 003
Order Item Number 1160044969A00040

Customer NINGBO BAKELON ELECTRICAL
Product Name Contact grill
Comment

Old ID	Equip.	Description	Model	Manufacturer	Inte. (mon)	Due Date
1.243	1809691	Temp. & Humidity recorder	175H1	Testo	12	16.01.2019
1.437D	1809903	Power meter	WT310E-C1-H	YOKOGAWA	12	03.01.2019
1.381K	1809794	Data acquisition unit	34972A	Keysight	12	07.09.2018
1.390A	1809808	Probe A	DMS-A18	DMS	36	26.02.2019
1.013	1809450	Leakage current tester	3156	HIOKI	12	05.01.2019
1.002	1809427	Digital power meter	WT200	YOKOGAWA	12	06.09.2018
1.006B	1809438	Withstanding voltage tester	TOS5051A	KIKUSUI	12	03.01.2019
1.336	1809751	Flammability tester	YH-8920U	Yue Hua	12	06.09.2018

* No entry for devices that are not subject to regular gauging or calibration

Signature: Wanda Xuan