Test Report issued under the responsibility of:

SGS Fimko Ltd.

TEST REPORT
IEC 60335-2-7
Safety of household and similar electrical appliances
Part 2: Particular requirements for washing

Report Number. .....:	GZES160801275303A3
Date of issue .....:	2016-11-22; Amendment No. 3: 2019-10-16
Total number of pages.....	56
Name of Testing Laboratory preparing the Report.....:	SGS-CSTC Standards Technical Services Co., Ltd. Shunde Branch Building 1, European Industrial Park, No.1, Shunhe South Road, Wusha, Daliang, Shunde District, Foshan, Guangdong, China
Applicant's name.....:	
Address .....:	
Test specification:	
Standard.....:	IEC 60335-2-7:2008 (Seventh Edition) +A1 :2011 in conjunction with IEC 60335-1:2010 (Fifth Edition)) incl. Corrigendum 1:2010 and Corr. 2:2011 + A1:2013
Test procedure.....:	CB Scheme
Non-standard test method.....:	N/A
Test Report Form No.....:	IEC60335_2_7K
Test Report Form(s) Originator.....:	LCIE
Master TRF .....:	Dated 2015-08

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.
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Test item description .....:	**Washing Machine**
Trade Mark .....:	**Galanz**
Manufacturer.....:	Zhongshan Galanz Consumer Electric Appliances Co., Ltd. Maxin Industry Zone, Xingpu Road, Huangpu Town, Zhongshan, Guangdong, China
Model/Type reference .....:	XQG90-T514E, XQG90-T512E, XQG80-T514E, XQG80-T512E
Ratings .....:	220 V - 240 V; 50 Hz; 2100 W; XQG90-T514E, XQG90-T512E: 9,0 Kg; XQG80-T514E, XQG80-T512E: 8,0 Kg

Responsible Testing Laboratory (as applicable), testing procedure and testing location(s):			
☒	**CB Testing Laboratory:**	SGS-CSTC Standards Technical Services Co., Ltd. Shunde Branch	
Testing location/ address.....:		Building 1, European Industrial Park, No.1, Shunhe South Road, Wusha, Daliang, Shunde District, Foshan, Guangdong, China	
☐	**Associated CB Testing Laboratory:**	N/A	
Testing location/ address.....:			
Tested by (name, function, signature).....:		Dean Yang / Project Engineer	Dean Yang
Approved by (name, function, signature)...:		Mike Liu / Reviewer	Mike Liu
☐	**Testing procedure: CTF Stage 1:**	N/A	
Testing location/ address.....:			
Tested by (name, function, signature).....:			
Approved by (name, function, signature)...:			
☐	**Testing procedure: CTF Stage 2:**	N/A	
Testing location/ address.....:			
Tested by (name + signature).....:			
Witnessed by (name, function, signature)..:			
Approved by (name, function, signature)...:			
☐	**Testing procedure: CTF Stage 3:**	N/A	
☐	**Testing procedure: CTF Stage 4:**	N/A	
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):

Attachment 2: Photo documentation (2 pages)
Attachment 3: Circuit diagram (1 page);
Attachment 5: EN 60335-1: 2012 / A13: 2017 (1 page)

Summary of testing:

Tests performed (name of test and test clause):	**Testing location:**
Tests according to the following standards were carried out: IEC 60335-2-7: 2008 + A1: 2011 IEC 60335-1: 2010 + A1: 2013 AS/NZS 60335.2.7: 2012 + A1: 2015 AS/NZS 60335.1: 2011 + A1:2012 + A2: 2014 + A3: 2015 EN 60335-2-7: 2010 + A1: 2013 + A11: 2013 EN 60335-1: 2012 + A11: 2014 + A13: 2017 EN 62233: 2008 After reviewing, tests of clause 10, 11, 13, 15, 16, 19, 22.5, 23.5, 29, 30 and Annex E were conducted on model XQG90-T514E assembly with new main board. Model XQG90-T512E were selected for clause 10. The submitted samples complied with above standard.	See page 3

Summary of compliance with National Differences (List of countries addressed):

EU Group Differences, DE, AU, NZ.
Requirements in German legislation ProdSG and EK decisions for electrical equipment have been taken into account. Risk analysis and evaluation for PAH has been performed (ref. AfPS GS 2014:01 PAK, EK 1 601-15).

Copy of marking plate:

The artwork below may be only a draft. The use of certification marks on a product must be authorized by the respective NCBs that own these marks.

—

Remark:

1. The Height of CE logo shall not be less than 5 mm; Height of WEEE logo shall not be less than 7 mm.
2. As declared by the applicant, the importer (and manufacturer, if it is different)'s name, registered trade name or registered trade mark and the postal address will be marked on the products before being place on the market. The contact details shall be in a language easily understood by end-users and market surveillance authorities.
3. Marking on the packaging or in a document accompanying the electrical equipment is only acceptable if it is not possible to place such markings on the product.

Test item particulars ..... :	Washing Machine
Classification of installation and use ..... :	Stationary appliance
Supply Connection ..... :	Non-detachable supply cord fitted with a plug
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 .....:	2019-09-05
Date (s) of performance of tests .....:	2019-09-05 to 2019-10-16

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.

Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 3 months only.

This report GZES160801275303A3 is not valid without report GZES160801275301, GZES160801275301A1 and GZES160801275302A2.

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 manufacturer

General product information:

Tumble type washing machine for household and indoor use only.
The appliance assembles with heating element and intended for connection to cold water supply only.
The two models are identical except for the rotate speed.

Amendment No.1:

The original test report no. GZES160801275301 dated 2016-11-22, was modified on 2017-05-05 to include the following changes, which were considered technical modifications:

1, Add new model XQG80-T514E and XQG80-T512E.
New model XQG80-T514E and XQG80-T512E are separately same as model XQG90-T514E and XQG80-T512E except rated capacity.

After reviewing, model XQG80-T514E and XQG80-T512E were selected for clause 10.

Amendment No.2:

The original test report no. GZES160801275301 dated 2016-11-22, was modified on 2017-07-06 to include the following changes, which were considered technical modifications:

1, Australia and New Zealand national differences were added.

2, Alternative washing motor and drain pump on all models.

3, Alternative Plug, power cord and internal wire.

4, Corrected the cold water valve ratings.

After reviewing, model XQG90-T514E was selected for clause 10, 11, 13, 15.2, 16.3, 19.7, 19.10, 23.5, 29, 30 and Annex D. Model XQG90-T512E was selected for clause 10.

Amendment No. 3:

The original test report no. GZES160801275301 dated 2016-11-22, was modified on 2019-10-16 to include the following changes, which were considered technical modifications:

1, Add alternative main board, plug, PCB, varistor, X2 capacitor and relay. Details see table 24.1;
2, Updated the CDF. Details see table 24.1;
3, Updated standard from “EN 60335-1: 2012 + A11: 2014” to “EN 60335-1: 2012 + A11: 2014+ A13: 2017”.

After reviewing, tests of clause 10, 11, 13, 15, 16, 19, 22.5, 23.5, 29, 30 and Annex E were conducted on model XQG90-T514E assembly with new main board. Model XQG90-T512E were selected for clause 10.

IEC 60335-2-7			
Clause	Requirement + Test	Result - Remark	Verdict
10	**POWER INPUT AND CURRENT**		—
10.1	Power input at normal operating temperature, rated voltage and normal operation not deviating from rated power input by more than shown in table 1 .:	(see appended table)	P
	If the power input varies throughout the operating cycle and the maximum value of the power input exceeds, by a factor greater than two, the arithmetic mean value of the power input occurring during a representative period, the power input is the maximum value that is exceeded for more than 10 % of the representative period		P
	Otherwise the power input is the arithmetic mean value		N/A
	Test carried out at upper and lower limits of the ranges for appliances with one or more rated voltage ranges, unless		N/A
	the rated power input is related to the arithmetic mean value		P
	The selected representative period is the period, such as filling with water, washing, rinsing, water extraction, spinning or braking, during which the power input is the highest (IEC 60335-2-7)		P
10.2	Current at normal operating temperature, rated voltage and normal operation not deviating from rated current by more than shown in table 2 .....:		N/A
	If the current varies throughout the operating cycle and the maximum value of the current exceeds, by a factor greater than two, the arithmetic mean value of the current occurring during a representative period, the current is the maximum value that is exceeded for more than 10 % of the representative period		N/A
	Otherwise the current is the arithmetic mean value		N/A
	Test carried out at upper and lower limits of the ranges for appliances with one or more rated voltage ranges, unless		N/A
	the rated current is related to the arithmetic mean value of the range		N/A
	The selected representative period is the period, such as filling with water, washing, rinsing, water extraction, spinning or braking, during which the current is the highest (IEC 60335-2-7)		N/A
11	**HEATING**		—
11.1	No excessive temperatures in normal use		P
11.2	The appliance is held, placed or fixed in position as described.....:		P

IEC 60335-2-7			
Clause	Requirement + Test	Result - Remark	Verdict
11.3	Temperature rises, other than of windings, determined by thermocouples		P
	Temperature rises of windings determined by resistance method, unless		P
	the windings are non-uniform or it is difficult to make the necessary connections		N/A
11.4	Heating appliances operated under normal operation at 1.15 times rated power input (W) .....:		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).....:	240 V x 1,06 = 254,4 V	P
11.7	Appliances with a programmer :(IEC 60335-2-7)		P
	-3 cycles with programme that results in highest temperature rises		P
	-rest period of 4 min between cycles		P
	Others appliances sequences of test as specified (IEC 60335-2-7)		N/A
	-for appliances without means for water extraction and for washing machines with a hand-operated wringer: washing		N/A
	-for appliances having a single drum for washing and water extraction: washing followed by water extraction		N/A
	-for appliances having separate drums for washing and water extraction, which can-not be used simultaneously: washing and water extraction separated by an additional 4 min rest period		N/A
	-for appliances having separate drums for washing and water extraction, which can be used simultaneously washing together with water extraction so that the operations terminate simultaneously		N/A
	- for appliances having a single drum (dried=washed) washing followed by water extraction, followed by drying		N/A
	- for appliances having a single drum (dried<washed) washing followed by water extraction, followed by 2 drying periods, with an additional rest period 4 min before each drying period. In this case only 2 cycles of operation are carried out.		N/A

IEC 60335-2-7			
Clause	Requirement + Test	Result - Remark	Verdict
	For appliances with a timer, the washing period, the water extraction period and the drying are equal to the maximum period allowed by the timer (IEC 60335-2-7)		N/A
	For appliance without a timer (IEC 60335-2-7)		N/A
	Type of washing machine:		N/A
	Duration of washing (min)		N/A
	Duration of water extraction : 5min		N/A
	The rest period, including any braking time, has a duration of 4 min. (IEC 60335-2-7)		N/A
	After the specified sequence of operation, discharge pumps that are driven by a separate motor and switched on and off manually, are subjected to 3 operating periods separated by rest periods of 4 min. (IEC 60335-2-7)		N/A
	Duration of each operating period :		N/A
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		P
	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
13	**LEAKAGE CURRENT AND ELECTRIC STRENGTH AT OPERATING TEMPERATURE**		—
13.1	Leakage current not excessive and electric strength adequate		P
	Heating appliances operated at 1.15 times the rated power input (W) .....:		N/A
	Motor-operated appliances and combined appliances supplied at 1.06 times the rated voltage (V) .....:	240 V x 1,06 = 254,4 V	P
	Protective impedance and radio interference filters disconnected before carrying out the tests		P
13.2	For class 0, class II , class II constructions and class III appliances, leakage current measured by means of the circuit described in figure 4 of IEC 60990		N/A

IEC 60335-2-7			
Clause	Requirement + Test	Result - Remark	Verdict
	For other appliances, a low impedance ammeter may be used		P
	Leakage current measurements .....:	(see appended table)	P
	For stationary class I appliances, the leakage current not exceeding 3,5 mA, or 1 mA/kW of rated power input with a limit of 5 mA, whichever is greater .....(IEC 60335-2-7)		P
13.3	The appliance is disconnected from the supply		P
	Electric strength tests according to table 4 .....:	(see appended table)	P
	No breakdown during the tests		P
15	**MOISTURE RESISTANCE**		—
15.3	Appliances proof against humid conditions		P
	Checked by test Cab: Damp heat steady state in IEC 60068-2-78		P
	Detachable parts removed and subjected, if necessary, to the humidity test with the main part		P
	Humidity test for 48 h in a humidity cabinet	25°C; 93% R.H.	P
	Reassembly of those parts that may have been removed		N/A
	The appliance withstands the tests of clause 16		P
16	**LEAKAGE CURRENT AND ELECTRIC STRENGTH**		—
16.1	Leakage current not excessive and electric strength adequate		P
	Protective impedance disconnected from live parts before carrying out the tests		N/A
	Tests carried out at room temperature and not connected to the supply		P
16.2	Single-phase appliances: test voltage 1.06 times rated voltage (V).....:	240 V x 1,06 = 254,4 V	P
	Three-phase appliances: test voltage 1.06 times rated voltage divided by √3 (V) .....:		N/A
	Leakage current measurements .....:	(see appended table)	P
	Limit values doubled if:		—
	- all controls have an off position in all poles, or		N/A
	- the appliance has no control other than a thermal cut-out, or		N/A
	- all thermostats, temperature limiters and energy regulators do not have an off position, or		N/A
	- the appliance has radio interference filters		N/A

IEC 60335-2-7			
Clause	Requirement + Test	Result - Remark	Verdict
	With the radio interference filters disconnected, the leakage current do not exceed limits specified.....:	(see appended table)	P
16.3	Electric strength tests according to table 7.....:	(see appended table)	P
	Test voltage applied between the supply cord and inlet bushing and cord guard and cord anchorage as specified .....:	(see appended table)	P
	No breakdown during the tests		P
19	**ABNORMAL OPERATION**		—
19.1	The risk of fire, mechanical damage or electric shock under abnormal or careless operation obviated		P
	Electronic circuits so designed and applied that a fault will not render the appliance unsafe .....:	(see appended table)	P
	Appliances incorporating heating elements subjected to the tests of 19.2 and 19.3, and		N/A
	if the appliance also has a control that limit the temperature during clause 11 it is subjected to the test of 19.4, and		P
	if applicable, to the test of 19.5		P
	Appliances incorporating PTC heating elements are also subjected to the test of 19.6		N/A
	Appliances incorporating motors subjected to the tests of 19.7 to 19.10, as applicable		P
	Appliances incorporating electronic circuits subjected to the tests of 19.11 and 19.12, as applicable		P
	Appliances incorporating contactors or relays subjected to the test of 19.14, being carried out before the tests of 19.11		P
	Appliances incorporating voltage selector switches subjected to the test of 19.15		N/A
	Unless otherwise specified, the tests are continued until a non-self-resetting thermal cut-out operates, or		P
	until steady conditions are established		P
	If a heating element or intentionally weak part becomes open-circuited, the relevant test is repeated on a second sample		P
	For appliances incorporating a programmer or timer, the tests of 19.2 and 19.3 are replaced by the tests of 19.101 (IEC 60335-2-7)		P
	Test of 19.7 is not carried out on motor driving moving parts of oscillating agitator (IEC 60335-2-7)		N/A

IEC 60335-2-7			
Clause	Requirement + Test	Result - Remark	Verdict
	Appliances not intended for connection to the hot water supply and not provided with heating elements are also subjected to the test of 19.102. (IEC 60335-2-7)		N/A
19.11	Electronic circuits, compliance checked by evaluation of the fault conditions specified in 19.11.2 for all circuits or parts of circuits, unless		P
	they comply with the conditions specified in 19.11.1		P
	Appliances incorporating an electronic circuit that relies upon a programmable component to function correctly, subjected to the test of 19.11.4.8, unless		N/A
	restarting does not result in a hazard		N/A
	Appliances having a device with an off position obtained by electronic disconnection, or a device placing the appliance in a stand-by mode, subjected to the tests of 19.11.4		N/A
	If the safety of the appliance under any of the fault conditions depends on the operation of a miniature fuse-link complying with IEC 60127, the test of 19.12 is carried out		N/A
	During and after each test the following is checked:		—
	- the temperature of the windings do not exceed the values specified in table 8		P
	- the appliance complies with the conditions specified in 19.13		P
	- any current flowing through protective impedance not exceeding the limits specified in 8.1.4		N/A
	If a conductor of a printed board becomes open-circuited, the appliance is considered to have withstood the particular test, provided both of the following conditions are met:		—
	- the base material of the printed circuit board withstands the test of Annex E		N/A
	- any loosened conductor does not reduce clearance or creepage distances between live parts and accessible metal parts below the values specified in clause 29		N/A
19.11.1	Fault conditions a) to g) in 19.11.2 are not applied to circuits or parts of circuits meeting both of the following conditions:		—
	- the electronic circuit is a low-power circuit, that is, the maximum power at low-power points does not exceed 15 W according to the tests specified	After C13: 10,7 W	P
	- the protection against electric shock, fire hazard, mechanical hazard or dangerous malfunction of other parts of the appliance does not rely on the correct functioning of the electronic circuit		P

IEC 60335-2-7			
Clause	Requirement + Test	Result - Remark	Verdict
19.11.2	Fault conditions applied one at a time, the appliance operating under conditions specified in clause 11, but supplied at rated voltage, duration of the tests as specified:		—
	a) short circuit of functional insulation if clearances or creepage distances are less than the values specified in clause 29		N/A
	b) open circuit at the terminals of any component		P
	c) short circuit of capacitors, unless		P
	they comply with IEC 60384-14		P
	d) short circuit of any two terminals of an electronic component, other than integrated circuits		P
	This fault condition is not applied between the two circuits of an optocoupler		N/A
	e) failure of triacs in the diode mode		N/A
	f) failure of microprocessors and integrated circuits		P
	g) failure of an electronic power switching device		N/A
	Each low power circuit is short-circuited by connecting the low-power point to the pole of the supply source from which the measurements were made		P
19.13	During the tests the appliance does not emit flames, molten metal, poisonous or ignitable gas in hazardous amounts		P
	Temperature rises not exceeding the values shown in table 9.....:	(see appended table)	P
	Compliance with clause 8 not impaired		P
	If the appliance can still be operated it complies with 20.2		P
	Insulation, other than of class III appliances or class III constructions that do not contain live parts, withstands the electric strength test of 16.3, the test voltage as specified in table 4:		—
	- basic insulation (V) .....:	1000 V	P
	- supplementary insulation (V) .....:		N/A
	- reinforced insulation (V).....:	3000 V	P
	After operation or interruption of a control, clearances and creepage distances across the functional insulation withstand the electric strength test of 16.3, the test voltage being twice the working voltage		P
	The appliance does not undergo a dangerous malfunction, and		N/A

IEC 60335-2-7			
Clause	Requirement + Test	Result - Remark	Verdict
	no failure of protective electronic circuits, if the appliance is still operable		N/A
	Appliances tested with an electronic switch in the off position, or in the stand-by mode:		—
	- do not become operational, or		N/A
	- if they become operational, do not result in a dangerous malfunction during or after the tests of 19.11.4		N/A
	If the appliance contains lids or doors that are controlled by one or more interlocks, one of the interlocks may be released provided that:		—
	- the lid or door does not move automatically to an open position when the interlock is released, and		N/A
	- the appliance does not start after the cycle in which the interlock was released		N/A
	The textile material shall not ignite and shall not show any charring or glowing (IEC 60335-2-7)		P
	During the tests of 19.101 and 19.102, the temperature of windings shall not exceed the values specified in table 8. (IEC 60335-2-7)		P
	The appliance shall comply with 20.103 to 20.105 if it can still be operated. (IEC 60335-2-7)		P
19.101	Fault conditions applied, appliance supplied at rated voltage and operated under normal operation. (IEC 60335-2-7)		—
	-programmer stopping in any position		P
	-disconnection and reconnection of one or more phases of the supply		N/A
	-open-circuiting or short-circuiting of components		P
	-failure of magnetic valve		P
	-failure or blocking the mechanical parts of water-level switch, except if		P
	-the cross-sectional area of the tube supplying the air chamber is greater than 500mm² with a minimum dimension of 10mm, -the outlet of the chamber is at least 20mm above the highest water level, and -the tube connecting the air chamber to the water-level switch is fixed so that there is no likelihood of bending or pinching		N/A
	-puncture of the capillary tube of a thermostat		N/A
	If operation without water in appliance is a more unfavourable condition for starting any programme, tests with that programme are carried out with water valve closed. This valve is not closed after programme stated to operate (IEC 60335-2-7)		P

IEC 60335-2-7			
Clause	Requirement + Test	Result - Remark	Verdict
22	**CONSTRUCTION**		—
22.5	No risk of electric shock when touching the pins of the plug, for appliances having a capacitor with rated capacitance equal to or greater than 0,1μF, the appliance being disconnected from the supply at the instant of voltage peak		P
	Voltage not exceeding 34 V (V) .....:	18,0 V	P
	If compliance relies on the operation of an electronic circuit, the electromagnetic phenomena tests of 19.11.4.3 and 19.11.4.4 are applied		N/A
	The discharge test is then repeated three times, voltage not exceeding 34 V (V).....:		N/A
23	**INTERNAL WIRING**		—
23.5	The insulation of internal wiring subjected to the supply mains voltage withstanding the electrical stress likely to occur in normal use		P
	Basic insulation electrically equivalent to the basic insulation of cords complying with IEC 60227 or IEC 60245, or		P
	no breakdown when a voltage of 2000 V is applied for 15 min between the conductor and metal foil wrapped around the insulation		P
	For class II construction, the requirements for supplementary insulation and reinforced insulation apply,		P
	except that the sheath of a cord complying with IEC 60227 or IEC 60245 may provide supplementary insulation.		N/A
	A single layer of internal wiring insulation does not provide reinforced insulation		P
29	**CLEARANCES, CREEPAGE DISTANCES AND SOLID INSULATION**		—
	Clearances, creepage distances and solid insulation withstand electrical stress		P
	For coatings used on printed circuits boards to protect the microenvironment (Type 1) or to provide basic insulation (Type 2), Annex J applies .....:		N/A
	The microenvironment is pollution degree 1 under type 1 protection		N/A
	For type 2 protection, the spacing between the conductors before the protection is applied is not less than the values specified in Table 1 of IEC 60664-3		N/A
	These values apply to functional, basic, supplementary and reinforced insulation .....:		N/A

IEC 60335-2-7			
Clause	Requirement + Test	Result - Remark	Verdict
29.1	Clearances not less than the values specified in table 16, taking into account the rated impulse voltage for the overvoltage categories of table 15, unless.....:	(see appended table)	P
	for basic insulation and functional insulation they comply with the impulse voltage test of clause 14		N/A
	However, if the distances are affected by wear, distortion, movement of the parts or during assembly, the clearances for rated impulse voltages of 1500V and above are increased by 0,5 mm and the impulse voltage test is not applicable		P
	For appliances intended for use at altitudes exceeding 2 000 m, the clearances in Table 16 is increased according to the relevant multiplier values in Table A.2 of IEC 60664-1		N/A
	Impulse voltage test is not applicable:		—
	- when the microenvironment is pollution degree 3, or		N/A
	- for basic insulation of class 0 and class 01 appliances		N/A
	- to appliances intended for use at altitudes exceeding 2 000 m		N/A
	Appliances are in overvoltage category II		P
	A force of 2 N is applied to bare conductors, other than heating elements		P
	A force of 30 N is applied to accessible surfaces		P
29.1.1	Clearances of basic insulation withstand the overvoltages, taking into account the rated impulse voltage		P
	The values of table 16 or the impulse voltage test of clause 14 are applicable .....:	(see appended table)	P
	Clearance at the terminals of tubular sheathed heating elements may be reduced to 1,0 mm if the microenvironment is pollution degree 1		P
	Lacquered conductors of windings considered to be bare conductors		P
29.1.2	Clearances of supplementary insulation not less than those specified for basic insulation in table 16 .....:	(see appended table)	P
29.1.3	Clearances of reinforced insulation not less than those specified for basic insulation in table 16, using the next higher step for rated impulse voltage .....:	(see appended table)	P

IEC 60335-2-7			
Clause	Requirement + Test	Result - Remark	Verdict
	For double insulation, with no intermediate conductive part between basic and supplementary insulation, clearances are measured between live parts and the accessible surface, and the insulation system is treated as reinforced insulation		P
29.1.4	Clearances for functional insulation are the largest values determined from:		—
	- table 16 based on the rated impulse voltage.....:	(see appended table)	P
	- table F.7a in IEC 60664-1, frequency not exceeding 30 kHz		P
	- clause 4 of IEC 60664-4, frequency exceeding 30 kHz		N/A
	If values of table 16 are largest, the impulse voltage test of clause 14 may be applied instead, unless		P
	the microenvironment is pollution degree 3, or		N/A
	the distances can be affected by wear, distortion, movement of the parts or during assembly		P
	However, clearances are not specified if the appliance complies with clause 19 with the functional insulation short-circuited		N/A
	Lacquered conductors of windings considered to be bare conductors		P
	However, clearances at crossover points are not measured		P
	Clearance between surfaces of PTC heating elements may be reduced to 1mm		N/A
29.1.5	Appliances having higher working voltages than rated voltage, clearances for basic insulation are the largest values determined from:		—
	- table 16 based on the rated impulse voltage.....:		N/A
	- table F.7a in IEC 60664-1, frequency not exceeding 30 kHz		N/A
	- clause 4 of IEC 60664-4, frequency exceeding 30 kHz		N/A
	If clearances for basic insulation are selected from Table F.7a of IEC 60664-1 or Clause 4 of IEC 60664-4, the clearances of supplementary insulation are not less than those specified for basic insulation		N/A
	If clearances for basic insulation are selected from Table F.7a of IEC 60664-1, the clearances of reinforced insulation dimensioned as specified in Table F.7a are to withstand 160% of the withstand voltage required for basic insulation		N/A

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Clause	Requirement + Test	Result - Remark	Verdict
	If clearances for basic insulation are selected from Clause 4 of IEC 60664-4, the clearances of reinforced insulation are twice the value required for basic insulation		N/A
	If the secondary winding of a step-down transformer is earthed, or if there is an earthed screen between the primary and secondary windings, clearances of basic insulation on the secondary side not less than those specified in table 16, but using the next lower step for rated impulse voltage		N/A
	Circuits supplied with a voltage lower than rated voltage, clearances of functional insulation are based on the working voltage used as the rated voltage in table 15		N/A
29.2	Creepage distances not less than those appropriate for the working voltage, taking into account the material group and the pollution degree .....:	(see appended table)	P
	Pollution degree 2 applies, unless		N/A
	- precautions taken to protect the insulation; pollution degree 1	Tubular sheathed heating elements	P
	- insulation subjected to conductive pollution; pollution degree 3		P
	A force of 2 N is applied to bare conductors, other than heating elements		P
	A force of 30 N is applied to accessible surfaces		P
	In a double insulation system, the working voltage for both the basic and supplementary insulation is taken as the working voltage across the complete double insulation system		P
	Pollution degree 3, and the insulation with a CTI not less than 250, (IEC 60335-2-7)		P
	Unless the insulation is enclosed or located so that it is unlikely to be exposed to pollution during normal use of the appliance due to :		N/A
	- condensation produced by the appliance		N/A
	- chemicals, such as detergent or fabric conditioner		N/A
	Compliance is checked by inspection and measurements as specified		P
29.2.1	Creepage distances of basic insulation not less than specified in table 17 .....:	(see appended table)	P
	However, if the working voltage is periodic and has a frequency exceeding 30 kHz, the creepage distances are also determined from table 2 of IEC 60664-4, these values being used if exceeding the values in table 17 .....:		N/A

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Clause	Requirement + Test	Result - Remark	Verdict
	Except for pollution degree 1, corresponding creepage distance not less than the minimum specified for the clearance in table 16, if the clearance has been checked according to the test of clause 14.....:		N/A
29.2.2	Creepage distances of supplementary insulation at least those specified for basic insulation in table 17, or.....:	(see appended table)	P
	Table 2 of IEC 60664-4, as applicable.....:		N/A
29.2.3	Creepage distances of reinforced insulation at least double those specified for basic insulation in table 17, or.....:	(see appended table)	P
	Table 2 of IEC 60664-4, as applicable.....:		N/A
29.2.4	Creepage distances of functional insulation not less than specified in table 18 .....:	(see appended table)	P
	However, if the working voltage is periodic and has a frequency exceeding 30 kHz, the creepage distances are also determined from table 2 of IEC 60664-4, these values being used if exceeding the values in table 18 .....:		N/A
	Creepage distances may be reduced if the appliance complies with clause 19 with the functional insulation short-circuited		N/A
29.3	Supplementary and reinforced insulation have adequate thickness, or a sufficient number of layers, to withstand the electrical stresses		P
	Compliance checked:		—
	- by measurement, in accordance with 29.3.1, or		P
	- by an electric strength test in accordance with 29.3.2, or		N/A
	- for insulation, other than single layer internal wiring insulation, by an assessment of the thermal quality of the material combined with an electric strength test, in accordance with 29.3.3, and		N/A
	for accessible parts of reinforced insulation consisting of a single layer, by measurement in accordance with 29.3.4, or		N/A
	- by an assessment of the thermal quality of the material according to 29.3.3 combined with an electric strength test in accordance with 23.5, for each single layer internal wiring insulation touching each other, or		N/A
	- as specified in subclause 6.3 of IEC 60664-4 for insulation that is subjected to any periodic voltage having a frequency exceeding 30 kHz		N/A

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Clause	Requirement + Test	Result - Remark	Verdict
29.3.1	Supplementary insulation have a thickness of at least 1 mm		P
	Reinforced insulation have a thickness of at least 2 mm		N/A
29.3.2	Each layer of material withstand the electric strength test of 16.3 for supplementary insulation		N/A
	Supplementary insulation consist of at least 2 layers		N/A
	Reinforced insulation consist of at least 3 layers		N/A
29.3.3	The insulation is subjected to the dry heat test Bb of IEC 60068-2-2, followed by		N/A
	the electric strength test of 16.3		N/A
	If the temperature rise during the tests of clause 19 does not exceed the value specified in table 3, the test of IEC 60068-2-2 is not carried out		N/A
29.3.4	Thickness of accessible parts of reinforced insulation consisting of a single layer not less than specified in table 19 .....:		N/A
30	**RESISTANCE TO HEAT AND FIRE**		—
30.1	External parts of non-metallic material,		P
	parts supporting live parts, and		P
	parts of thermoplastic material providing supplementary or reinforced insulation		P
	sufficiently resistant to heat		P
	Ball-pressure test according to IEC 60695-10-2		P
	External parts tested at 40 °C plus the maximum temperature rise determined during the test of clause 11, or at 75 °C, whichever is the higher; temperature (°C) .....:	(see appended table)	P
	Parts supporting live parts tested at 40°C plus the maximum temperature rise determined during the test of clause 11, or at 125 °C, whichever is the higher; temperature (°C) .....:	(see appended table)	P
	Parts of thermoplastic material providing supplementary or reinforced insulation tested at 25 °C plus the maximum temperature rise determined during clause 19, if higher; temperature (°C).....:		N/A
30.2	Parts of non-metallic material resistant to ignition and spread of fire		P
	This requirement does not apply to:		—

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Clause	Requirement + Test	Result - Remark	Verdict
	parts having a mass not exceeding 0,5 g, provided the cumulative effect is unlikely to propagate flames that originate inside the appliance by propagating flames from one part to another, or		N/A
	decorative trims, knobs and other parts unlikely to be ignited or to propagate flames that originate inside the appliance		N/A
	Compliance checked by the test of 30.2.1, and in addition:		P
	- for attended appliances, 30.2.2 applies		N/A
	- for unattended appliances, 30.2.3 applies		P
	For appliances for remote operation, 30.2.3 applies		N/A
	For base material of printed circuit boards, 30.2.4 applies		P
	For appliances incorporating a programmer or a timer, 30.2.3 is applicable. (IEC 60335-2-7)		P
	For other appliances, 30.2.2 is applicable (IEC 60335-2-7)		N/A
30.2.1	Parts of non-metallic material subjected to the glow-wire test of IEC 60695-2-11 at 550 °C		P
	However, test not carried out if the material is classified as having a glow-wire flammability index according to IEC 60695-2-12 of at least 550 °C, or		N/A
	the material is classified at least HB40 according to IEC 60695-11-10		N/A
	Parts for which the glow-wire test cannot be carried out need to meet the requirements in ISO 9772 for material classified HBF		N/A
30.2.2	Appliances operated while attended, parts of non-metallic material supporting current-carrying connections, and		N/A
	parts of non-metallic material within a distance of 3mm of such connections,		N/A
	subjected to the glow-wire test of IEC 60695-2-11		N/A
	The test severity is:		—
	- 750 °C, for connections carrying a current exceeding 0,5 A during normal operation		N/A
	- 650 °C, for other connections		N/A
	Glow-wire applied to an interposed shielding material, if relevant		N/A
	The glow-wire test is not carried out on parts of material classified as having a glow-wire flammability index according to IEC 60695-2-12 of at least:		—

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Clause	Requirement + Test	Result - Remark	Verdict
	- 750 °C, for connections carrying a current exceeding 0,5 A during normal operation		N/A
	- 650 °C, for other connections		N/A
	The glow-wire test is also not carried out on small parts. These parts are to:		—
	- comprise material having a glow-wire flammability index of at least 750 °C, or 650 °C as appropriate, or		N/A
	- comply with the needle-flame test of Annex E, or		N/A
	- comprise material classified as V-0 or V-1 according to IEC 60695-11-10 .....:		N/A
	Glow-wire test not applicable to conditions as specified .....:		N/A
30.2.3	Appliances operated while unattended, tested as specified in 30.2.3.1 and 30.2.3.2		P
	The tests are not applicable to conditions as specified .....:		N/A
30.2.3.1	Parts of non-metallic material supporting connections carrying a current exceeding 0,2 A during normal operation, and		P
	parts of non-metallic material, other than small parts, within a distance of 3 mm,		P
	subjected to the glow-wire test of IEC 60695-2-11 with a test severity of 850 °C		P
	Glow-wire applied to an interposed shielding material, if relevant		P
	The glow-wire test is not carried out on parts of material classified as having a glow-wire flammability index according to IEC 60695-2-12 of at least 850 °C		N/A
30.2.3.2	Parts of non-metallic material supporting connections, and		P
	parts of non-metallic material within a distance of 3mm,		P
	subjected to glow-wire test of IEC 60695-2-11		P
	The test severity is:		—
	- 750 °C, for connections carrying a current exceeding 0,2 A during normal operation		P
	- 650 °C, for other connections		P
	Glow-wire applied to an interposed shielding material, if relevant		N/A
	However, the glow-wire test of 750 °C or 650 °C as appropriate, is not carried out on parts of material fulfilling both or either of the following classifications:		—

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Clause	Requirement + Test	Result - Remark	Verdict
	- a glow-wire ignition temperature according to IEC 60695-2-13 of at least:		N/A
	• 775 °C, for connections carrying a current exceeding 0,2 A during normal operation		N/A
	• 675 °C, for other connections		N/A
	- a glow-wire flammability index according to IEC 60695-2-12 of at least:		N/A
	- 750 °C, for connections carrying a current exceeding 0,2 A during normal operation		N/A
	- 650 °C, for other connections		N/A
	The glow-wire test is also not carried out on small parts. These parts are to:		—
	- comprise material having a glow-wire ignition temperature of at least 775 °C or 675 °C as appropriate, or		N/A
	- comprise material having a glow-wire flammability index of at least 750 °C or 650 °C as appropriate, or		N/A
	- comply with the needle-flame test of Annex E, or		N/A
	- comprise material classified as V-0 or V-1 according to IEC 60695-11-10		N/A
	The consequential needle-flame test of Annex E applied to non-metallic parts that encroach within the vertical cylinder placed above the centre of the connection zone and on top of the non-metallic parts supporting current-carrying connections, and parts of non-metallic material within a distance of 3 mm of such connections if these parts are those:		—
	- parts that withstood the glow-wire test of IEC 60695-2-11 of 750 °C or 650 °C as appropriate, but produce a flame that persist longer than 2 s, or		N/A
	- parts that comprised material having a glow-wire flammability index of at least 750 °C or 650 °C as appropriate, or		N/A
	- small parts, that comprised material having a glow-wire flammability index of at least 750 °C or 650 °C as appropriate, or		N/A
	- small parts for which the needle-flame test of Annex E was applied, or		N/A
	- small parts for which a material classification of V-0 or V-1 was applied		N/A
	However, the consequential needle-flame test is not carried out on non-metallic parts, including small parts, within the cylinder that are:		—
	- parts having a glow-wire ignition temperature of at least 775 °C or 675 °C as appropriate, or		N/A

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Clause	Requirement + Test	Result - Remark	Verdict
	- parts comprising material classified as V-0 or V-1 according to IEC 60695-11-10, or		N/A
	- parts shielded by a flame barrier that meets the needle-flame test of Annex E or that comprises material classified as V-0 or V-1 according to IEC 60695-11-10		N/A
30.2.4	Base material of printed circuit boards subjected to the needle-flame test of Annex E		P
	Test not applicable to conditions as specified .....:		N/A
E	**ANNEX E (NORMATIVE) NEEDLE-FLAME TEST**		—
	Needle-flame test carried out in accordance with IEC 60695-11-5, with the following modifications:		—
7	Severities		—
	The duration of application of the test flame is 30 s ± 1 s		P
9	Test procedure		—
9.1	The specimen so arranged that the flame can be applied to a vertical or horizontal edge as shown in the examples of Figure 1		P
9.2	The first paragraph does not apply		P
	If possible, the flame is applied at least 10 mm from a corner		P
9.3	The test is carried out on one specimen		P
	If the specimen does not withstand the test, the test may be repeated on two additional specimens, both withstanding the test		N/A
11	Evaluation of test results		—
	The duration of burning not exceeding 30 s		N/A
	However, for printed circuit boards, the duration of burning not exceeding 15 s		P

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10.1	TABLE: Power input deviation				P
Input deviation of/at:	P rated (W)	P measured (W)	dP (W, %)	Required dP (W, %)	Remark
230 V, 50 Hz	2100	2014,7	-4,06 %	-10%, +5%	XQG90-T514E (100% load)
230 V, 50 Hz	2100	1987,5	-5,36 %	-10%, +5%	XQG90-T514E (50% load)
230 V, 50 Hz	2100	2008,9	-4,34 %	-10%, +5%	XQG90-T512E (100% load)
230 V, 50 Hz	2100	1984,3	-5,51 %	-10%, +5%	XQG90-T512E (50% load)

11.8	TABLE: Heating test, thermocouple measurements		P
	Test voltage (V)..... :	254,4 V	—
	Ambient (°C) ..... :	22,9 / 21,6	—

Thermocouple locations	Max. temperature rise measured, dT (K)	Max.temperature rise limit, dT (K)
Power cord	22,3	50
Power cord sheath	21,3	35
Internal wire	45,4	50
Top plastic enclosure	14,3	For clause 30.1
Knob	7,3	60
Button	7,3	35
Accessible front metal surface	12,7	60
Accessible front plastic surface	37,0	80
Appliance plastic other surfaces	13,7	74
Appliance metal other surfaces	40,1	48
Filter	26,7	T85-25=60
Ambient of interlock switch	20,2	T85-25=60
Water inlet valve	28,6	T60-25=35
Water level switch	17,6	T85-25=60
Washing motor winding	60,1	115
Drain pump winding	50,5	115
Heater surface	29,3	Ref.
Connector for heater	19,9	For clause 30.1
Internal wire for heater	23,7	T105-25=80
PCB	17,7	120

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Varistor	26,3	T85-25=60
X2 capacitor	29,7	T85-25=60
Relay for heater	35,3	T85-25=60
Relay for washing motor	41,2	T85-25=60
Connector on PCB (black)	31,7	For clause 30.1
Connector on PCB (white)	21,0	For clause 30.1
Support for main board	11,3	For clause 30.1
Display PCB	17,6	120
Connector on water level switch	13,5	For clause 30.1
Test wall	10,3	60
Test floor	12,7	60
Supplementary information: XQG90-T514E assembly with new main board		

11.8	**TABLE: Heating test, resistance method**					P
	Test voltage (V)..... :			254,4 V		—
	Ambient, t1 (°C) ..... :			22,9		—
	Ambient, t2 (°C) ..... :			21,6		—
Temperature rise of winding		R1 (Ω)	R2 (Ω)	dT (K)	Max. dT (K)	Insulation class
Washing motor winding		1,5202	2,0834	94,11	115	155
Drain pump winding		201,54	246,13	58,25	115	155
Water valve winding		4874,0	5617,6	40,57	75	105
Supplementary information: XQG90-T514E assembly with new main board						

13.2	**TABLE: Leakage current**		P
	Heating appliances: 1.15 x rated input (W) ..... :	—	—
	Motor-operated and combined appliances: 1.06 x rated voltage (V) ..... :	254,4 V	—
Leakage current between		I (mA)	Max. allowed I (mA)
Between live part and accessible part		0,023 peak	0,35 peak
Between live part and earthed metal		0,407	3,5
Supplementary information:			

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13.3	TABLE: Electric strength		P
Test voltage applied between:		Voltage (V)	Breakdown (Yes/No)
Between live part and accessible part		3000	No
Between live part and earthed metal		1000	No
Supplementary information:			

16.2	TABLE: Leakage current		P
	Single phase appliances: 1.06 x rated voltage (V) .....:	254,4 V	—
	Three phase appliances 1.06 x rated voltage divided by √3 (V).....:	—	—
Leakage current between		I (mA)	Max. allowed I (mA)
Between live part and accessible part		0,031	0,25
Between live part and earthed metal		0,472	3,5
Supplementary information:			

16.3	TABLE: Electric strength		P
Test voltage applied between:		Voltage (V)	Breakdown (Yes/No)
Between live part and accessible part		3000	No
Between live part and earthed metal		1250	No
Supplementary information:			

19	Abnormal operation conditions		P
Operational characteristics		YES/NO	Operational conditions
Are there electronic circuits to control the appliance operation?		YES	Normal operation complied with 3.1.9
Are there “off” or “stand-by” position?		YES	Normal operation complied with 3.1.9
The unintended operation of the appliance results in dangerous malfunction?		NO	—

Sub-clause	Operating conditions description	Test results description	PEC description	EMP 19.11.4	Software type required	19.11.3 PEC	Final result
19.2	N.A	N.A	N.A	N.A	N.A	N.A	N.A
19.3	N.A	N.A	N.A	N.A	N.A	N.A	N.A

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19.4	N.A	N.A	N.A	N.A	N.A	N.A	N.A
19.5	N.A	N.A	N.A	N.A	N.A	N.A	N.A
19.6	N.A	N.A	N.A	N.A	N.A	N.A	N.A
19.7	N.A	N.A	N.A	N.A	N.A	N.A	N.A
19.7	N.A	N.A	N.A	N.A	N.A	N.A	N.A
19.8	N.A	N.A	N.A	N.A	N.A	N.A	N.A
19.9	N.A	N.A	N.A	N.A	N.A	N.A	N.A
19.10	N.A	N.A	N.A	N.A	N.A	N.A	N.A
19.11.2	(1)	(3)	N.A	N.A	N.A	N.A	P
19.11.4.8	N.A	N.A	N.A	N.A	N.A	N.A	N.A
19.101	(2)	(3)	N.A	N.A	N.A	N.A	P
Supplementary information: (1) Simulated every one fault at a time and until steady condition or ended if a interruption occur; (2) Operated with fault condition or unexpected; (3) No hazard observed, measured temperature below limit.							

24.1	**TABLE: Components information**				P
Object / part No.	Manufacturer/ trademark	Type / model	Technical data	Standard	Mark(s) of conformity[1])
Plug	Good Clear Group Limited	AP-405	250 V, 16 A	DIN VDE 0620-2-1 (VDE 0620-2-1): 2013-03 IEC 60884-1: 2002 + A1: 2006 + A2: 2013	VDE 40021674
Plug (alternative)	Guangdong Galanz Enterprises Co., Ltd.	GAL-01V	250 V, 16 A	IEC 60884-1: 2002 + A1: 2006 + A2: 2013 NEN 1020: 1987/A2: 2004	KEMA 4323022.01
Plug (alternative)	Friendship Enterprise International Co., Ltd.	FE-03P	250 V, 16 A	DIN VDE 0620-2-1 (VDE 0620-2-1): 2013-03 IEC 60884-1: 2002 + A1: 2006 + A2: 2013	VDE 40012926
Plug for Argentina (alternative)	Friendship Enterprise International Co., Ltd.	FE-132P	250 V, 10 A	IRAM 2073: 2009 Ed 4.0 IRAM-NM 60884-1: 2006 Ed 1.0 IEC 60884-1: 2002 + A1: 2006 + A2: 2013	DC-E-F43-001.2

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Plug for Korea (alternative)	Ningbo Friendship Electronics Co., Ltd.	FE-114P	250 V, 16 A	K60884-1 (2008-12) KSC 8305 (2008-09) IEC 60884-1: 2002 + A1: 2006 + A2: 2013	KTL SU04038-4001B
Plug (alternative)	Ningbo qiaopu Electric Co., Ltd.	D03	250 V, 16 A	DIN VDE 0620-2-1 (VDE 0620-2-1): 2013-03 IEC 60884-1: 2002 + A1: 2006 + A2: 2013	VDE 40002872
Plug (alternative)	Shunde Wansheng Electric Co. Ltd.	WS-D316	250 V, 16 A	DIN VDE 0620-2-1 (VDE 0620-2-1): 2013-03 IEC 60884-1: 2002 + A1: 2006 + A2: 2013	VDE 40011763
Plug (alternative)	Shenzhen Linoya Electronic Co. Ltd.	XYP-02L	250 V, 16 A	DIN VDE 0620-2-1 (VDE 0620-2-1): 2013-03 IEC 60884-1: 2002 + A1: 2006 + A2: 2013	VDE 40015292
Plug for Singapore (alternative)	Gla(RS code) Global Approvals Pte Ltd	DC-168A	250 V, 13 A	SS 145: Part1: 2010 IEC 60884-1: 2002 + A1: 2006 + A2: 2013	Intertek 091111-12
Plug for Malaysia only (alternative)	Metal Sing Pte, Ltd	HEC-168	250 V, 13 A	MS 589-1: 2011 IEC 60884-1: 2002 + A1: 2006 + A2: 2013	PM079101
Plug for South Africa only (alternative)	Friendship Enterprise International Co., Ltd.	FE-07P	250 V, 16 A	SANS164-1&3: 2007 SABS164-1: 1997 IEC 60884-1: 2002 + A1: 2006 + A2: 2013	Test report ML/104935
Plug (alternative)	Friendship Enterprise International Co., Ltd.	FE-105P	250 V, 10 A	AS/NZS 3112: 2017 IEC 60884-1: 2002 + A1: 2006 + A2: 2013	Fair Trading NSW24571
Plug for AU only (alternative)	Friendship Enterprise International Co., Ltd.	FE-05P	250 V, 10 A	AS/NZS 3112: 2017 IEC 60884-1: 2002 + A1: 2006 + A2: 2013	Fair Trading NSW18291

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Plug (alternative)	Mainland Electric Wire & Cable Co Ltd	ML-302	250 V, 16 A	DIN VDE 0620-2-1 (VDE 0620-2-1): 2013-03 IEC 60884-1: 2002 + A1: 2006 + A2: 2013	VDE 40012805
Plug (alternative)	Mainland Electric Wire & Cable Co Ltd	ML-302	250 V, 16 A	K60884-1 (2008-12) KSC 8305 (2008-09) IEC 60884-1: 2002 + A1: 2006 + A2: 2013	KTL SUO4102-7002
Plug (alternative)	Mainland Electric Wire & Cable Co., Ltd	ML-350	250 V, 10 A	IRAM 2073: 2009 Ed 4.0 IRAM-NM 60884-1: 2006 Ed 1.0 IEC 60884-1: 2002 + A1: 2006 + A2: 2013	Intertek ICU-M5-001.2R1
Plug (alternative)	Mainland Electric Wire & Cable Co Ltd	ML-340A	250 V, 15 A	AS/NZS 3112: 2017 IEC 60884-1: 2002 + A1: 2006 + A2: 2013	Fair Trading NSW20617
Plug (alternative)	Shenzhen Tongyuan Industrial Co., Ltd.	TY-IN301A	250 V ,16 A	IEC 60884-1: 2002 + A1 SNI 04-3892.1-2006	PCS 00053.02
Plug (alternative)	Koni Electronics(s) Pte Ltd	KDJ828	250 V, 13 A	SS 145: Part1: 2010 IEC 60884-1: 2002 + A1: 2006 + A2: 2013	CPA KON PLR 026180-00
Plug (alternative)	Mainland Electric Wire & Cable Co Ltd	ML-319	250 V, 10 A	CEI 23-50-II Ed. 2007 + V1: 2008 IEC 60884-1: 2002 + A1: 2006 + A2: 2013	IMQ CA02.02531
Plug for Brazil (alternative)	Mainland Electric Wire & Cable Co Ltd	ML-305	250 V, 10 A	NBR NM 6147/2000 NBR NM 14136/2002 IEC 60884-1: 2002 + A1: 2006 + A2: 2013	10/UL-BRAB-0014
Plug (alternative)	Mainland Electric Wire & Cable Co Ltd	ML-340	250 V, 10 A	AS/NZS 3112: 2017 IEC 60884-1: 2002 + A1: 2006 + A2: 2013	Fair Trading NSW20617

IEC 60335-2-7					
Plug for Italy only (alternative)	Friendship Enterprise International Co., Ltd.	FE-110P	250 V, 10 A	CEI 23-50-II Ed. 2007 + V1: 2008 IEC 60884-1: 2002 + A1: 2006 + A2: 2013	IMQ CA02.00630
Plug for Brazil only (alternative)	Friendship Enterprise International Co., Ltd.	FE-151P	250 V, 10 A	NBR NM 6147/2000 NBR NM 14136/2002 IEC 60884-1: 2002 + A1: 2006 + A2: 2013	TÜV MC,DPC-5166
Plug for South Africa only (alternative)	Guangdong Mainland Electric Wire & Cable Co., Ltd.	ML-316	250 V, 16 A	SANS164-1&3: 2007 SABS164-1: 1997 IEC 60884-1: 2002 + A1: 2006 + A2: 2013	SABS 8502/13456
Plug for AU only (alternative)	Friendship Enterprise International Co., Ltd.	FE-137P	250 V, 15 A	AS/NZS 3112: 2017 IEC 60884-1: 2002 + A1: 2006 + A2: 2013	Fair Trading NSW18291
Plug for Italy only (alternative)	Friendship Enterprise International Co., Ltd.	FE-111P	250 V, 16 A	CEI 23-50-II Ed. 2007 + V1: 2008 IEC 60884-1: 2002 + A1: 2006 + A2: 2013	IMQ CA02.01258
Plug for AU (alternative)	Guangdong Galanz Enterprises Co., Ltd.	GAL-01A	250 V, 10 A	AS/NZS 3112: 2017 IEC 60884-1: 2002 + A1: 2006 + A2: 2013	Fair Trading NSW24282
Plug (alternative)	Shunde Huasheng Electrical Industrial Co., Ltd	CT-401	250 V, 10 A	AS/NZS 3112: 2017 IEC 60884-1: 2002 + A1: 2006 + A2: 2013	Fair Trading NSW20173
Plug for Singapore (alternative)	HOYO MARKETING PTE. LTD.	8001	250 V, 13 A	SS 145: Part1: 2010 IEC 60884-1: 2002 + A1: 2006 + A2: 2013	CPA HYO PLR 110031-00
Plug for Malaysia (alternative)	PSE INDUSTRIES(M)SDN BHD	8001N, 8001	250 V, 13 A	MS 589-1: 2011 IEC 60884-1: 2002 + A1: 2006 + A2: 2013	009802/07

IEC 60335-2-7					
Plug (alternative)	Guangdong Galanz Enterprises Co., Ltd.	GAL-01S	250 V, 16 A	SANS164-1&3: 2007 SABS164-1: 1997 IEC 60884-1: 2002 + A1: 2006 + A2: 2013	Intertek 140804048 GZU-001
Plug (alternative)	Guangdong Galanz Enterprises Co., Ltd.	GAL-01S	250 V, 16 A	SANS164-1&3: 2007 SABS164-1: 1997 IEC 60884-1: 2002 + A1: 2006 + A2: 2013	Intertek GZ09060490
Plug (alternative)	Guangdong Galanz Enterprises Co., Ltd.	GAL-01A	250 V, 10 A	AS/NZS 3112: 2017 IEC 60884-1: 2002 + A1: 2006 + A2: 2013	Fair Trading NSW24282
Plug (alternative)	Guangdong Xiongrun Eletrical Co., Ltd.	XR-322	250 V, 16 A	No.04-3892.1: 2006 IEC 60884-1: 2002 + A1: 2006 + A2: 2013	LMK 079 130-12
Plug (alternative)	Friendship Enterprise International Co., Ltd.	FE-07P	250 V, 16 A	SANS164-1&3: 2007 SABS164-1: 1997 IEC 60884-1: 2002 + A1: 2006 + A2: 2013	SABS HC/100248
Plug (alternative)	Friendship(ganzhou) electronics co., Ltd.	PSE8001	250 V, 13 A	MS 589-1: 2011 IEC 60884-1: 2002 + A1: 2006 + A2: 2013	SIRIM 016142/08
Plug for Brazil (alternative)	Friendship Enterprise International Co., Ltd.	FE-153P	250 V, 16 A	NBR NM 6147/2000 NBR NM 14136/2002 IEC 60884-1: 2002 + A1: 2006 + A2: 2013	MC, DPC-5197
Plug for Israel (alternative)	Friendship Enterprise International Co., Ltd.	FE-08P	250 V, 16 A	IEC 60884-1: 2002 + A1: 2006 + A2: 2013	SII 23622
Plug (alternative)	Friendship Enterprise International Co., Ltd.	FE-132P	250 V, 10 A	IRAM 2073: 2009 Ed 4.0 IRAM-NM 60884-1: 2006 Ed 1.0 IEC 60884-1: 2002 + A1: 2006 + A2: 2013	DC-E-F43-002.2(C1)

IEC 60335-2-7					
Plug (alternative)	Mainland Electric Wire & Cable Co., Ltd.	ML-302	250 V, 16 A	CEI 23-50-II Ed. 2007 + V1: 2008 IEC 60884-1: 2002 + A1: 2006 + A2: 2013	IMQ CA02.02658
Plug (alternative)	Mainland Electric Wire & Cable Co., Ltd.	ML-316	250 V, 16 A	SANS164-1&3: 2007 SABS164-1: 1997 IEC 60884-1: 2002 + A1: 2006 + A2: 2013	SABS 8502/15242
Plug (alternative)	Mainland Electric Wire & Cable Co., Ltd.	ML-317	250 V, 10 A	IEC 60884-1: 2002 + A1: 2006 + A2: 2013 SEV 1011: 2009	14.0353
Plug (alternative)	Shenzhen Yuxin Wire & Cable Co.,Ltd	YX-201	250 V, 16 A	DIN VDE 0620-2-1 (VDE 0620-2-1): 2013-03 IEC 60884-1: 2002 + A1: 2006 + A2: 2013	VDE 40001445
Plug (alternative)	Shenzhen Yuxin Wire & Cable Co.,Ltd	YX-211	250 V, 16 A	DIN VDE 0620-2-1 (VDE 0620-2-1): 2013-03 IEC 60884-1: 2002 + A1: 2006 + A2: 2013	VDE 40001470
Plug (alternative)	Dongguan Yuxin Wire & Cable CO.，LTD.	YX-210	250 V, 10 A	DIN VDE 0620-2-1 (VDE 0620-2-1): 2013-03 IEC 60884-1: 2002 + A1: 2006 + A2: 2013	VDE 40035945
Plug (alternative)	Shenzhen Yuxin Wire & Cable Co., Ltd.	YX-201(2)	250 V, 16 A	DIN VDE 0620-2-1 (VDE 0620-2-1): 2013-03 IEC 60884-1: 2002 + A1: 2006 + A2: 2013	VDE 40024114
Plug (alternative)	Dongguan Yuxin Wire & Cable CO.，LTD.	YX-431	250 V, 10 A	AS/NZS 3112: 2017 IEC 60884-1: 2002 + A1: 2006 + A2: 2013	NSW22825
Plug (alternative)	I-Sheng Electric Wire &Cable Co., Ltd	SP-87	250 V, 16 A	Israel Standard No. 32 Part 1.1 Edition June 2012 IEC 60884-1: 2002 + A1: 2006 + A2: 2013	License No. 73976

IEC 60335-2-7					
Plug (alternative)	Unirise Electric Wire & Cable Co., Ltd.	UE-312	250 V, 10 A	K60884-1 (2008-12) KSC 8305 (2008-09) IEC 60884-1: 2002 + A1: 2006 + A2: 2013	SU04049-5002
Plug (alternative)	Unirise Electric Wire & Cable Co.,Ltd	UE-317	250 V, 10 A	CEI 23-50-II Ed. 2007 + V1: 2008 IEC 60884-1: 2002 + A1: 2006 + A2: 2013	CA02.04783
Plug (alternative)	Unirise Electric Wire & Cable Co.,Ltd	UE-311	250 V, 16 A	K60884-1 (2008-12) KSC 8305 (2008-09) IEC 60884-1: 2002 + A1: 2006 + A2: 2013	SU04049-12002
Plug (alternative)	Unirise Electric Wire & Cable Co.,Ltd	UE-326	250 V, 10 A	IRAM 2073: 2009 Ed 4.0 IRAM-NM 60884-1: 2006 Ed 1.0 IEC 60884-1: 2002 + A1: 2006 + A2: 2013	09CA35902.1
Plug (alternative)	Unirise Electric Wire & Cable Co.,Ltd	UE-312	250 V, 16 A	DIN VDE 0620-2-1 (VDE 0620-2-1): 2013-03 IEC 60884-1: 2002 + A1: 2006 + A2: 2013	VDE 40013356
Plug (alternative)	Awin Wire & Cable Co.,Ltd	AW103	250 V, 16 A	DIN VDE 0620-2-1 (VDE 0620-2-1): 2013-03 IEC 60884-1: 2002 + A1: 2006 + A2: 2013	VDE 40023421
Plug (alternative)	Awin Wire & Cable Co.,Ltd	AW109	250 V, 16 A	DIN VDE 0620-2-1 (VDE 0620-2-1): 2013-03 IEC 60884-1: 2002 + A1: 2006 + A2: 2013	VDE 40023421
Plug (alternative)	Awin Wire & Cable Co.,Ltd	AW105	250 V, 10 A	CEI 23-50-II Ed. 2007 + V1: 2008 IEC 60884-1: 2002 + A1: 2006 + A2: 2013	CA02.01566

IEC 60335-2-7					
Plug (alternative)	Awin Wire & Cable Co., Ltd.	AW202	250 V, 10 A	AS/NZS 3112: 2017 IEC 60884-1: 2002 + A1: 2006 + A2: 2013	ESO130488
Plug (alternative)	Awin Wire & Cable Co., Ltd.	AW123	250 V, 16 A	DIN VDE 0620-2-1 (VDE 0620-2-1): 2013-03 IEC 60884-1: 2002 + A1: 2006 + A2: 2013	VDE 4002358
Plug (alternative)	Awin Wire & Cable Co.,Ltd	AW902	250 V, 16 A	K60884-1 (2008-12) KSC 8305 (2008-09) IEC 60884-1: 2002 + A1: 2006 + A2: 2013	SU04076-6002C
Plug (alternative)	Mainland Electric Wire & Cable Co., Ltd.	ML-313	250V,13A	BS 1363-1: 2016+A1:2018 IEC 60884-1: 2002 + A1: 2006 + A2: 2013	ASTA Licence No.876
Plug (alternative)	Friendship Enterprises International Ltd	FE-130P	250V,13A	BS 1363-1: 2016+A1:2018 IEC 60884-1: 2002 + A1: 2006 + A2: 2013	ASTA Licence No.1307
Plug (alternative)	Dongguan Ubill Electrical Co., Ltd.	8801	250 V; 13A	BS 1363-1: 2016+A1:2018 IEC 60884-1: 2002 + A1: 2006 + A2: 2013	Licence No. 805
Plug (alternative)	Unirise Electric Wire & Cable Co., Ltd.	UE-324	250 V; 13 A	SASO 2203: 2015 IEC 60884-1: 2002 + A1: 2006 + A2: 2013	CAP ref. No.: KSA R-310640/3
Plug (alternative)	Mainland Electric Wire & Cable Co., Ltd.	ML-313	250 V; 13 A	SASO 2203: 2015 IEC 60884-1: 2002 + A1: 2006 + A2: 2013	SoR No. R-1703/01250
Plug (alternative)	Friendship Enterprise International Co., Ltd.	FE-130O-B	250 V; 13 A	SASO 2203: 2015 IEC 60884-1: 2002 + A1: 2006 + A2: 2013	CAP ref, No.: KSA R-310858
Plug (alternative)	KDJ Quality Electrical Co., Ltd.	KDJ828	250 V; 13 A	SASO 2203: 2015 IEC 60884-1: 2002 + A1: 2006 + A2: 2013	Intertek GZ10070460-1

IEC 60335-2-7					
Power Cord	Shenzhen Tongyuan Industrial Co., Ltd.	H05VV-F 60227 IEC 53	3G1,5 mm², 3G1,0 mm²	EN 50525-2-11: 2011 IEC 60227-5: 2011	VDE 101980
Power cord for AU only (alternative)	Nindgbo Light-Heavy Electronics Technology Co., Ltd.	H05VV-F 60227 IEC 53	3G1,5 mm², 3G1,0 mm²	AS/NZS 3191: 2008 IEC 60227-5: 2011	Fair Trading NSW20288
Power Cord (alternative)	Zhejiang Xinya Electronic Co., Ltd.	H05VV-F 60227 IEC 53	3G1,5 mm², 3G1,0 mm²	EN 50525-2-11: 2011 IEC 60227-5: 2011	VDE 40000965
Power Cord (alternative)	Taiwan Line Tek Electronic Co., Ltd.	H05VV-F 60227 IEC 53	3G1,5 mm², 3G1,0 mm²	EN 50525-2-11: 2011 IEC 60227-5: 2011	VDE 96233
Power Cord (alternative)	Shunde Wanshang Electric Co., Ltd.	H05VV-F 60227 IEC 53	3G1,5 mm², 3G1,0 mm²	EN 50525-2-11: 2011 IEC 60227-5: 2011	VDE 40009866
Power Cord (alternative)	Mainland Electric Wire & Cable Co Ltd	H05VV-F 60227 IEC 53	3G1,5 mm², 3G1,0 mm²	EN 50525-2-11: 2011 IEC 60227-5: 2011	VDE 40010355
Power Cord AU only (alternative)	Mainland Electric Wire & Cable Co Ltd	H05VV-F 60227 IEC 53	3G1,5 mm², 3G1,0 mm²	AS/NZS 3191: 2008 IEC 60227-5: 2011	Fair Trading NSW20609
Power Cord AU only (alternative)	Shenzhen Tongyuan Industrial Co., Ltd.	H05VV-F 60227 IEC 53	3G1,5 mm², 3G1,0 mm²	AS/NZS 3191: 2008 IEC 60227-5: 2011	Fair Trading NSW24638
Power Cord AU only (alternative)	Xinya Electronic Co Ltd	H05VV-F 60227 IEC 53	3G1,5 mm², 3G1,0 mm²	AS/NZS 3191: 2008 IEC 60227-5: 2011	Fair Trading NSW19420
Power cord (alternative)	Ningbo Light-Heavy Electronics Technology Co., Ltd.	H05VV-F 60227 IEC 53	3G1,5 mm², 3G1,0 mm²	EN 50525-2-11: 2011 IEC 60227-5: 2011	VDE 40035166
Power Cord (alternative)	Shenzhen Yuxin Wire & Cable Co., Ltd.	H05VV-F 60227 IEC 53	3G1,5 mm², 3G1,0 mm²	EN 50525-2-11: 2011 IEC 60227-5: 2011	VDE 40012386
Power Cord (alternative)	Awin Wire & Cable Co., Ltd.	H05VV-F 60227 IEC 53	3G1,5 mm², 3G1,0 mm²	EN 50525-2-11: 2011 IEC 60227-5: 2011	VDE 40023114

IEC 60335-2-7					
Power Cord (alternative)	Ningbo Dabu Electric Appliance Co., Ltd	H05VV-F 60227 IEC 53	3G1,5 mm², 3G1,0 mm²	EN 50525-2-11: 2011 IEC 60227-5: 2011	VDE 40031723
Power Cord (alternative)	Ningbo Qiaopu Electric Co., Ltd.	H05VV-F 60227 IEC 53	3G1,5 mm² or 3G1,0 mm²	EN 50525-2-11: 2011 IEC 60227-5: 2011	VDE 136970
Power Cord (alternative)	Unirise Electric Wire & Cable Co.,Ltd	H05VV-F 60227 IEC 53	3G1,5 mm² or 3G1,0 mm²	EN 50525-2-11: 2011 IEC 60227-5: 2011	VDE 40017449
Power Cord (alternative)	Unirise Electric Wire & Cable Co.,Ltd	H05VV-F 60227 IEC 53	3G1,5 mm² or 3G1,0 mm²	K60227-5 (2011-12) IEC 60227-5: 2011	SU01036-5001
Power Cord (alternative)	Good Clear Group Limited	H05VV-F 60227 IEC 53	3G1,5 mm² or 3G1,0 mm²	EN 50525-2-11: 2011 IEC 60227-5: 2011	VDE 134558
Power Cord for Brazil (alternative)	Friendship Enterprise International Co., Ltd.	H05VV-F 60227 IEC 53	3G1,5 mm² or 3G1,0 mm²	BNT NBR NM 60884-1:2004 NBR 14136:2002 IEC 60227-5: 2011	MC, DPC-5197
Power Cord (alternative)	Ningbo Light-Heavy Electronics Technology Co., Ltd.	H05VV-F 60227 IEC 53	3G1,5 mm² or 3G1,0 mm²	IEC 60227-5: 2011	FCV-6388-REVISA0 03
Power Cord for Italy (alternative)	Guangdong Galanz Enterprises Co., Ltd.	H05VV-F 60227 IEC 53	3G1,5 mm² or 3G1,0 mm²	EN 50525-2-11: 2011 IEC 60227-5: 2011 CEI EN 50525-2-11: 2012	IMQ CA02.03922
Power Cord for Italy (alternative)	Ningbo Light-Heavy Electronics Technology Co., Ltd.	H05VV-F 60227 IEC 53	3G1,5 mm² or 3G1,0 mm²	EN 50525-2-11: 2011 IEC 60227-5: 2011 CEI EN 50525-2-11: 2012	IMQ CA01.00381
Power Cord (alternative)	Shenzhen Tongyuan Industrial Co., Ltd.	H05VV-F 60227 IEC 53	3G1,5 mm² or 3G1,0 mm²	SNI 04-6629.5: 2006 SNI 04-6629.1: 2006 SNI 04-6629.2: 2006 IEC 60227-5: 2011	PCS 00053.01.02

IEC 60335-2-7					
Power Cord (alternative)	I-Sheng Electric Wire &Cable Co.,Ltd	H05VV-F 60227 IEC 53	3G1,5 mm² or 3G1,0 mm²	EN 50525-2-11: 2011 IEC 60227-5: 2011	VDE 40006070
Power Cord (alternative)	GUANGDONG XIONGRUN ELETRICAL CO.LTD	H05VV-F 60227 IEC 53	3G1,5 mm² or 3G1,0 mm²	No.04-6629.5 IEC 60227-5: 2011	LMK 079 126-12
Power Cord (alternative)	Ningbo Light-Heavy Electronics Technolgy Co., Ltd.	H05VV-F 60227 IEC 53	3G1,5 mm² or 3G1,0 mm²	EN 50525-2-11: 2011 IEC 60227-5: 2011 CEI EN 50525-2-11: 2012	IMQ CA01.00381
Power Cord (alternative)	Dongguan Yuxin Wire & Cable CO.，LTD.	H05VV-F 60227 IEC 53	3G1,5 mm² or 3G1,0 mm²	EN 50525-2-11: 2011 IEC 60227-5: 2011	VDE 40012386
Power Cord (alternative)	Awin Wire & Cable Co.,Ltd	H05VV-F 60227 IEC 53	3G1,0 mm²	K60227-5 (2011-12) IEC 60227-5: 2011	SU01056-7002
Power Cord (alternative)	Awin Wire & Cable Co.,Ltd	H05VV-F 60227 IEC 53	3G1,0 mm²	EN 50525-2-11: 2011 IEC 60227-5: 2011 CEI EN 50525-2-11: 2012	CA01.00158
Power Cord (alternative)	Dongguan Yuxin Wire & Cable CO.，LTD.	H05VV-F 60227 IEC 53	3G1,5 mm² or 3G1,0 mm²	EN 50525-2-11: 2011 IEC 60227-5: 2011 CEI EN 50525-2-11: 2012	CA01.00628
Power Cord (alternative)	GuangDong YongRui Cable Technology Co.,Ltd	H05VV-F 60227 IEC 53	3G1,5 mm² or 3G1,0 mm²	EN 50525-2-11: 2011 IEC 60227-5: 2011	VDE 40021527
Power Cord (alternative)	Dongguan Yuxin Wire & Cable CO.，LTD.	H05VV-F 60227 IEC 53	3G1,5 mm² or 3G1,0 mm²	AS/NZS 3191: 2008 IEC 60227-5: 2011	NSW25282
Filter	Shanghai CII Electronic Co., Ltd.	F4338-1, F4338-2,	250 V, 16 A, 50/60 Hz, T100	IEC/EN 60939-2: 2005	TÜV R 50164074
Filter (alternative)	Aerodev Electromagnetic Tech. Inc	DNF06-T	250 V, 16 A, 50/60 Hz, T100	IEC/EN 60939-2: 2005	SEMKO 902703
Filter (alternative)	Aerodev Electromagnetic Tech. Inc	DNF06-T (RBDF); DNF06-T (RBDFB)	250 V , 16 A, 50/60 Hz, T85	IEC/EN 60939-2: 2005	SEMKO 902703

IEC 60335-2-7					
Filter (alternative)	Ningguo Darong Electronics Co., Ltd.	DR02-(CIDD)	250 V , 16 A, 50/60 Hz, T100	IEC/EN 60939-2: 2005 IEC/EN 60939-1: 2010	TÜV R 50310135
Internal wire 1,5/1,0 mm² and 16 AWG for main and heating element; 24/26 AWG for signal wire; 0,5/0,75 mm² and 18/20/22 AWG for other (alternative)	Xingda Electronics Wire & Cable Co., Ltd.	H05VV-F 227 IEC 53	300/500 V, 0,5/0,75/1,0/1,5 mm²	IEC/EN 60335-1 IEC/EN 60335-2-7	Tested with appliance VDE 40019127
Internal wire (alternative)	Zhejiang Xingda Electronics Wire & Cable Co., Ltd.	H05V2-K / H07V2-K	300/500 V, 0,5/0,75/1,0/1,5 mm²	IEC/EN 60335-1 IEC/EN 60335-2-7	Tested with appliance VDE 40027352
Internal wire (alternative)	Qing Dao Riken Wire & Cable Co. Ltd	H05V2-K / H07V2-K	300/500 V, 0,5/0,75/1,0/1,5 mm²	IEC/EN 60335-1 IEC/EN 60335-2-7	Tested with appliance VDE 40013850
Internal wire (alternative)	Zhejiang Xingda Electronics Wire & Cable Co., Ltd.	60227 IEC 08 (RV-90)	300/500 V, 0,5/0,75/1,0/1,5 mm²	IEC/EN 60335-1 IEC/EN 60335-2-7	Tested with appliance CCC200201 0105012462
Internal wire (alternative)	GuangDong linoYa Electronic Technology Co., Ltd.	60227 IEC 08 (RV-90)	300/500 V, 0,5/0,75/1,0/1,5 mm²	IEC/EN 60335-1 IEC/EN 60335-2-7	Tested with appliance CCC200201 0105009098
Internal wire (alternative)	AnHui YuHe Cable and electrical equipment Co., Ltd.	60227 IEC 08 (RV-90)	300/500 V, 0,5/0,75/1,0/1,5 mm²	IEC/EN 60335-1 IEC/EN 60335-2-7	Tested with appliance CCC200501 0105156781
Internal wire (alternative)	Yueqing City Hong Hua Electric Co., Ltd.	60227 IEC 08 (RV-90)	300/500 V, 0,5/0,75/1,0/1,5 mm²	IEC/EN 60335-1 IEC/EN 60335-2-7	Tested with appliance CCC200601 0105199870
Internal wire (alternative)	Weihaishi Honglin Wire & Cable Co., Ltd.	60227 IEC 08 (RV-90)	300/500 V, 0,5/0,75/1,0/1,5 mm²	IEC/EN 60335-1 IEC/EN 60335-2-7	Tested with appliance CCC200801 0105283001
Internal wire (alternative)	Zhongshan Qi Liang Wire Mfr. Co., Ltd.	60227 IEC 08 (RV-90)	300/500 V, 0,5/0,75/1,0/1,5 mm²	IEC/EN 60335-1 IEC/EN 60335-2-7	Tested with appliance CCC200801 0105294466
Internal wire (alternative)	Guangzhou Panyu Cable Group Co., Ltd.	60227 IEC 08 (RV-90)	300/500 V, 0,5/0,75/1,0/1,5 mm²	IEC/EN 60335-1 IEC/EN 60335-2-7	Tested with appliance CCC200201 0105006797
Internal wire (alternative)	Qingdao Riken Wire & Cable Co., Ltd.	60227 IEC 08 (RV-90)	300/500 V, 0,5/0,75/1,0/1,5 mm²	IEC/EN 60335-1 IEC/EN 60335-2-7	Tested with appliance CCC200201 0105013152

IEC 60335-2-7					
Internal wire (alternative)	Zhongshan Shenlong Zhou Wire Manufacturing Co., Ltd	60227 IEC 08 (RV-90)	300/500 V, 0,5/0,75/1,0/1,5 mm²	IEC/EN 60335-1 IEC/EN 60335-2-7	Tested with appliance CCC200501 0105147089
Internal wire (alternative)	Yong Rui Wire Co., Ltd. Zhongshan City	60227 IEC 08 (RV-90)	300/500 V, 0,5/0,75/1,0/1,5 mm²	IEC/EN 60335-1 IEC/EN 60335-2-7	Tested with appliance CCC200301 0105057075
Internal wire (alternative)	Wei Feng Electrical Appliance Co., Ltd. Zhongshan City	60227 IEC 08 (RV-90)	300/500 V, 0,5/0,75/1,0/1,5 mm²	IEC/EN 60335-1 IEC/EN 60335-2-7	Tested with appliance CCC200801 0105290051
Internal wire (alternative)	Shanghai Legang Electric Co., Ltd.	60227 IEC 08 (RV-90)	300/500 V, 0,5/0,75/1,0/1,5 mm²	IEC/EN 60335-1 IEC/EN 60335-2-7	Tested with appliance CCC200801 0105288270
Internal wire (alternative)	Zhongshan Xinlong Electric Co., Ltd.	60227 IEC 08 (RV-90)	300/500 V, 0,5/0,75/1,0/1,5 mm²	IEC/EN 60335-1 IEC/EN 60335-2-7	Tested with appliance CCC200901 0105373879
Internal wire (alternative)	Zhongshan Yuxuan Electric Co., Ltd.	60227 IEC 08 (RV-90)	300/500 V, 0,5/0,75/1,0/1,5 mm²	IEC/EN 60335-1 IEC/EN 60335-2-7	Tested with appliance CCC200801 0105270697
Internal wire (alternative)	Zhongshan Yongrui Electric Wire Co., Ltd.	AVR-90	300/300 V, 0,3 mm²	IEC/EN 60335-1 IEC/EN 60335-2-7	Tested with appliance CCC200701 0105219103
Internal wire (alternative)	Mianyang City Changxin wire & Cable Co., Ltd	60227 IEC 08 (RV-90)	300/500 V, 0,5/0,75/1,0/1,5 mm²	IEC/EN 60335-1 IEC/EN 60335-2-7	Tested with appliance CCC200801 0105309046
Internal wire (alternative)	Zhongshan Xinsheng Electric Co., Ltd.	60227 IEC 08 (RV-90)	300/500 V, 0,5/0,75/1,0/1,5 mm²	IEC/EN 60335-1 IEC/EN 60335-2-7	Tested with appliance CCC201001 0105421814
Internal wire (alternative)	Yujia Wire Electronics Co., Ltd.	60227 IEC 08 (RV-90)	300/500 V, 0,5-2,5 mm²	IEC/EN 60335-1 IEC/EN 60335-2-7	Tested with appliance CCC200801 0105289418
Internal wire (alternative)	Heshan City Tehsing Huanchiu Electric Cable Co., Ltd.	60227 IEC 08 (RV-90)	300/500 V, 0,5-2,5 mm²	IEC/EN 60335-1 IEC/EN 60335-2-7	Tested with appliance CCC200201 0105024376
Internal wire (alternative)	Lonsid Electronics Co.Ltd	60227 IEC 08 (RV-90)	300/500 V, 0,5/0,75/1,0/1,5 mm²	IEC/EN 60335-1 IEC/EN 60335-2-7	Tested with appliance CCC200301 0105051465
Internal wire (alternative)	Zhejiang Qingyuan Yongchang Electric Co., Ltd.	60227 IEC 08 (RV-90)	300/500 V, 0,5-1,5 mm²	IEC/EN 60335-1 IEC/EN 60335-2-7	Tested with appliance CCC201101 0105516107

IEC 60335-2-7					
Internal wire (alternative)	Jiangsu Gongguan electron fitting Co.Ltd	60227 IEC 08 (RV-90)	300/500 V, 0,5-2,5 mm²	IEC/EN 60335-1 IEC/EN 60335-2-7	Tested with appliance CCC201301 0105634217
Internal wire (alternative)	Dongguan Chang Xin Cable Technology Co Ltd	60227 IEC 08 (RV-90)	300/500 V, 0,5-2,5 mm²	IEC/EN 60335-1 IEC/EN 60335-2-7	Tested with appliance CCC201501 0105754715
Internal wire (alternative)	Dongguan Chang Xin Cable Technology Co Ltd	1569, 1430	105°C, 300 V, 22/20/18/16 AWG	IEC/EN 60335-1 IEC/EN 60335-2-7	Tested with appliance UL E344713
Internal wire (alternative)	Zhongshan Fuyuantong Wire & Cable Co Ltd	1569	105°C, 300 V, 22/20/18/16 AWG	IEC/EN 60335-1 IEC/EN 60335-2-7	Tested with appliance UL E241989
Internal wire (alternative)	Dongguan City Fu Tai Electronic Technology Co Ltd	1569	105°C, 300 V, 22/20/18/16AWG	IEC/EN 60335-1 IEC/EN 60335-2-7	Tested with appliance UL E314597
Internal wire (alternative)	Shanghai Legang Electric Co Ltd	1569	105°C, 300 V, 22/20/18/16 AWG	IEC/EN 60335-1 IEC/EN 60335-2-7	Tested with appliance UL E301936
Internal wire (alternative)	Guangdong Yong Roi Cable Technology Co Ltd	1569	105°C, 300 V, 22/20/18/16 AWG	IEC/EN 60335-1 IEC/EN 60335-2-7	Tested with appliance UL E204893
Internal wire (alternative)	Jiangyin Jiangzhou Copper Product Co Ltd	1569	105°C, 300 V, 22/20/18/16 AWG	IEC/EN 60335-1 IEC/EN 60335-2-7	Tested with appliance UL E341212
Internal wire (alternative)	China Lonsid Electric Co Ltd	1569	105°C, 300 V, 22/20/18/16 AWG	IEC/EN 60335-1 IEC/EN 60335-2-7	Tested with appliance UL E205056
Internal wire (alternative)	Yu Jia Wire Electronics Co Ltd	1569	105°C, 300 V, 22-16 AWG	IEC/EN 60335-1 IEC/EN 60335-2-7	Tested with appliance UL E311408
Internal wire (alternative)	Heshan City Tehsing Huanchiu Electric Cable Co Ltd	1569	105°C, 300 V, 22-16 AWG	IEC/EN 60335-1 IEC/EN 60335-2-7	Tested with appliance UL E229340
Internal wire (alternative)	Shanghai Shangxu Wire & Cable Co Ltd	1569	105°C, 300 V, 22-16 AWG	IEC/EN 60335-1 IEC/EN 60335-2-7	Tested with appliance UL E225292
Internal wire (alternative)	Zhongshan Weifeng Electrical Equipment Co Ltd	1569	105°C, 300 V, 22/20/18/16 AWG	IEC/EN 60335-1 IEC/EN 60335-2-7	Tested with appliance UL E314135
Internal wire (alternative)	Zhongshan City Liangyu Wire And Cable Co Ltd	1569	105°C, 300 V, 22/20/18/16 AWG	IEC/EN 60335-1 IEC/EN 60335-2-7	Tested with appliance UL E340038
Internal wire (alternative)	Guangzhou Fengtai Meihua Cable Co Ltd	1569	105°C, 300 V, 22/20/18/16 AWG	IEC/EN 60335-1 IEC/EN 60335-2-7	Tested with appliance UL E204798
Internal wire (alternative)	Xingda Electronics Wire & Cable Co Ltd	1569	105°C, 300 V, 22/20/18/16 AWG	IEC/EN 60335-1 IEC/EN 60335-2-7	Tested with appliance UL E187208
Internal wire (alternative)	Weihai Hong Lin Electronic Co Ltd	1569	105°C, 300 V, 22/20/18/16 AWG	IEC/EN 60335-1 IEC/EN 60335-2-7	Tested with appliance UL E239426

IEC 60335-2-7					
Internal wire (alternative)	Qingdao Riken Wire & Cable Co Ltd	1569	105°C, 300 V, 22/20/18/16 AWG	IEC/EN 60335-1 IEC/EN 60335-2-7	Tested with appliance UL E212103
Internal wire (alternative)	Zhejiang Kanghua Technology Co Ltd	1569	105°C, 300 V, 22/20/18/16 AWG	IEC/EN 60335-1 IEC/EN 60335-2-7	Tested with appliance UL E317788
Internal wire (alternative)	Shenzhen Bao Hing Electric Wire & Cable Mfr Co Ltd	1569	105°C, 300 V, 22/20/18/16 AWG	IEC/EN 60335-1 IEC/EN 60335-2-7	Tested with appliance UL E168141
Internal wire (alternative)	Ltk Electric Wire (Huizhou) Ltd	1569	105°C, 300 V, 22/20/18/16 AWG	IEC/EN 60335-1 IEC/EN 60335-2-7	Tested with appliance UL E148000
Internal wire (alternative)	Zhongshan Qi Liang Wire Mfr Co Ltd	1569	105°C, 300 V, 22/20/18/16 AWG	IEC/EN 60335-1 IEC/EN 60335-2-7	Tested with appliance UL E320362
Internal wire (alternative)	Kelin Wire Co Ltd (Dongguan)	1569	105°C, 300 V, 22/20/18/16 AWG	IEC/EN 60335-1 IEC/EN 60335-2-7	Tested with appliance UL E250866
Internal wire (alternative)	Xinya Electronic Co Ltd	1569	105°C, 300 V, 22/20/18/16 AWG	IEC/EN 60335-1 IEC/EN 60335-2-7	Tested with appliance UL E170689
Internal wire (alternative)	Linoya Electronic Technology Co Ltd	1430, 1569	105°C, 300 V, 22/20/18/16 AWG	IEC/EN 60335-1 IEC/EN 60335-2-7	Tested with appliance UL E315619
Internal wire (alternative)	Shenzhen Linoya Electronic Co Ltd	1569	105°C, 300 V, 22/20/18/16 AWG	IEC/EN 60335-1 IEC/EN 60335-2-7	Tested with appliance UL E315618
Internal wire (alternative)	Weihai Hong Lin Electronic Co Ltd	1015	105°C, 600 V 22/20/18/16 AWG	IEC/EN 60335-1 IEC/EN 60335-2-7	Tested with appliance UL E239426
Internal wire (alternative)	Zhejiang Kanghua Technology Co Ltd	1015	105°C, 600 V 22/20/18/16 AWG	IEC/EN 60335-1 IEC/EN 60335-2-7	Tested with appliance UL E317788
Internal wire (alternative)	Zhongshan Qi Liang Wire Mfr Co Ltd	1015	105°C, 600 V 22/20/18/16 AWG	IEC/EN 60335-1 IEC/EN 60335-2-7	Tested with appliance UL E320362
Internal wire (alternative)	Yu Jia Wire Electronics Co Ltd	1015	105°C, 600 V 22/20/18/16 AWG	IEC/EN 60335-1 IEC/EN 60335-2-7	Tested with appliance UL E311408
Internal wire (alternative)	Heshan City Tehsing Huanchiu Electric Cable Co Ltd	1015	105°C, 600 V 22/20/18/16 AWG	IEC/EN 60335-1 IEC/EN 60335-2-7	Tested with appliance UL E229340
Internal wire (alternative)	China Lonsid Electric Co Ltd	1015	105°C, 600 V 22/20/18/16 AWG	IEC/EN 60335-1 IEC/EN 60335-2-7	Tested with appliance UL E205056
Internal wire (alternative)	Zhongshan Fuyuantong Wire & Cable Co Ltd	1015	105°C, 600 V 22/20/18/16 AWG	IEC/EN 60335-1 IEC/EN 60335-2-7	Tested with appliance UL E241989
Internal wire (alternative)	Dongguan City Fu Tai Electronic Technology Co Ltd	1015	105°C, 600 V 22/20/18/16 AWG	IEC/EN 60335-1 IEC/EN 60335-2-7	Tested with appliance UL E314597
Internal wire (alternative)	Shanghai Legang Electric Co Ltd	1015	105°C, 600 V 22/20/18/16 AWG	IEC/EN 60335-1 IEC/EN 60335-2-7	Tested with appliance UL E301936

IEC 60335-2-7					
Internal wire (alternative)	Guangdong Yong Roi Cable Technology Co Ltd	1015	105°C, 600 V 22/20/18/16 AWG	IEC/EN 60335-1 IEC/EN 60335-2-7	Tested with appliance UL E204893
Internal wire (alternative)	Zhongshan Xinsheng Electric Co Ltd	1015	105°C, 600 V 22/20/18/16 AWG	IEC/EN 60335-1 IEC/EN 60335-2-7	Tested with appliance UL E328303
Internal wire (alternative)	Shenzhen Linoya Electronic Co Ltd	1015	105°C, 600 V 22/20/18/16 AWG	IEC/EN 60335-1 IEC/EN 60335-2-7	Tested with appliance UL E315618
Internal wire (alternative)	Linoya Electronic Technology Co Ltd	1015	105°C, 600 V 22/20/18/16 AWG	IEC/EN 60335-1 IEC/EN 60335-2-7	Tested with appliance UL E315619
Internal wire (alternative)	Zhongshan Yuxuan Electronics Co Ltd	1015	105°C, 600 V 22/20/18/16 AWG	IEC/EN 60335-1 IEC/EN 60335-2-7	Tested with appliance UL E316286
Internal wire (alternative)	Jiangyin Jiangzhou Copper Product Co Ltd	1015	105°C, 600 V 22/20/18/16 AWG	IEC/EN 60335-1 IEC/EN 60335-2-7	Tested with appliance UL E341212
Internal wire (alternative)	Guang Dong Xin Long Enterprise Co	1015	105°C, 600 V 22/20/18/16 AWG	IEC/EN 60335-1 IEC/EN 60335-2-7	Tested with appliance UL E207567
Internal wire (alternative)	Zhongshan Weifeng Electrical Equipment Co Ltd	1015	105°C, 600 V 22/20/18/16 AWG	IEC/EN 60335-1 IEC/EN 60335-2-7	Tested with appliance UL E314135
Internal wire (alternative)	Zhongshan City Liangyu Wire And Cable Co Ltd	1015	105°C, 600 V 22/20/18/16 AWG	IEC/EN 60335-1 IEC/EN 60335-2-7	Tested with appliance UL E340038
Internal wire (alternative)	Kelin Wire Co Ltd (Dongguan)	1015	105°C, 600 V 22/20/18/16 AWG	IEC/EN 60335-1 IEC/EN 60335-2-7	Tested with appliance UL E250866
Internal wire (alternative)	Xinya Electronic Co Ltd	1015	105°C, 600 V 22/20/18/16 AWG	IEC/EN 60335-1 IEC/EN 60335-2-7	Tested with appliance UL E170689
Internal wire (alternative)	Xingda Electronics Wire & Cable Co Ltd	1015	105°C, 600 V 22/20/18/16 AWG	IEC/EN 60335-1 IEC/EN 60335-2-7	Tested with appliance UL E187208
Internal wire (alternative)	Qingdao Riken Wire & Cable Co Ltd	1015	105°C, 600 V 22/20/18/16 AWG	IEC/EN 60335-1 IEC/EN 60335-2-7	Tested with appliance UL E212103
Internal wire (alternative)	Dongguan Chang Xin Cable Technology Co Ltd	1015	105°C, 600 V 22/20/18/16 AWG	IEC/EN 60335-1 IEC/EN 60335-2-7	Tested with appliance UL E344713
Internal wire (alternative)	Shanghai Legang Electric Co Ltd	1007	80°C, 300 V, 22/20/18/16 AWG	IEC/EN 60335-1 IEC/EN 60335-2-7	Tested with appliance UL E301936
Internal wire (alternative)	Guangdong Yong Roi Cable Technology Co Ltd	1007	80°C, 300 V, 22/20/18/16 AWG	IEC/EN 60335-1 IEC/EN 60335-2-7	Tested with appliance UL E204893
Internal wire (alternative)	Zhongshan Xinsheng Electric Co Ltd	1007	80°C, 300 V, 22/20/18/16 AWG	IEC/EN 60335-1 IEC/EN 60335-2-7	Tested with appliance UL E328303
Internal wire (alternative)	Zhongshan Yuxuan Electronics Co Ltd	1007	80°C, 300 V, 22/20/18/16 AWG	IEC/EN 60335-1 IEC/EN 60335-2-7	Tested with appliance UL E316286

IEC 60335-2-7					
Internal wire (alternative)	Guang Dong Xin Long Enterprise Co	1007	80°C, 300 V, 22/20/18/16 AWG	IEC/EN 60335-1 IEC/EN 60335-2-7	Tested with appliance UL E207567
Internal wire (alternative)	China Lonsid Electric Co Ltd	1007	80°C, 300 V, 22/20/18/16 AWG	IEC/EN 60335-1 IEC/EN 60335-2-7	Tested with appliance UL E205056
Internal wire (alternative)	Zhongshan Weifeng Electrical Equipment Co Ltd	1007	80°C, 300 V, 22/20/18/16 AWG	IEC/EN 60335-1 IEC/EN 60335-2-7	Tested with appliance UL E314135
Internal wire (alternative)	Zhongshan City Liangyu Wire And Cable Co Ltd	1007	80°C, 300 V, 22/20/18/16 AWG	IEC/EN 60335-1 IEC/EN 60335-2-7	Tested with appliance UL E340038
Internal wire (alternative)	Qingdao Riken Wire & Cable Co Ltd	1007	80°C, 300 V, 22/20/18/16 AWG	IEC/EN 60335-1 IEC/EN 60335-2-7	Tested with appliance UL E212103
Internal wire (alternative)	Xingda Electronics Wire & Cable Co Ltd	1007	80°C, 300 V, 24/26 AWG	IEC/EN 60335-1 IEC/EN 60335-2-7	Tested with appliance UL E187208
Internal wire (alternative)	Zhejiang Kanghua Technology Co Ltd	1007	80°C, 300 V, 22-16 AWG	IEC/EN 60335-1 IEC/EN 60335-2-7	Tested with appliance UL E317788
Internal wire (alternative)	Shenzhen Linoya Electronic Co Ltd	1007	80°C, 300 V, 22/20/18/16 AWG	IEC/EN 60335-1 IEC/EN 60335-2-7	Tested with appliance UL E315618
Internal wire (alternative)	Linoya Electronic Technology Co Ltd	1007	80°C, 300 V, 22/20/18/16 AWG	IEC/EN 60335-1 IEC/EN 60335-2-7	Tested with appliance UL E315619
Internal wire (alternative)	Dongguan Chang Xin Cable Technology Co Ltd	1007	80°C, 300 V, 22/20/18/16 AWG	IEC/EN 60335-1 IEC/EN 60335-2-7	Tested with appliance UL E344713
Internal wire (alternative)	Zhejiang Kanghua Technology Co., Ltd.	60227IEC 08 (RV-90)	300/500 V, 0,5/0,75/1,0/1,5 mm²	IEC/EN 60335-1 IEC/EN 60335-2-7	Tested with appliance CCC 2006010105 199870
Internal wire (alternative)	Zhongshan Fuyuantong Wire & Cable Co Ltd	60227IEC 08 (RV-90)	300/500 V, 0,5/0,75/1,0/1,5 mm²	IEC/EN 60335-1 IEC/EN 60335-2-7	Tested with appliance CCC 2002010105 016607
Internal wire (alternative)	Zhongshan Jinzhong electronic Co., LTD	60227 IEC 08 (RV-90)	300/500 V, 0,5/0,75/1,0/1,5 mm²	IEC/EN 60335-1 IEC/EN 60335-2-7	Tested with appliance 2010010105 437329
Internal wire (alternative)	Zhongshan Shenlong Zhou Wire Manufacturing Co., Ltd	1569	300/500 V, 105˚C, 22/20/18/16 AWG	IEC/EN 60335-1 IEC/EN 60335-2-7	Tested with appliance UL E257280
Internal wire (alternative)	Zhongshan Ruitian wire&cable Co.,LTD	1569	300 V, 105 ˚C, 22/20/18/16 AWG	IEC/EN 60335-1 IEC/EN 60335-2-7	Tested with appliance ULE318425
Internal wire (alternative)	Zhongshan Jinzhong electronic Co., LTD	1569	300 V, 105 ˚C, 22/20/18/16 AWG	IEC/EN 60335-1 IEC/EN 60335-2-7	Tested with appliance UL E337898

IEC 60335-2-7					
Internal wire (alternative)	Zhongshan Shenlong Zhou Wire Manufacturing Co., Ltd	1015	600 V, 105˚C, 22/20/18/16 AWG	IEC/EN 60335-1 IEC/EN 60335-2-7	Tested with appliance UL E257280
Internal wire (alternative)	Zhongshan Fuyuantong Wire & Cable Co Ltd	1007	300 V, 80˚C, 22/20/18/16 AWG	IEC/EN 60335-1 IEC/EN 60335-2-7	Tested with appliance E241989
Washing motor	Askoll (China) Motor Technologies Co., Ltd	MCC52/64-148/GAL2	220-240 V, 50 Hz, Class 155	IEC/EN 60335-1 IEC/EN 60335-2-7	Tested with appliance
- winding	Tongling Jingda Rea Special Enameled Wire Co Ltd	QZ-x/155	Class 155	IEC/EN 60335-1 IEC/EN 60335-2-7	UL E174580 Tested with appliance
- winding (alternative)	Shandong Saint Electric Co Ltd	Q(Z/X)-*/155	Class 155	IEC/EN 60335-1 IEC/EN 60335-2-7	UL E194410 Tested with appliance
- winding (alternative)	Shanghai Yusheng Special Magnet Wire Co Ltd	QZ(G)-x/155	Class 155	IEC/EN 60335-1 IEC/EN 60335-2-7	UL E208123 Tested with appliance
- winding (alternative)	Tongling Jingxun Special Enamelled Wire Co Ltd	JXMW24A-x	Class 155	IEC/EN 60335-1 IEC/EN 60335-2-7	UL E248026 Tested with appliance
- motor protector	Sensata Technologies Holland, B.V.	15AM	250 V, 13(5) A, 1E4 cycles, Tf 155°C	IEC 60730-1: 1999+A1:2003+A2:2007; IEC 60730-2-2: 2001+A1:2005; EN 60730-2-2: 2002+A1 +A11 EN 60730-1: 2000+A1+A12+A13+A14+A16+A2	KEMA 2014531.04
- motor protector (alternative)	Sensata Technologies Holland, B.V.	3MP	250 V, 6(1) A, 3E3 cycles, Tf 155°C	IEC 60730-1: 1999+A1:2003+A2:2007; IEC 60730-2-2: 2001+A1:2005; EN 60730-2-2: 2002+A1 +A11 EN 60730-1: 2000+A1+A12+A13+A14+A16+A2	KEMA 2014531.07
Washing motor (alternative)	Jiangsu Sanjiang Electric Appliance Group Co., Ltd	HC-220L	220-240 V, 50/60 Hz, Class 155	IEC/EN 60335-1 IEC/EN 60335-2-7	Tested with appliance

IEC 60335-2-7					
- motor protector	Sensata Technologies Holland, B.V.	3MP	250 VAC, Tf 150 ºC	IEC 60730-1: 1999+A1:2003+A2:2007; IEC 60730-2-2: 2001+A1:2005; EN 60730-2-2: 2002+A1 +A11 EN 60730-1: 2000+A1+A12+A13+A14+A16+A2	KEMA 2014531.07
Water level swicth	Selong Electric Co., LTD	KS-2	250 V, 16 A, 1E4 cycles, T85	EN 60730-1: 2011 EN 60730-2-6: 2008 IEC 60730-2-6: 2007 IEC 60730-1: 1999+A1: 2003+A2:2007	TÜV SÜD B 12 05 54831 009
Water level switch (alternative)	Wenzhou Tianjian Electric Co., Ltd.	KS-1	250 V, 50 Hz; 1E4 cycels, T85	EN 60730-1: 2011 EN 60730-2-6: 2008 IEC 60730-2-6: 2007 IEC 60730-1: 1999+A1: 2003+A2:2007	TÜV SÜD N8 13 03 56796 010
Water level switch (alternative)	Jinhua Hongchang Electrical Equipment Co., Ltd.	PSR0401	250 V, 16 A, 1E4 cycles, T85	EN 60730-1: 2011 EN 60730-2-6: 2008 IEC 60730-2-6: 2007 IEC 60730-1: 1999+A1: 2003+A2:2007	TÜV R 50359687
Interlock switch	Bitron S.p.A.	DL-LC	250 V, 16(6) A, T85, 1E4 cycles, PTI250	EN 60730-1: 2011 EN 60730-2-12: 2006+ A11: 2008 IEC 60730-1: 2013 + A1: 2015 IEC 60730-2-12: 2005	VDE 136625
Interlock switch (alternative)	Elettrotecnica ROLD .S.R.L	DA	250 V, 16(6) A, T85, 1E4 cycles, PTI250	IEC 60730-1: 1999+A1:2003+A2: 2007; IEC 60730-2-12: 2005 EN 60730-2-12: 2006 EN 60730-1: 2000+A1+A12+A13+A14+A16+A2	IMQ EL452

IEC 60335-2-7					
Interlock switch (alternative)	Zhejiang Selong Ele. Appliance Co., Ltd.	KM	250 V, 50 Hz, 16(6) A, 1E4 cycles, T85	EN 60730-1: 2011 EN 60730-2-12: 2006+ A11: 2008 IEC 60730-1: 2013 + A1: 2015 IEC 60730-2-12: 2005	TÜV SÜD B 11 06 54831 007
Interlock switch (alternative)	CONCORE (Wenzhou Tianjian Electric Co., Ltd.)	KM	250 V; 16(6) A; 1E4 cycels; T85	EN 60730-1: 2011 EN 60730-2-12: 2006+ A11: 2008 IEC 60730-1: 2013 + A1: 2015 IEC 60730-2-12: 2005	VDE 40020082
Drain pump	Wuxi Haoli Pumps Industrial Co., Ltd.	PX-2-35	220-240 V, 50 Hz, 35 W, Class 155	IEC/EN 60335-1 IEC/EN 60335-2-7	VDE 40021531 Tested with appliance
- winding	Yixing Novel Electrician Materials Co Ltd	QZ-x/155	Class 155	IEC/EN 60335-1 IEC/EN 60335-2-7	UL E327151 Tested with appliance
- protector	Changzhou Xindu Electronics Co., Ltd.	CW-ii	250 VAC, 6 A, Tf 85 ºC	IEC 60730-1: 1999+A1:2003+A2:2007; IEC 60730-2-2: 2001+A1:2005; EN 60730-2-2: 2002+A1 +A11 EN 60730-1: 2011	VDE 40000497
- protector (alternative)	Jiangsu Changsheng Electric Appliance Co., Ltd. (DESHENG)	18AM-B	250 VAC, Tf 85 ºC	IEC 60730-1: 1999+A1:2003+A2:2007; IEC 60730-2-2: 2001+A1:2005; EN 60730-2-2: 2002+A1 +A11 EN 60730-1: 2000+A1+A12+A13+A14+A16+A2	VDE 40022813
- protector (alternative)	Changzhou Changda Electric Appliance Co., Ltd.	KWA-085°C	250 VAC, Tf 85 ºC	IEC 60730-1: 1999+A1:2003+A2:2007; IEC 60730-2-2: 2001+A1:2005; EN 60730-2-2: 2002+A1 +A11 EN 60730-1: 2000+A1+A12+A13+A14+A16+A2	VDE 40028541

IEC 60335-2-7					
Drain pump (alternative)	Askoll (China) Motor Technologies Co., Ltd.	S3029	220-240 V, 50 Hz	IEC/EN 60335-1 IEC/EN 60335-2-7	VDE 40030937 Tested with appliance
- protector	Sensata Technologies Holland, B.V.	3MP	250 VAC, Tf 145 ºC	IEC 60730-1: 1999+A1:2003+A2:2007; IEC 60730-2-2: 2001+A1:2005; EN 60730-2-2: 2002+A1 +A11 EN 60730-1: 2000+A1+A12+A13+A14+A16+A2	KEMA 2014531.07
- protector (alternative)	Jiangsu Changsheng Electric Appliance Co., Ltd.	17AM-D-Z	250 VAC, Tf 145 ºC	IEC 60730-1: 1999+A1:2003+A2:2007; IEC 60730-2-2: 2001+A1:2005; EN 60730-2-2: 2002+A1 +A11 EN 60730-1: 2000+A1+A12+A13+A14+A16+A2	VDE 40016509
Heating element	Zhongshan Galanz Household Appliances Co., Ltd.	GA-09	230 V, 1900 W	IEC/EN 60335-1 IEC/EN 60335-2-7	Tested with appliance
- thermal link for heating element	Therm-O-Disc Europe B.V.	G4	250 V, 10 A, Tf167°C	IEC 60691: 2002+ A1:2006 +A2:2010 EN60691: 2003+A1:2007+A2: 2010	VDE 40017228
Cold water valve	Jinhua Hongchang Electrical Equipment Co., Ltd.	~~FPS~~ FPS180G1	220-240 V, 50/60 Hz, 2 x 6 W, 10E4 cycles, T70	IEC 60730-1: 1999+A1:2003+A2: 2007 IEC 60730-2-8: 2000+A1:2002 EN 60730-1: 2011 EN 60730-2-8: 2002+A1:2003	TÜV R 50288699
Cold water valve (alternative)	Zhejiang Kebo Electrical Appliances Co., Ltd.	FPS-180A	220-240 V, 50/60Hz, 2 X 6 W, 1E4 cycles, T60	IEC 60730-1: 1999+A1:2003+A2: 2007 IEC 60730-2-8: 2000+A1:2002 EN 60730-1: 2011 EN 60730-2-8: 2002+A1:2003	TÜV R 50139579

IEC 60335-2-7					
Cold water valve (alternative)	ELBI International SPA	349	220/240 V 50/60 Hz, 2 X 6 W, Class 155, T60	IEC 60730-1: 1999+A1:2003+A2: 2007 IEC 60730-2-8: 2000+A1:2002 EN 60730-1: 2000+A1+A12+A13+A14+A16+A2 EN 60730-2-8: 2002+A1:2003	IMQ EL874
Cold water valve (alternative)	ELTEK SPA	101503.63	220-240 V 50/60 Hz, 6 VA, Class H, T60	IEC 60730-1: 1999+A1:2003+A2: 2007 IEC 60730-2-8: 2000+A1:2002 EN 60730-1: 2000+A1+A12+A13+A14+A16+A2 EN 60730-2-8: 2002+A1:2003	IMQ CA02.05311
Cold water valve (alternative)	Robertshaw (China) Controls Company Limited	V-28	220-240 V 50/60 Hz, 2 X 6 W, 25E3 cycles, T70	IEC 60730-1: 1999+A1:2003+A2: 2007 IEC 60730-2-8: 2000+A1:2002 EN 60730-1: 2000+A1+A12+A13+A14+A16+A2 EN 60730-2-8: 2002+A1:2003	TÜV HN 69251830
Cold water valve (alternative)	ELTEK SPA	101503.63	220-240 V 50-60 Hz, 6 VA, Class H, Max. water pressure=1,0 MPa, T60˚C	IEC 60730-1: 1999+A1:2003+A2: 2007 IEC 60730-2-8: 2000+A1:2002 EN 60730-1: 2000+A1+A12+A13+A14+A16+A2 EN 60730-2-8: 2002+A1:2003	IMQ CA02.05311
Hose set	Wuxi Jinhua Yiyuan Technology Co., Ltd	GJS-150CX	25°C, Nominal diameter: 10 mm	IEC 61770: 2008 EN 61770: 2009	VDE 40003534
Hose set (alternative)	Zhejiang Wise Electrical Appliances Co., Ltd.	S9CC	25°C, Nominal diameter: 9 mm	IEC 61770: 2008 EN 61770: 2009	VDE 40019295
Hose set (alternative)	Zhejiang Wise Electrical Appliances Co., Ltd.	S9C	90°C, Nominal diameter: 9,5 mm	IEC 61770: 2008 EN 61770: 2009	VDE 40015797

IEC 60335-2-7					
PCB	Shengyi Technology Co Ltd	CEM-1 (S3116)	V-0	IEC/EN 60335-1 IEC/EN 60335-2-7	Tested with appliance VDE 40010780 UL E109769
PCB (alternative)	Nan Ya Plastics Corp Ccl Dept Electronic Material Div	CEM-1 (CEM-1-97)	V-0	IEC/EN 60335-1 IEC/EN 60335-2-7	Tested with appliance UL E98983
PCB (alternative)	Chang Chun Plastics Co. Ltd.	CCP-508	V-0	IEC/EN 60335-1 IEC/EN 60335-2-7	Tested with appliance VDE 004154
PCB (alternative)	**Shunde Junda Electronic Co., Ltd**	**S3110**	**V-0**	**IEC/EN 60335-1 IEC/EN 60335-2-7**	**Tested With appliance UL E173873**
PCB (alternative)	**Shunde Junda Electronic Co., Ltd**	**JD-D, JD-E**	**V-0**	**IEC/EN 60335-1 IEC/EN 60335-2-7**	**Tested With appliance UL E173873**
PCB (alternative)	**Guangdong Cengde Eectronic Tchnology Co., Ltd**	**1, 2, 4, D1, D2**	**V-0**	**IEC/EN 60335-1 IEC/EN 60335-2-7**	**Tested With appliance UL E322995**
Varistor	Walsin Technology Co., Ltd.	511K14D	510 VAC, T85	IEC 61051-1: 2007 IEC 61051-2: 1991 + A1 IEC 61051-2-2: 1991 DIN EN 61051-1: 2009	VDE 40010090
Varistor (alternative)	EPCOS OHG	S14K320	320 VAC, T85	IEC 61051-1: 2007 IEC 61051-2: 1991 + A1 IEC 61051-2-2: 1991 DIN EN 61051-1: 2009	VDE 40027582
Varistor (alternative)	EPCOS OHG	S14K350	350 VAC, T85	IEC 61051-1: 2007 IEC 61051-2: 1991 + A1 IEC 61051-2-2: 1991 DIN EN 61051-1: 2009	VDE 40027582

IEC 60335-2-7					
Varistor (alternative)	Thinking Electronic Industrial Co.,Ltd	TVR14561	560 VAC, T85	IEC 61051-1: 2007 IEC 61051-2: 1991 + A1 IEC 61051-2-2: 1991 DIN EN 61051-1: 2009	VDE 005944
Varistor (alternative)	VISHAY Resistors Belgium BVBA	2381 595 83216	320 VAC, T85	IEC 61051-1: 2007 IEC 61051-2: 1991 + A1 IEC 61051-2-2: 1991 DIN EN 61051-1: 2009	VDE 40002622
Varistor (alternative)	**Fenghua Adv. Tech. (Holding) Co., Ltd. Xianhua New Sen. Comp. & Sensor Br. Co.**	**FNR 14K561**	**560 VAC, T85**	**IEC 61051-1: 2007 IEC 61051-2: 1991 + A1 IEC 61051-2-2: 1991 DIN EN 61051-1: 2009**	**VDE 40008242**
Varistor (alternative)	**Fenghua Adv. Tech. (Holding) Co., Ltd. Xianhua New Sen. Comp. & Sensor Br. Co.**	**FNR 14K471**	**470 VAC, T85**	**IEC 61051-1: 2007 IEC 61051-2: 1991 + A1 IEC 61051-2-2: 1991 DIN EN 61051-1: 2009**	**VDE 40008242**
Varistor (alternative)	**Haohua Electronic Co.,**	**HVR 14K561**	**560 VAC, T85**	**IEC 61051-1: 2007 IEC 61051-2: 1991 + A1 IEC 61051-2-2: 1991 DIN EN 61051-1: 2009**	**VDE 40031718**
Varistor (alternative)	**Haohua Electronic Co.,**	**HVR 14K471**	**470 VAC, T85**	**IEC 61051-1: 2007 IEC 61051-2: 1991 + A1 IEC 61051-2-2: 1991 DIN EN 61051-1: 2009**	**VDE 40031718**

IEC 60335-2-7					
Varistor (alternative)	**Centra Science Corp**	**CNR 14D561K**	**560 VAC, T85**	**IEC 61051-1: 2007 IEC 61051-2: 1991 + A1 IEC 61051-2-2: 1991 DIN EN 61051-1: 2009**	**VDE 40008220**
Varistor (alternative)	**Centra Science Corp**	**CNR 14D471K**	**470 VAC, T85**	**IEC 61051-1: 2007 IEC 61051-2: 1991 + A1 IEC 61051-2-2: 1991 DIN EN 61051-1: 2009**	**VDE 40008220**
Varistor (alternative)	**Haohua Electronic Co**	**HVR 14K621**	**620V, T85**	**IEC 61051-1: 2007 IEC 61051-2: 1991 + A1 IEC 61051-2-2: 1991 DIN EN 61051-1: 2009**	**VDE 40031718**
X2 capacitor	**WINDAY ELECTRONIC (DONG GUAN) CO., LTD**	**MPX**	**275VAC;0,1uF/0,01uF; T85**	**IEC 60384-14: 2013 + A1: 2016 EN 60384-14: 2013 + A1: 2016**	**VDE 40018071**
X2 capacitor (alternative)	**Foshan Shunde Beijiao Hua Da Electric Industrial Co., Ltd.**	**HD-MKP**	**275 V, 0,01 uF / 0,1 uF, T105 or T85**	**IEC 60384-14: 2013 + A1: 2016 EN 60384-14: 2013 + A1: 2016**	**VDE 40027182**
X2 capacitor (alternative)	**Foshan Shunde Beijiao Hua Da Electric Industrial Co., Ltd.**	**HD**	**275 V, 0,01 uF / 0,1 uF, T105 or T85**	**IEC 60384-14: 2013 + A1: 2016 EN 60384-14: 2013 + A1: 2016**	**VDE 40027182**
X2 capacitor (alternative)	**Shenzhen Su Rong Capacitors Co., Ltd.**	**MPX/MKP**	**280 VAC; 0,1uF/0,01uF; T100**	**IEC 60384-14: 2013 + A1: 2016 EN 60384-14: 2013 + A1: 2016**	**VDE 40008924**
X2 capacitor (alternative)	**GUANGDONG FENGMING ELECTRONIC TECH. CO., LTD.**	**MKP-X2**	**275VAC; 0,1uF/0,01uF; T105**	**IEC 60384-14: 2013 + A1: 2016 EN 60384-14: 2013 + A1: 2016**	**VDE 40025702**
Relay	Xiamen Hongfa Electroacoustics Co., Ltd.	HF3FD-012-Z3F	250 VAC, 10 A, 12 VDC, 1E4 cycles, T85	IEC 61810-1: 2015 EN 61810-1: 2015	VDE 40014057
Relay (alternative)	Song Chuan Precision Co., Ltd.	899-1CH-F-C	250 VAC, 10 A, 12 VDC, 5E4 cycles, T85	IEC 61810-1: 2015 EN 61810-1: 2015	VDE 40012174

IEC 60335-2-7					
Relay (alternative)	Xiamen Hongfa Electroacoustics Co., Ltd.	HF3FA-012-ZTF	250 VAC, 10 A, 12 VDC, 1E4 cycles, T85	IEC 61810-1: 2015 EN 61810-1: 2015	VDE 40023708
Relay (alternative)	Dongguan Sanyou Electrical Appliances Co., Ltd.	SRD-S-112D2	250 VAC, 10 A, 12 VDC, 1E5 cycles, T105	IEC 61810-1: 2015 EN 61810-1: 2015	VDE 40034479
Relay (alternative)	Dongguan Sanyou Electrical Appliances Co., Ltd.	SRD-S-112D2-F-C1	250 VAC, 10 A, 12 VDC, 1E5 cycles, T105	IEC 61810-1: 2015 EN 61810-1: 2015	VDE 40034479
Relay (alternative)	**Xiamen Hongfa Electroacoustic Co., Ltd.**	**HF3FD 012-Z3F**	**250VAC; 10 A; 12 VDC; T85**	**IEC 61810-1: 2015 EN 61810-1: 2015**	**VDE 40014057**
Relay (alternative)	**NINGBO TIANBO GANGLIAN ELECTRONICS CO., LTD.**	**HJR-21FF-S-Z**	**240 VAC; 10 A; 12 VDC; T85**	**IEC 61810-1: 2015 EN 61810-1: 2015**	**TUV R50116165**
Relay (alternative)	**Tyco Electronics (Shenzhen) Co., Ltd.**	**OJE-SS-112HMF**	**250 VAC; 10 A; 12 VDC; T85**	**IEC 61810-1: 2015 EN 61810-1: 2015**	**TUV R50139166**
Relay (alternative)	**Xiamen Hongfa Electroacoustic Co., Ltd.**	**HF32FV-T-12-HTF**	**250 VAC, 10 A, 12 VDC; T85**	**IEC 61810-1: 2015 EN 61810-1: 2015**	**VDE 40012204**
Supplementary information: [1]) Provided evidence ensures the agreed level of compliance. See OD-CB2039.					

29.1	**TABLE: Clearances**					P
	Overvoltage category .... :			II		—
		Type of insulation:				
Rated impulse voltage (V):	Min. cl (mm)	Basic (mm)	Supplementary (mm)	Reinforced (mm)	Functional (mm)	Verdict / Remark
330	0,2* / 0,5 / 0,8**	—	—	—	—	N/A
500	0,2* / 0,5 / 0,8**	—	—	—	—	N/A
800	0,2* / 0,5 / 0,8**	—	—	—	—	N/A
1 500	0,5 / 0,8** / 1,0***	—	—	—	—	N/A
2 500	**1,5 / 2,0*** **	—	—	—	F1	P
4 000	3,0 / 3,5***	—	—	—	—	N/A
6 000	5,5 / 6,0***	—	—	—	—	N/A
8 000	8,0 / 8,5***	—	—	—	—	N/A
10 000	11,0 / 11,5***	—	—	—	—	N/A

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Supplementary information:

*) For tracks on printed circuit boards if pollution degree 1 and 2
**) For pollution degree 3
***) If the construction is affected by wear, distortion, movement of the parts or during assembly
F1: between L and N poles on PCB: 2,6 mm

29.2	**TABLE: Creepage distances, functional insulation**							P
Working voltage (V)	Creepage distance (mm) Pollution degree							
	1	2			3			
		Material group			Material group			
		I	II	IIIa/IIIb	I	II	IIIa/IIIb*)	Verdict / Remark
≤10	0,08	0,4	0,4	0,4	1,0	1,0	1,0	N/A
50	0,16	0,56	0,8	1,0	1,4	1,6	1,8	N/A
125	0,25	0,71	1,0	1,4	1,8	2,0	2,2	N/A
250	0,42	1,0	1,4	2,0	2,5	2,8	**3,2**	P (F1)
400	0,75	1,6	2,2	3,2	4,0	4,5	5,0	N/A
500	1,0	2,0	2,8	4,0	5,0	5,6	6,3	N/A
>630 and ≤800	1,8	3,2	4,5	6,3	8,0	9,0	10,0	N/A
>800 and ≤1000	2,4	4,0	5,6	8,0	10,0	11,0	12,5	N/A
>1000 and ≤1250	3,2	5,0	7,1	10,0	12,5	14,0	16,0	N/A
>1250 and ≤1600	4,2	6,3	9,0	12,5	16,0	18,0	20,0	N/A
>1600 and ≤2000	5,6	8,0	11,0	16,0	20,0	22,0	25,0	N/A
>2000 and ≤2500	7,5	10,0	14,0	20,0	25,0	28,0	32,0	N/A
>2500 and ≤3200	10,0	12,5	18,0	25,0	32,0	36,0	40,0	N/A
>3200 and ≤4000	12,5	16,0	22,0	32,0	40,0	45,0	50,0	N/A
>4000 and ≤5000	16,0	20,0	28,0	40,0	50,0	56,0	63,0	N/A
>5000 and ≤6300	20,0	25,0	36,0	50,0	63,0	71,0	80,0	N/A
>6300 and ≤8000	25,0	32,0	45,0	63,0	80,0	90,0	100,0	N/A
>8000 and ≤10000	32,0	40,0	56,0	80,0	100,0	110,0	125,0	N/A
>10000 and ≤12500	40,0	50,0	71,0	100,0	125,0	140,0	160,0	N/A

Supplementary information:

*) Material group IIIb is allowed if the working voltage does not exceed 50 V
F1: between L and N poles on PCB: 3,3 mm

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30	**TABLE: Resistance to heat and fire**																			
Object/ part No.	Manufacturer/ trademark	Type/ model	Ball pressure test °C				Glow wire test (GWT) °C						Glow-wire flammability index (GWFI) °C				Glow-wire ignition temp. (GWIT) °C		Needle - flame test (NFT)	Verdict
			75	125	cl. 11 +40	cl. 19 +25	550	650		750		850	550	650	750	850	675	775		
								t_e	t_i	t_e	t_i									
Terminal of main board	Guangdong Galanz Enterprises Co., Ltd.	—		1,04 mm						0s	0s	x								P
Relay*	Xiamen Hongfa Electroacoustic Co., Ltd.	HF3FD 012-Z3F								0s	0s	x								P
X2 capacitor*	WINDAY ELECTRONIC (DONG GUAN) CO., LTD	MPX						0s	0s											P

Supplementary information: * Only the unfavourable result for this component was displayed.

[1] Parts of material classified at least HB40 or if relevant HBF

[2] Parts of material classified as V-0 or V-1

[3] Flame persisting longer than 2 s (= $t_e - t_i$) need only be reported for unattended appliances

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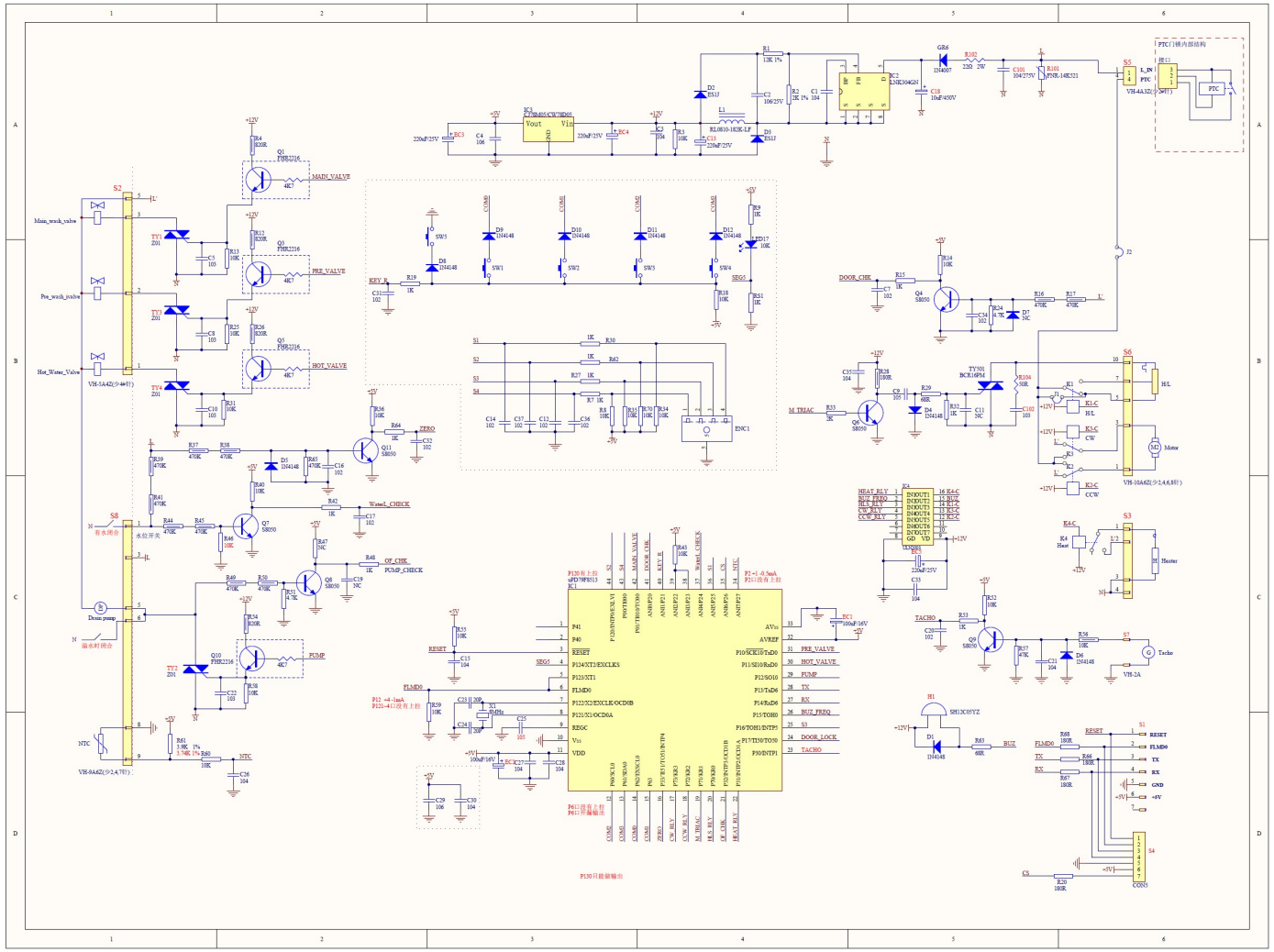
[4] Surrounding parts subjected to the needle-flame test of annex E
[5] Base material classified as V-0 or if relevant VTM-0
[6] The GWIT pre-selection option, the 850 °C GWFI pre-selection option, and the 850 °C GWT are not applicable for attended appliances

---End of report---

Circuit diagram for new main board



--- End of Attachment 2 ---

Attachment 3: Photo documentation
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Type of equipment, model: Washing Machine:
XQG90-T514E, XQG90-T512E, XQG80-T514E, XQG80-T512E

Details of: Main board view (alternative)

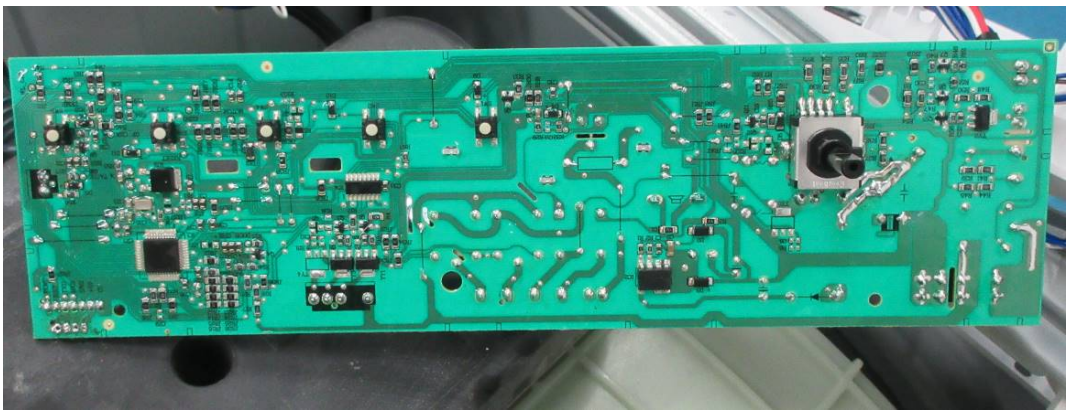
View:

- ☐ general
- ☐ front
- ☐ rear
- ☐ right
- ☐ left
- ☐ top
- ☐ bottom

Details of: Main board view (alternative)

View:

- ☐ general
- ☐ front
- ☐ rear
- ☐ right
- ☐ left
- ☐ top
- ☐ bottom



---- End of Attachment 3---

EN 60335-1: 2012 /A13: 2017			
Clause	Requirement - Test	Result - Remark	Verdict

ATTACHMENT TO TEST REPORT EN 60335-1
Household and similar electrical appliances – Safety –
Part 1: General requirements

Differences according to.....:	**EN 60335-1: 2012 /A13: 2017**
Attachment Form No. .....:	EN 60335_1
Attachment Originator .....:	SGS-CSTC
Master Attachment .....:	Date 2018-01

Annex ZC	Replace Annex ZC of EN 60335-1:2012	P
Replace Annex ZZ of EN 60335-1:2012 with Annex ZZA& ZZB		**P**
Annex ZZA	(informative) Relationship between this European standard and the safety objectives of Directive 2014/35/EU [2014 OJ L96] aimed to be covered	P
Annex ZZB	(informative) Relationship between this European standard and the essential requirements of Directive 2006/42/EC aimed to be covered	P

--End of this Attachment 5--