

IEC60335_1W – ATTACHMENT			
Clause	Requirement + Test	Result - Remark	Verdict

ATTACHMENT TO TEST REPORT IEC 60335-1 (AUSTRALIA / NEW ZEALAND) NATIONAL DIFFERENCES (Household and similar electrical appliances – Safety – Part 1: GENERAL REQUIREMENTS)	
Differences according to.....:	AS/NZS 60335.1:2011 + A1:2012 + A2:2014 + A3:2015+A4:2017+A5:2019
Attachment Form No.....:	AU_NZ_ND_IEC60335_1W
Attachment Originator	NZ Electrotechnical Committee/Standards New Zealand
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IEC60335_1W – ATTACHMENT			
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	National Differences		--
5	GENERAL CONDITIONS FOR THE TESTS		--
5.8.1	Test at a.c. 50Hz for a.c. only appliance		P
	Test at a.c. 50Hz or d.c., whichever is the more unfavourable supply for a.c. and d.c. appliance		N/A
6	CLASSIFICATION		--
6.1	Protection against electric shock: Class I,II,III	Class II	P
7	MARKING AND INSTRUCTIONS		--
7.1	After the first paragraph of the requirement insert the following variation:		--
	Appliances intended for connection to the supply mains, other than class III appliances, shall be marked with:		--
	- a rated voltage of at least: 230 V for single-phase appliances; 400 V for poly-phase appliances; or		N/A
	- a rated voltage range that includes: 230 V for single-phase appliances; 400 V for poly-phase appliances.		P
	For appliances outlets and socket outlets accessible to the user that are incorporated in appliances connected to the supply mains; and		N/A
	- that operate at rated voltage;		N/A
	the appliances shall be marked with their maximum outlet load in Watts.		N/A
7.13	Replace the requirement with the following variation:		--
	Instructions and other text required by this standard are written in English.		P
7.15	After the last paragraph of the requirement insert the following variation:		--
	The marking of the maximum outlet load shall be close to the appliance outlet or socket outlet.		N/A
10	POWER INPUT AND CURRENT		--
10.1	After the last paragraph of the test specification insert the following variation:		--
	Appliance outlets and socket outlets accessible to the user that are incorporated in appliances connected to the supply mains; and		N/A
	that operate at rated voltage;		N/A
	are not loaded during the test, however their contribution to the power input is considered to be the marked outlet load per appliance outlet or socket-outlet.		N/A

IEC60335_1W – ATTACHMENT			
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11	HEATING		--
11.7	After the first paragraph of the test specification insert the following variation:		--
	Appliance outlets and socket outlets accessible to the user are loaded with a resistive load that gives the marked outlet load in watts.		N/A
11.8	After the first paragraph of the test specification insert the following variation:		--
	The pins of plug connectors inserted into appliance outlets accessible to the user and plugs inserted into socket outlets accessible to the user shall have a temperature rise not exceeding 45 K.		N/A
19	ABNORMAL OPERATION		--
19.13	After the seventh paragraph of the test specification insert the following variation:		--
	During and after the tests the no-load output voltage of an accessible safety extra-low voltage outlet or connector or Universal Serial Bus (USB) outlet shall not have increased by more than 3 V or 10% of its no-load output voltage in normal use, which is higher.		N/A
22	CONSTRUCTION		--
22.2	After the first paragraph of the requirement insert the following variation:		--
	For stationary appliances permanently connected to the fixed wiring, compliance with this requirement is considered to be met if the instruction concerning disconnection incorporated in the fixed wiring is in accordance with AS/NZS 3000.		N/A
22.3	Replace the first paragraph of the test specification with the following variation:		--
	Compliance is checked by inserting the pins of the appliance into a socket-outlet capable of accepting a plug complying with Figure 2.1(a) of AS/NZS 3112.		N/A
	The socket-outlet has a horizontal pivot at a distance of 8 mm behind the engagement face of the socket-outlet and in the plane of the lower intersection of the centre lines of the contact apertures.		N/A
	Replace the third, fourth and fifth paragraphs of the test specification with the following variation:		--
	A new sample of the appliance shall be subjected to and shall comply with the tests in 2.13.9.2 of AS/NZS 3112.		N/A
22.33	Delete the last sentence of the first paragraph of the requirement and introduce it as a new first paragraph of the requirement.		N/A

IEC60335_1W – ATTACHMENT			
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22.201	Appliances having integral pins for insertion into socket outlets shall comply with the appropriate requirements of AS/NZS 3112.		N/A
	Compliance is checked as specified in Annex J of AS/NZS 3112		N/A
22.202	Appliance outlets and socket outlets accessible to the user that are incorporated in appliances connected to the supply mains; and		N/A
	that operate at rated voltage		N/A
	shall be single-phase and have a current rating not exceeding 16 A.		N/A
	The socket outlets shall comply with AS/NZS 3112;		N/A
	accept a 3-pin, flat-pin plug as described in figure 2.1(a1) of AS/NZS 3112.		N/A
	The appliance outlets and socket outlets shall be protected by one of the following protection devices that has a current rating not exceeding the current rating of the appliance outlet or socket-outlet:		--
	- a circuit breaker for equipment complying with IEC 60934;		N/A
	- a manually resettable trip-free or cycling trip-free overcurrent protection device;		N/A
	- a non-user replaceable fuse-link.		N/A
	The protection device shall be placed behind a non-detachable cover. The actuating member of the circuit breaker and the manually resettable protection device may be accessible.		N/A
	The current rating of the appliance outlets and socket outlets is obtained from the marked outlet load in watts divided by the rated voltage.		N/A
	Compliance is checked by inspection and for a manually resettable trip-free or cycling trip-free overcurrent protection device by the following tests:		--
	The device shall be operated at rated voltage at 136% of its current rating, in an ambient temperature of 23°C ± 2°C in a draught-free environment.		N/A
	The device shall operate to interrupt the current within 2 h.		N/A
	The device shall be operated at rated voltage at 600% of its current rating in an ambient temperature of 23°C ± 2°C in a draught-free environment		N/A
	The device shall operate to interrupt the current within 5 s.		N/A

IEC60335_1W – ATTACHMENT			
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	Immediately following the overcurrent tests, the test of clause 16.3 shall be applied, and the device shall comply with the specified requirements of the test.		N/A
	The device shall comply with the ball pressure test of 30.1 carried out at 160 °C.		N/A
	The device shall comply with the glow-wire test of 30.2.3.1 with a test severity of 960 °C.		N/A
25	SUPPLY CONNECTION AND EXTERNAL FLEXIBLE CORDS		
25.1	Supply cords for single-phase portable appliances intended for direct connection to the supply mains, shall be fitted with an appropriate plug complying with AS/NZS 3112.		P
	SPECIAL NATIONAL CONDITIONS		P
	Australian		P
5.201	For appliances, other than class III appliances, that are intended for connections to the supply mains and that are not marked with:		--
	- a rated voltage of at least 240 V for single-phase appliances and at least 415 V for three-phase appliances, or		N/A
	- a rated voltage range that includes 240 V for single-phase appliances and 415 V for three-phase appliances,		N/A
	the rated voltage is equal to 240 V for single-phase appliances and 415 V for three phase appliances,		N/A
	and the upper limit of the rated voltage range is equal to 240 V for single-phase appliances and 415V for three-phase appliances.		N/A
	In addition, the rated current or rated power input is equal to the calculated value corresponding to 240 V for single-phase appliances and 415 V for three-phase appliances as appropriate		N/A
24.1.7	Telecommunication interface circuitry must comply with the Telecom Labeling Notice issued under the Telecommunications Act instead of IEC 62151		N/A

IEC60335_1W – ATTACHMENT			
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24.1	TABLE: Critical components information					P
Object / part No.	Manufacturer/ trademark	Type / model	Technical data	Standard	Mark(s) of conformity ¹⁾	
Australia power cord (length< 2 m)	Xiamen Runfa Cable Co., Ltd.	H03VVH2-F	2 x 0,5 mm ²	AS 3191	NSW 28091	
Alternative	Ningbo Light-Heavy Electronics Technology Co., Ltd.	H03VVH2-F	2 x 0,5 mm ²	AS 3191	NSW 20288	
Alternative	Fund Resources Electric Industry Co., Ltd.	H03VVH2-F	2 x 0,5 mm ²	AS 3191	SAA101003E A	
Alternative	Wuxi Zhonghui Wire & Cable Co., Ltd	H03VVH2-F	2 x 0,5 mm ²	AS 3191	ESV170371	
Australia plug	Xiamen Runfa Cable Co., Ltd.	RP-009	250 V, 7,5/10 A	AS/NZS 3112	NSW 28063	
Alternative	Friendship Enterprises International Ltd.	FE-104P	250 V, 3/7,5 A	AS/NZS 3112	NSW 24571	
Alternative	Fund Resources Electric Industry Co., Ltd.	SP-501J	250 V, 7,5 A	AS/NZS 3112	SAA110201E A	
Alternative	Wuxi Zhonghui Wire & Cable Co., Ltd	ZH-41D	250 V, 7,5 A	AS/NZS 3112	ESO170514	
Y2 capacitor	Jyh Chung Electronic Co., Ltd.	JY	300 Vac, 1000 pF	IEC/EN 60384-14	VDE 123326	
Alternative	Ease Electronics Co., Ltd.	SY	250 Vac, 1000 pF	IEC/EN 60384-14	VDE 40021868	
Alternative	Dongguan QinHong (QNR) Electronic Technology Co., Ltd.	CT7 series	300 Vac, 1000 pF	IEC/EN 60384-14	VDE 40046285	
X2 capacitor	Tenta Electric Industry Co., Ltd.	MEX	275 Vac, X2; 0,1µF; T100	IEC/EN 60384-14	VDE 119119	
Alternative	Dain Electronics Co., Ltd.	MPX	275 Vac, X2; 0,1µF; T110	IEC/EN 60384-14	VDE 40018798	

IEC60335_1W – ATTACHMENT					
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Alternative	Carli Electronics Co., Ltd	MPX	275 Vac, X2; 0,1μF; T100	IEC/EN 60384-14	VDE 40008520
Alternative	Xiamen Wanming Electronics Co., Ltd.	MPX	275 Vac, X2; 0,1μF; T110	IEC/EN 60384-14	VDE 40023119
Alternative	Jimson Electronics (Xiamen) Co., Ltd.	MKP	275 Vac, X2; 0,1μF; T100	IEC/EN 60384-14	VDE 40000463
Switch	Zhejiang Zhongxun Electronics Co., Ltd.	KCD1	250 Vac; 10 A; 1E4; T85	IEC/EN 61058	VDE 40025514
Alternative	Zhejiang Zhongxun Electronics Co., Ltd.	KCD1-B4	250 Vac; 10(6) A; 1E4; T105	IEC/EN 61058	TUV R 50250555
Alternative	Zhejiang Leci Electronics Co., Ltd.	RS601	250 Vac; 6(4) A; 1E4; T85	IEC/EN 61058	VDE 40017430
Internal wire	SHENZHEN DONG JU WIRE&CABLE CO., LTD.	1015	22 AWG, 105 °C	IEC/EN 60335-1	UL E189674 & Test with appliance
Alternative	QIFURUI Electronics Co.	1015	22 AWG, 105 °C	IEC/EN 60335-1	UL E211048 & Test with appliance
Alternative	Shenzhen HengLiDe Electricity Co., Ltd	1015	22 AWG, 105 °C	IEC/EN 60335-1	UL E256832 & Test with appliance
Alternative	Ningbo Light-Heavy Electronics Technology Co., Ltd	1015	22 AWG, 105 °C	IEC/EN 60335-1	UL E302443 & Test with appliance
Alternative	Xiamen Yihetai Cable Co., Ltd	1015	22 AWG, 105 °C	IEC/EN 60335-1	UL E241406 & Test with appliance
Alternative	Xiamen Xinyitai Electronics Co., Ltd.	1015	22 AWG, 105 °C	IEC/EN 60335-1	UL E342112 & Test with appliance

IEC60335_1W – ATTACHMENT					
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Motor	Shenzhen Keli Motor Ltd	HC5410M230	Class 130 At 22,4 °C Winding of stator: 32,09 Ω Winding of rotor: 71,0 Ω	IEC/EN 60335-1	Tested with appliance
Thermal link	Zhangzhou Aupo Electronics Ltd.	P2-F	250 Vac; 2 A; 115 °C	IEC/EN 60691	VDE 40000032
Enclosure	GOLEADER INDUSTRIES (JINHUA)CO.,LTD	PP	Min. thickness: 2mm	IEC/EN 60335-1	Tested with appliance
Supplementary information:					
1) Provided evidence ensures the agreed level of compliance. See OD-CB2039.					

IEC60335_1W – ATTACHMENT			
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30.2	TABLE: Resistance to heat and fire - Glow wire tests							P
Object/ Part No./ Material	Manufacturer / trademark	Glow wire test (GWT); (°C)						Verdict
		550	650		750		850	
			te	ti	te	ti		
Plastic enclosure	See table 24.1	X	--	--	--	--	--	P
Brush holder	See table 24.1	X	--	--	--	--	--	P
Motor bobbin	See table 24.1	X	--	--	--	--	--	P
Switch	See table 24.1	X	--	--	--	--	--	P
X2 capacitor	See table 24.1	X	--	--	--	--	--	P
Y2 capacitor	See table 24.1	X	--	--	--	--	--	P
Object/ Part No./ Material	Manufacturer / trademark	Glow-wire flammability index (GWFI), °C				GW ignition temp. (GWIT), °C		Verdict
		550	650	750	850	675	775	
--	--	--	--	--	--	--	--	--
The test specimen passed the glow wire test (GWT) with no ignition [(te – ti) ≤ 2s] (Yes/No) :								Yes
If no, then surrounding parts passed the needle-flame test of annex E (Yes/No) :								N/A
The test specimen passed the test by virtue of most of the flaming material being withdrawn with the glow-wire (Yes/No)?..... :								No
Ignition of the specified layer placed underneath the test specimen (Yes/No) :								No
Supplementary information:								
- 550 °C GWT not relevant (or applicable) to parts of material classified at least HB40 or if relevant HBF								
- The GWIT pre-selection option, the 850 °C GWFI pre-selection option, and the 850 °C GWT are not relevant (or applicable) for attended appliances								

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