

Test report

Number: T211-0108/20 M1
Project file: C20193326
Date: 2020-03-10
Pages: 23

Product: Exchangeable AUS plug part of GT-41076 power supply

Type reference: Q-SAA

Ratings: Input data of appliance: 100-240 V~; 50-60 Hz; up to 0,3 A

Trademark: /

Applicant: GlobTek, Inc.
186 Veterans Dr. Northvale, NJ 07647, USA

Manufacturer: GlobTek (Suzhou) Co. Ltd.
Building 4, No. 76 JinLing East Road, Suzhou Industrial Park, Suzhou
JiangSu, 215021, China

Place of manufacture: See next page

Summary of testing

Testing method: Dimensions and safety:
AS/NZS 3112:2017 (Annex J)

Testing location: SIQ Ljubljana, Mašera-Spasičeva ulica 10, SI-1000 Ljubljana, Slovenia

Remarks: Date of receipt of test items: (2019-12-01)
Number of items tested: 10
Date of performance of tests: (2020-01-06) – (2020-02-11)
The test results presented in this report relate only to the items tested.
The product complies with the requirements of the testing methods.

Tested by: Tibor Kokelj

Approved by: Tomaž Knez

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1. IDENTIFICATION (example)



2. FACTORY LOCATIONS

- GlobTek, Inc. 186 Veterans Dr. Northvale, NJ 07647, USA
- GlobTek (Suzhou) Co. Ltd. Building 4, No. 76 JinLing East Road, Suzhou Industrial Park, Suzhou JiangSu, 215021, China
- Shenzhen Eng Electronics Co., Ltd. Block B, Nuclear Group Industrial District, Baishixia, Fuyun Town, Bao'an, Shenzhen, China

3. AS/NZS 3112:2017 EVALUATION

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)

History sheet			
Report No.	Date	Change	Revision No.
T211-0108/20	2020-02-18	Initial Test Report issued.	--
T211-0108/20 M1	2020-03-10	Modified type designation and applicant.	1.0

AS/NZS 3112:2017 Annex J Plugs and Socket outlets			
Clause	Requirement – Test	Result – Remark	Verdict

J	APPENDIX J: EQUIPMENT WITH INTEGRAL PINS FOR INSERTION INTO SOCKET – OUTLETS		P
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J1	Scope		Noted
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J2	DEFINITIONS		P
J2.1	Detachable plug portion	Type B	—
J2.2	Integral plug portion		N/A
J2.3	Plug portion		P
J3	REQUIREMENTS FOR PLUG PORTION		
J3.1	General		P
a)	For detachable plug portions intended for connection to the equipment in multiple orientations, the relevant tests are performed in the most onerous orientation.		P
b)	For Type A detachable plug portion, the relevant requirements of AS/NZS 3105 are applicable, in addition to conformance with relevant clauses of this Appendix		N/A
c)	For Type B detachable plug portions, the conformance is shown by the relevant clauses of this Appendix.		P
d)	For Type C detachable plug portions, conformance is shown by assessment to Section 2 of this Standard (plugs) and relevant clauses of this Appendix.		N/A
J3.2	Plug pins of plug portions		P

2.2	PLUG PINS		P
2.2.1	Material for pins Current-carrying parts of plug pins shall be of metal with, under the conditions occurring in the plug, sufficient mechanical strength, electrical conductivity and resistance to corrosion adequate for their intended use. Compliance is checked by inspection and, where in doubt, by chemical analysis.		P
	Plug pin material	(b)	P
2.2.2	Assembly of pins Pins that may become detachable from plug yet remain attached to cord conductors, not possible for plug to be assembled in correct manner.	No detachable pins and no cord.	N/A
	Plugs made of resilient insulation material; pins and terminals held securely in position	See also the material description in the list of safety critical components	P

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Clause	Requirement – Test	Result – Remark	Verdict
2.2.3	Form of pin The plug pins shall be adequately proportioned throughout, and the portion adjacent to the connection shall be designed to not introduce a stress concentration which may lead to a fracture of the pin, and shall be suitably shaped to prevent abrasion or cutting of conductor strands due to flexure in normal use.		P
	The exposed ends of plug pins shall have a bevel or radius to facilitate entry into socket- outlets and to operate shutters.	Tested, no sharp edges Figure 2.1, shape (h)	P
	Contact portion of the pins smooth and free from openings or indentations	No openings	P
	Flat pin plugs having a longitudinal seam or opening in the contact portion of one face; width not exceeding 0,3 mm		N/A
	Exposed portion of earthing pins and pins other than insulated pins free from any non-metallic covering or coatings.	Without earthing pin, both pins insulated	N/A
2.2.4	Insulation of plug pins Live parts of insulated pin plugs not exposed when plug is partially or fully engaged with associated socket		P
	Compliance by measurement to Figure 2.4	See appended table	P
	Lacquer, enamelled or sprayed insulating coating not considered to be insulated material	No Lacquer used	P
	Plugs up to 15 A complying with Figure 2.1 (a2) , 2.1 (b) or 2.1 (fg) (flat live pins) and of the insulated pin type need not comply with the R20.0 +/- 1 mm requirement of Figure 2.1 (e)		P
	All live pins on low voltage plugs except for those shown in Figure 2.1 (a2) , (b), and (g) of the insulated pin type	Both pins are insulated	P
	Colour green/ Yellow or Green not used for insulation of insulated pins		N/A
J.3.3	Ratings and dimensions for low voltage plug portions		P
	The requirements of Clauses 2.8.1 and 2.8.4 are applicable for ratings and dimensions		P
2.8.1	Low voltage flat- pin plugs and low voltage plugs having one round earth pin and two flat earth pin or two round live pins and one flat earth pin, having ratings up to and including 20 A; compliance with Figure 2.1	See enclosed test results	P
	Rating of Plug	10 A (nominal)	P
	Nominal dimensions covering disposition of pins checked by gauge of Appendix A		P
	Distance between live pin and edge of moulding to not less 9 mm.		P

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Clause	Requirement – Test	Result – Remark	Verdict
	Measured distance	> 11 mm	P
	No point of plug face protrudes more than 0,5 mm		P
	Measured protrusion	0 mm (flat surface, without moulding irregularities or markings)	P
2.8.4	Low voltage plugs comply with the dimension of Figure 2.1	(see appended table 2.8.1)	P
	Disposition of pins checked by gauge complying with Appendix A, B or F as appropriate.	Gauge A1 (10 A, 250 V, three-pin flat-pin plugs)	P
	Low voltage plug having rating up to 15 A and of the Figure 2.1 (a1) , (c), (d) , (f) or (g) type ; comply with dimensional requirements of Figure 2.1 (e1 and e2)		P
	20 A plugs of the Figure 2.1 (a2) type shall comply with the dimensional requirements of Figure 2.1(e2).		N/A
	Plugs with insulated pins need not comply with dimension R20.0 +/- 1 mm requirement of Figure 2.1 (e)		P
J3.4	Internal connections for plug portions		P
	Requirements of Clause 2.9 apply for internal connections; unless		N/A
	Requirements contained in the relevant product Standard	To be evaluated within final product testing	N/A
2.9	INTERNAL CONNECTIONS		N/A
	Plug provided with earthed connections designed and constructed so, that when plug is correctly wired and assembled:		N/A
a)	a loose terminal screw or conductive material cannot bridge any live parts or earthing parts;		N/A
b)	the earthing parts are effectively isolated from contact with a live conductor that may become detached; and		N/A
c)	the live parts are effectively isolated from contact with any earthing conductor that may become detached.		N/A
	Any connections for auxiliary devices, such as radio interference suppressors or visual indicators, shall comply with the above requirements.		N/A
J3.5	Arrangement of earthing connection for plug portion		N/A
	Requirements of clause 2.10 apply for arrangement of earthed connections	No earth connection	N/A

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Clause	Requirement – Test	Result – Remark	Verdict
J3.6	Configuration of plug portions		P
	Requirements of clause 2.12.6 apply for configuration of the plug portion		P
2.12.6	Configuration of plugs		P
	Pins disposed so that configuration, as viewed from the pins, is earth, neutral and active in a clockwise direction.	Non-rewirable plug, without earthing	P
J4	TESTS		P
J4.1	General		P
	Plug portions of equipment with integral pins shall be subjected to the following tests and unless stated otherwise, shall comply with the requirements specified in Section 2 for each test. The number of test samples shall be in accordance with Table 2.2.		P
	Conformance for detachable plug portions shall be established by assessment with the plug portion fully assembled with the equipment.	Assesment together with power supply GT-41076	P
J.4.2	High voltage test		P
	The requirements of Clause 2.13.3 are applicable unless requirements are contained in the relevant product standard		P
2.13.3	High voltage test		P
	The plug shall withstand without failure an a.c. voltage of the value indicated in Table 2.3, applied between the parts set out in Items (a) and (c) of Clause 2.13.2 for 1 min in each case.	(see appended table)	P
	The plug shall further withstand, without failure, a voltage of 3000 V a.c. applied between the parts set out in Items (b) and (d) of Clause 2.13.2 for 1 min in each case.		P
	The insulation of insulated pin plugs shall withstand a voltage of 1250 V a.c. for 1 min applied in accordance with Clause 2.13.2(e)		P
J4.3	Mechanical strength of pin test		P
J4.3.1	Tumbling barrel test	No cracks of pins	P
2.13.7	Mechanical strength of pin tests		P
2.13.7.1	Tumbling barrel test	< 250 g; 500 x No damage	P

AS/NZS 3112:2017 Annex J Plugs and Socket outlets			
Clause	Requirement – Test	Result – Remark	Verdict
	Following each test the samples shall comply with Clause 2.13.7.1		
J4.3.2	Pin Bending Test		P
	The pins of the plug portion of three samples not subjected to any of previous tests shall be tested for conformance with the pin bending test of Clause 2.13.7.2		P
2.13.7.2	Pin Bending Test	Pins did not break off after 20 operations.	F
J4.4	Temperature rise test		P
	The relevant requirements of Clause 2.13.8 are applicable for the temperature rise test, except that the test current shall be that specified in the relevant product standard.		P
	Test current	Measured with following power supply: GT-41076	P
	Temperature rise of the pins shall not exceed 45 K irrespective of the temperature rise of parts specified in end-product standard	Max. 8 K	P
	For detachable plug portions the temperature rise of terminals and contacts shall not exceed 45 K	See appended table	P
J4.5	Securement of pins of the plug portion		P
	Requirements of Clause 2.13.9 are applicable for securement of pins		P
2.13.9	Securement of Pins		P
2.13.9.1	Movement of pins		P
	Plug pins clamped 5 +/- 0,5 mm from pin face; test equipment and sample pre-conditioned for 1 h at 40 +/- 1 °C		P
	Force of 18 +/- 1 N applied to pin 14 +/- 0,5 mm from plug face ; applied gradually over 10 sec and maintained for 10 sec, applied in four directions.		P
	Maximum deflection during test not exceeding 2,0 mm		P
	Any distortion 5 minutes after test does not prevent insertion of plugs into standard gauge (s)		P
2.13.9.2	Fixing of pins		P
	Plug heating to 50 +/- 2 °C for 1 h		P
	Force 60 +/- 0,6 N applied to each pin over 10 sec. And maintained for 10 minutes; applied in two directions along the length of pins		P

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Clause	Requirement – Test	Result – Remark	Verdict
	Maximum displacement during test not exceeding 2,4 mm		P
	Maximum measured displacement	Max. 0,1 mm	P
	Pin returns to within 0,8 mm of nominal length within 5 minutes of removal of the test force		P
J4.6	Tests for insulation material of insulated pin-plug portions		P
	Requirements of Clause 2.13.13 are applicable for insulating material of insulated pins.		P
2.13.13	Tests for insulation material of insulated pins		P
2.13.13.1	The material of the pin insulation shall be resistant to the stresses to which it may be subjected at the high temperature likely to occur in conditions approaching the bad connection conditions and at low temperatures in particular conditions of service. Conformance is checked by the tests of Clauses 2.13.13.2 to 2.13.13.6.		P
2.13.13.2	Pressure test at high temperature		P
	Specimen tested as per Figure 2.5 with force of 2,5 N applied as specified; maintained for 2 h at 160 °C +/- 5 °C removed and cooled by immersion in water within 10 sec		P
	Thickness of insulation at point of impression not reduced by more than 50 %		P
	Initial thickness and thickness after test	Initial overall thickness of pin over insulation: 1,62 mm Initial thickness of insulation on one side of pin: 0,36 mm Reduction of thickness at point of impression: No impression (0 %)	P
	No visual cracks on insulation material		P
	Dimension of insulation material not below minimum size in Figure 2.4		P
2.13.13.3	Static Damp heat test		P
	Specimen subjected to two damp heat cycles in accordance with IEC60068-2-30 as specified; Db (12 + 12 h cycle), 95 % RH, 25 +/- 3 °C, 40 °C		P
	After this treatment and recovery to room temperature; specimen subjected to:		P
	Insulation resistance test in accordance with clause 2.13.2 (2)	(see appended table)	P
	High voltage test in accordance with clause 2.13.3	(see appended table)	P

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Clause	Requirement – Test	Result – Remark	Verdict
	Abrasion test in accordance with clause 2.13.13.6		P
2.13.13.4	Low temperature test		P
	Plug maintained at -15 ± 2 °C for minimum of 24 h and returned to room temperature; after which specimen subjected to :		P
	Insulation resistance test in accordance with clause 2.13.2 (e)	(see appended table)	P
	High voltage test in accordance with clause 2.13.3	(see appended table)	P
	Abrasion test in accordance with clause 2.13.13.6	No damage of pin isolation	P
2.13.13.5	Impact test at low temperature		P
	Specimen maintained at -15 ± 2 °C for minimum of 24 h		P
	Specimen placed in position and subjected to impact test as per Figure 2.6 ; mass of 100 ± 1 g falling through 100 mm		P
	Four impacts applied; specimen rotated through 90 °C between impacts.		P
	After return to room temperature; no visible cracks of insulation material.		P
2.13.13.6	Abrasion test		P
	Plug held in clamp and tested as per Figure 2.7; pin loaded at 4 N; 20 000 Movements		P
	After test; pins show no damage affecting safety or impairing further use of the plug		P
	Insulation sleeve not punctured or rucked up		P

J4.7	Equipment with integral pins intended to be supported by contacts of socket- outlet		P
	Equipment with pins intended to be introduced into fixed socket – outlets not imposing undue strain on socket – outlet		P
	Applied torque not exceeding 0,25 Nm		P
	Measure torque	< 0,01 Nm	P
J4.8	Additional requirements for detachable plug portions		P
J4.8.1	Access to live parts		P
	The design and construction of the detachable plug portion shall be such that it is not possible to contact live parts with the small test finger of Figure 13 of IEC 61032.		P
	Conformance is checked by inspection and applying small test finger of Figure 13 of IEC 61032:1997 to the plug portion. If an opening does not allow entry of the test finger, a force on the test finger in the straight position is increased to 20 N.		P

AS/NZS 3112:2017 Annex J Plugs and Socket outlets			
Clause	Requirement – Test	Result – Remark	Verdict
	It shall not be possible to incorrectly assemble the plug portion to the equipment allowing access to live parts.		P
J4.8.2	Construction of detachable contacts where the input current of the equipment exceeds 0.2 A		P
	Contacts of the equipment shall be such that they make and maintain, under normal service conditions, satisfactory electrical and mechanical contact with the corresponding contact of the detachable plug portion		P
	For connections intended to accommodate flat pins, contact shall be made with both sides of each pin, except that it shall be permissible to use spring-assisted single-sided contacts.		P
	These contacts shall not rely exclusively on the resilience of the contact material and shall have an opposite face of material other than thermoplastic or resilient insulating material.		P
	The alignment and contact making properties of contacts shall be independent of terminal screws.		P
	The effectiveness of the contacts shall be independent of pressure from any thermoplastic or resilient moulding.		P
	Conformance with the effectiveness of the contacts is checked by inspection and by the plug portion detachment requirements of Paragraph J4.8.3.		P
	A visual inspection is conducted to determine the existence of interference between the metal contacts and the thermoplastic or resilient moulding to provide supplementary contact pressure to the metal contacts.		P
J4.8.3	Plug portion detachment requirements		P
	For all Type B or C devices and for Type A devices where the outlet of the detachable plug portion is parallel to the plug supply pins, disengagement of the detachable plug portion from the equipment shall require at least two simultaneous independent actions or the use of a tool.	Type B	P
	Conformance is verified by inspection and the following test:		P
	The plug portion and the equipment/adaptor shall be connected and disconnected 50 times (100 strokes).		P

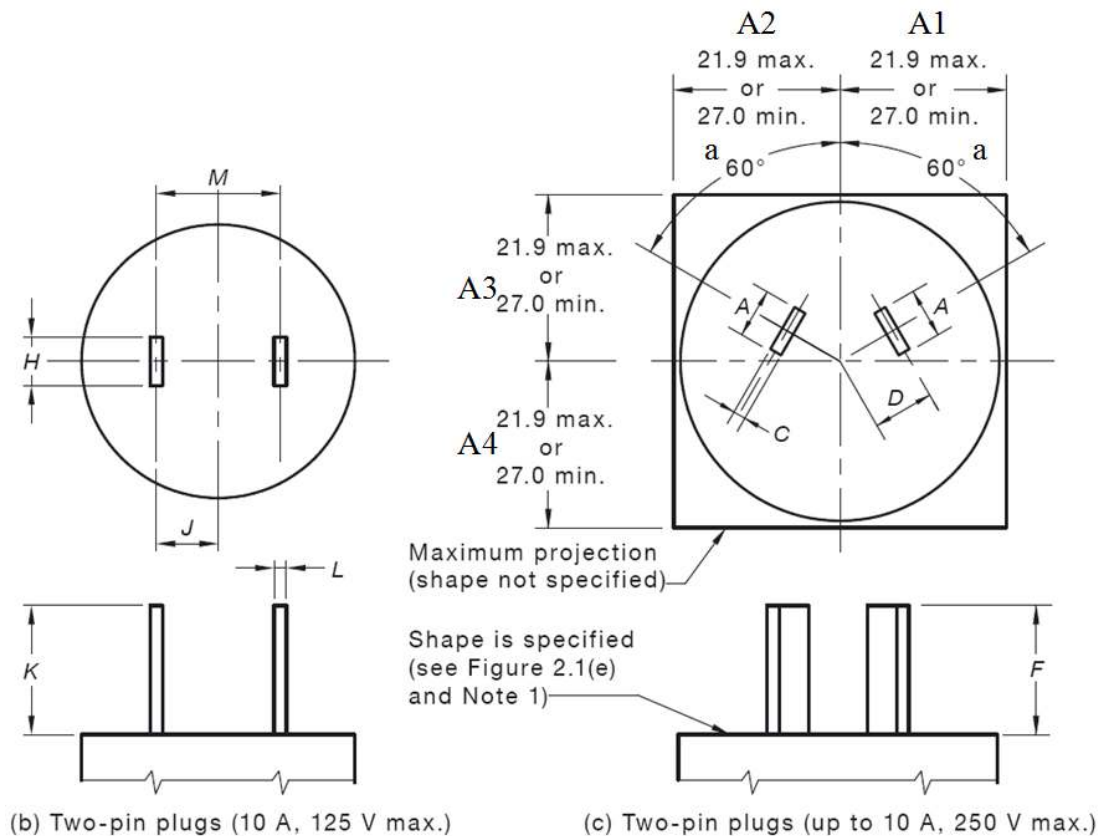
AS/NZS 3112:2017 Annex J Plugs and Socket outlets			
Clause	Requirement – Test	Result – Remark	Verdict
	The plug portion shall be securely held in position. A force which, over a period of 10 s, shall be increased steadily to 60 ± 0.6 N and held at this value for a further 10 s, shall be applied evenly at the connecting equipment in a direction parallel to the pins. This procedure shall be conducted three times on the same plug portion, at intervals of 5 min, without disturbing the plug portions between tests.		P
	During the test period, the plug portion shall not separate from the equipment.		P
	The test of AS/NZS 3112 'temperature rise test' for plugs shall be conducted immediately after the above test without disturbing the sample.		P
J4.8.4	Resistance of insulating material to heat and fire		P
J4.8.4.1	Resistance to heat		P
	For Type B detachable plug portions parts of non-metallic material, parts of insulating material supporting live parts including connections, and parts of thermoplastic material providing supplementary insulation or reinforced insulation, shall be sufficiently resistant to heat if their deterioration could cause the appliance to fail to comply with this Standard.		P
	This requirement does not apply to the insulation or sheath of flexible cords or internal wiring.		N/A
	Conformance is checked by subjecting the relevant part to the ball pressure test of IEC 60695-10-2.		P
	The test is carried out at a temperature of $40 \pm 2^\circ\text{C}$ plus the maximum temperature rise determined during the temperature test of Paragraph J4.4, but it shall be at least— (a) $75 \pm 2^\circ\text{C}$, for external parts; (b) $125 \pm 2^\circ\text{C}$, for parts supporting live parts.	125°C; Material: Sabic 945	P
J4.8.4.2	Resistance to fire		P
	Plug portions shall comply with the requirements for resistance to fire in accordance with AS/NZS 3100. The glow-wire test temperature 'T' shall be 750°C .	Sabic 945	P
J4.8	Additional requirements for detachable plug portions		P
	Where a plug portion is detachable, conformance shall be established by assessment with the plug portion fully assembled with the equipment.		P

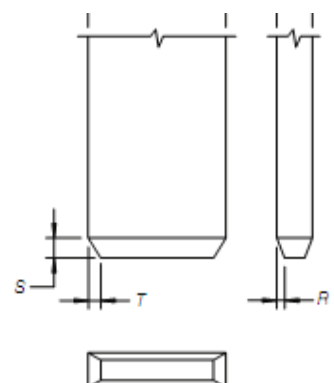
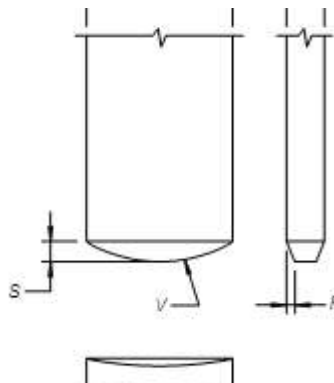
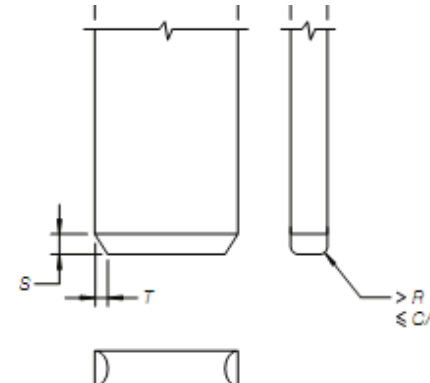
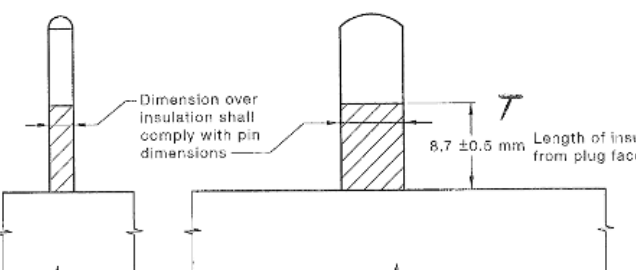
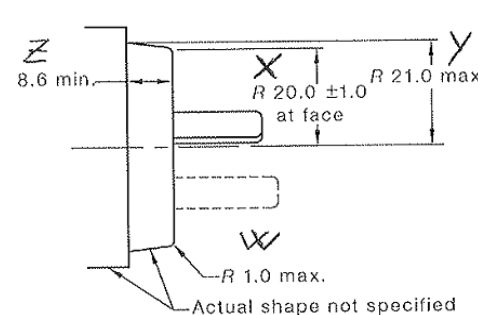
AS/NZS 3112:2017 Annex J Plugs and Socket outlets			
Clause	Requirement – Test	Result – Remark	Verdict
	Access to live parts shall be assessed for incorrect assembly of the plug portion.		P
	It shall not be possible to assemble the plug portion to the equipment resulting in a dangerous situation allowing access to live parts.		P
	The plug portion shall not expose live parts prior to assembly.		P
	APPENDIX K - NON-DETACHABLE PARTS TEST		P
K1	SCOPE This Appendix sets out the method for determining non-detachable parts that protect against access to live parts, moisture or contact with moving parts.		P
K2	GENERAL Non-detachable parts shall be fixed in a reliable manner and withstand the mechanical stress occurring during normal use. Snap-in devices used for the fixing of non-detachable parts shall have an obvious locked position. The fixing properties of snap-in devices used in parts that are likely to be removed during installation or servicing shall be reliable. Conformance is checked by the following test.		P
K3	TEST		P
	Parts that are likely to be removed during installation or servicing shall be disassembled and assembled 10 times before the test is carried out.		P
	The test shall be carried out at room temperature. If conformance may be affected by the temperature of the equipment, the test is also carried out immediately after the equipment has been operated under the conditions specified in Clause 3.14.5.		P
	The test is applied to all parts that are likely to be detachable whether or not they are fixed by screws, rivets or similar parts.		P
	A force shall be applied without jerks for 10 s in the most unfavourable direction to parts likely to be weak as follows: (a) Push force, 50 N. (b) Pull force: (i) If the shape of the part is such that the fingertips cannot easily slip off, 50 N. (ii) If the projection of the part that is gripped is less than 10 mm in the direction of removal, 30 N.	50 N	P
	The push force shall be applied by test probe 11 of IEC 61032.		P

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Clause	Requirement – Test	Result – Remark	Verdict
	If the part is likely to be twisted, the following torque shall be applied at the same time as the pull or push force: (A) 2 Nm, for major dimensions up to 50 mm. (B) 4 Nm, for major dimensions over 50 mm.	2 Nm	P
	This torque is also applied when the test fingernail is pulled by means of the loop. If the projection of the part which is gripped is less than 10 mm, the torque is reduced by 50%.		P
	Parts shall remain in the locked position and not become detached.		P

AS/NZS 3112:2017 Annex J Plugs and Socket outlets

Clause	Requirement – Test				Result – Remark		Verdict
AS/NZS 3112	TABLE: blade dimensions (two pin plug) ≤ 10 A, 250 V max;						P
Reference	Measured (mm)	Limits (mm) 10 A or 15 A	verdict	Reference	Measured (mm)	Limits (mm)	verdict
A1 A2 A3 A4	21 21 21 52	21,9 max. or 27,0 min.	P	V	/	6 (nominal)	N/A
A	6,34	6,35 ± 0,15	P	H	/	6,35 ± 0,15	N/A
B	/	6,35 ± 0,15	N/A	L	/	1,63 ± 0,15	N/A
C	1,62)	1,63 +0,15/-0,05	P	J	/	6,35 (nominal)	N/A
D	By gauge	7,92 (nominal)	P	K	/	17,06 ± 0,4	N/A
E	/	10,31 (nominal)	N/A	M	/	12,7 (nominal)	N/A
F	17,03	17,06 ± 0,4	P	a	60°	60°	P
G	/	19,94 ± 0,8	N/A	W	< 1,0	1,0 max	P
P	/	4,75 ± 0,05	N/A	X	20,77	20,0 ± 1,0	P
R	0,30	0,35 ± 0,05	P	Y	21,0	21,0 max	P
S	0,86	0,90 ± 0,10	P	Z	8,8	11,6	P
T	-	≥ 0,60	P	$\mathcal{T}$	8,78	8,7 ± 0,5	P



AS/NZS 3112	TABLE: blade dimensions ≤ 10 A;	P
 (i) Flat pin square on the end with corner bevels and side bevels  (h) Flat pin with radius on the end with side bevels  (j) The flat pin square on the end with corner bevels and radius on the sides		
 FIGURE 2.4 DIMENSIONS OF INSULATION ON INSULATED LIVE PINS 		

AS/NZS 3112:2017 Annex J Plugs and Socket outlets			
Clause	Requirement – Test	Result – Remark	Verdict

2.13.3	Table: Test No. 2 – High voltage test			P
	Test voltage applied between	Test voltage	Breakdown	-
	All poles of the plug; taken in pairs	1000 V a.c.	No	P
	Live poles of the plug and a flexible electrode	3500 V a.c.	No	P
	Live pole and metal foil applied around insulation on pins	1250 V a.c.	No	P

2.13.8	Table: Test No. 8 – Temperature rise test			P
	Ambient temperature	24°C		-
	Test Voltage	240 V		-
	Measured parts	DT measured (K)	DT allowed (K)	-
	Active phase or Neutral terminal (max.)	Max. 8	< 45	P

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Clause	Requirement – Test	Result – Remark	Verdict

2.13.9.1	Table: Movement of pins			P
	Force direction	Measured deflection (mm)	Allowed deflection (mm)	-
Phase pin	in both directions along the line perpendicular to the plane of the pin, and passing through the centre of the pin;	Max. 0,95	2,0	P
	in that plane in both directions along a line at right angles to that specified in Item (a)	Max. 1,04	2,0	P
Neutral pin	in both directions along the line perpendicular to the plane of the pin, and passing through the centre of the pin;	Max. 0,84	2,0	P
	in that plane in both directions along a line at right angles to that specified in Item (a)	Max. 1,11	2,0	P

2.13.13.3	Table: Test No. 13 (b) – Insulation resistance test after static heat damp test			P
	Applied between	Insulation resistance (MΩ)	Minimum required (MΩ)	-
	All poles of the plug ; taken in pairs	> 100 MΩ	5 MΩ	P
	Live poles of the plug and a flexible electrode	> 100 MΩ	5 MΩ	P
	Live pole and metal foil applied around insulation on pins	> 100 MΩ	5 MΩ	P

2.13.13.3	Table: Test No. 13 (b) – High voltage test after static damp heat test			P
	Test voltage applied between	Test voltage	Breakdown	-
	All poles of the plug ; taken in pairs	1000 V a.c.	No	P
	Live poles of the plug and a flexible electrode	3500 V a.c.	No	P
	Live pole and metal foil applied around insulation on pins	1250 V a.c.	No	P

2.13.13.4	Table: Test No. 13 (b) – Insulation resistance test after low temperature test			P
	Applied between	Insulation resistance (MΩ)	Minimum required (MΩ)	-
	All poles of the plug ; taken in pairs	> 100 MΩ	5 MΩ	P
	Live poles of the plug and a flexible electrode	> 100 MΩ	5 MΩ	P
	Live pole and metal foil applied around insulation on pins	> 100 MΩ	5 MΩ	P

AS/NZS 3112:2017 Annex J Plugs and Socket outlets			
Clause	Requirement – Test	Result – Remark	Verdict

2.13.13.3	Table: Test No. 13 (b) – High voltage test after low temperature test			P
	Test voltage applied between	Test voltage	Breakdown	-
	All poles of the plug; taken in pairs	1000 V a.c.	No	P
	Live poles of the plug and a flexible electrode	3500 V a.c.	No	P
	Live pole and metal foil applied around insulation on pins	1250 V a.c.	No	P

4. COMPONENT LIST (plug part)

AS/NZS 3112:2017 Annex J Plugs and Socket outlets					
Clause	Requirement – Test		Result – Remark		Verdict
TABLE: Components					P
Object / part No.	Manufacturer/ trademark	Type / model	Technical data	Standard	Mark(s) of conformity
Plug base material	Sabic	945(GG)	Rated 94V-0 at min. 1 mm; GWIT 800°C; GWFI 825°C	(QMFZ2) IEC 60695-2-12	UL E121562
Plug base material (alternative)	Sabic	SE1X	Rated 94V-1 at min. 1,5 mm; GWIT 700°C; GWFI 900°C	(QMFZ2) IEC 60695-2-12	UL E121562
Plug base material (alternative)	Sabic	C2950	Rated 94V-0 at min. 1,5 mm; GWIT 800°C; GWFI 960°C	(QMFZ2) IEC 60695-2-12	UL E121562
Plug base material (alternative)	Sabic	CX7211	Rated 94V-0 at min. 1 mm; GWIT 800°C; GWFI 960°C	(QMFZ2) IEC 60695-2-12	UL E121562
Pin insulation	Sabic	945(GG)	Rated 94V-0 at min. 1 mm; GWIT 800°C; GWFI 825°C	(QMFZ2) IEC 60695-2-12	UL E121562
Metal pin	/	/	Cu > 58%	/	Checked with the unit
1) An asterisk indicates a mark which assures the agreed level of surveillance					

5. PHOTOS

