TEST REPORT
BS 546 : 1950
Two-Pole And Earthing-Pin
Plugs, Socket-Outlets And Socket-Outlet Adaptors

Report Reference No. ..... :	181200602SHA-001
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Date of issue ..... :	2019-01-28
Contents ..... :	30 pages
Testing Laboratory ..... :	Intertek Testing Services Shanghai.
Address ..... :	Building No.86, 1198 Qinzhou Road (North), Shanghai 200233, China
Testing location ..... :	As above
Applicant's name ..... :	Scolmore International LTD
Address ..... :	Scolmore Park, Landsberg, Lichfield Road Industrial Estate Tamworth, England B79 7XB
Test specification	
Standard ..... :	BS 546:1950 +PD1752:1953 +PD4007:1960 +PD4389:1961 +AMD251:1969 +AMD2307:1977 +AMD4045:1982 +AMD5809:1987 +AMD6144:1989 +Supplement No. 1:1960 +Supplement No. 2:1987 +AMD8914:1999
Test procedure ..... :	GCC
Non-standard test method ..... :	N/A
Test Report Form:	
Test Report Form No. ..... :	BS546_V1
TRF Originator ..... :	Intertek
Master TRF ..... :	2013-02-17
Test item	
Description ..... :	Plug, rewirable
Trademark ..... :	**CLICK**
Model and/or type reference ..... :	PA166, PA176
Manufacturer/address ..... :	Same as applicant
Rating(s) ..... :	5A, 250V~

Remark:
1. When determining the test conclusion, measurement uncertainty of test has been considered.

Summary of testing:

This test report complies with BS 546:1950 +PD1752:1953 +PD4007:1960 +PD4389:1961 +AMD251:1969 +AMD2307:1977 +AMD4045:1982 +AMD5809:1987 +AMD6144:1989 +Supplement No. 1:1960 +Supplement No. 2:1987 +AMD8914:1999.

Possible test case verdicts:

- test case does not apply to the test object ..... : N/A(Not applicable)
- test object does meet the requirement..... : P (Pass)
- test object does not meet the requirement..... : F (Fail)

Testing..... :

Date of receipt of test item ..... : 2018-12-07

Date (s) of performance of tests ..... : 2018-12-07 ~ 2019-01-28

General remarks:

The test results presented in this report relate only to the object tested.

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"(see remark #)" refers to a remark appended to the report.

"(see appended table)" refers to a table appended to the report.

Throughout this report a comma is used as the decimal separator.

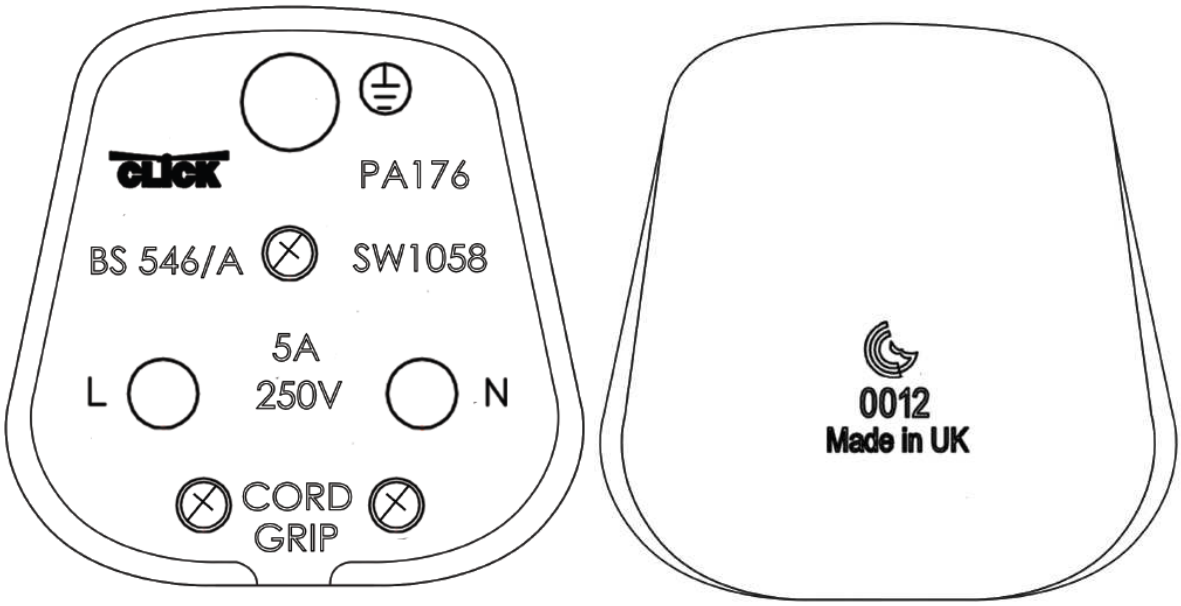
Note: When determining the test result, measurement uncertainty of test has been considered.

Factory information:

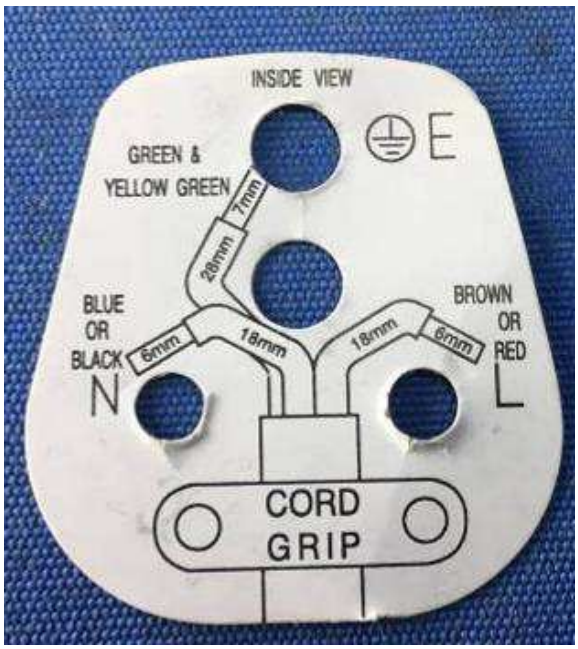
Same as applicant

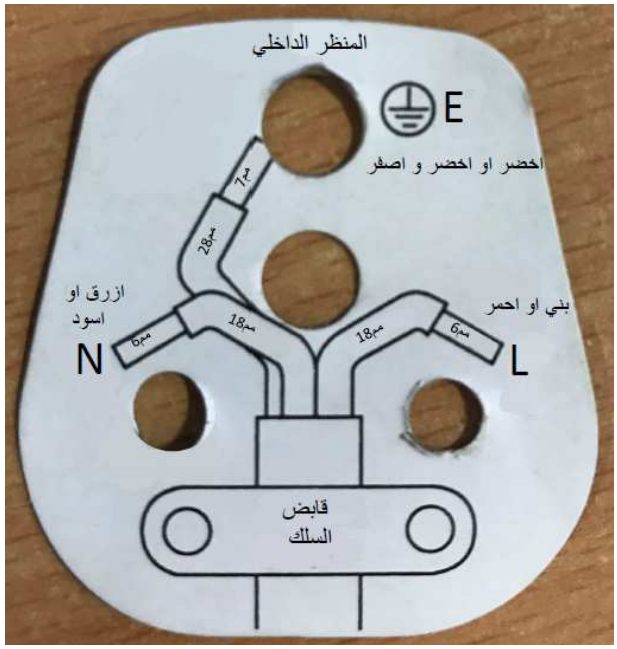
Copy of marking plate:

(Type PA176 as an example for type reference)



Instruction manual





Product description:

5A 250V~, two pole with earthing pin plug, rewirable, class I, IP20, with pillar terminals, with black or white enclosure.

List of insulating materials:

Part	Manufacturer	Type	Ingredient
Enclosure	Scolmore International Ltd	NC01	PA66
Cord anchorage	Scolmore International Ltd	M90-04	POM

BS 546 : 1950			
Clause	Requirement – Test	Result - Remark	Verdict
	Section Two - General Requirements		
6	**Current rating**		
	The current rating of non-fused plugs and of socket-outlets and the nominal current rating of fused plugs	5A	P
	The current rating of a fused-plug shall be expressed in terms both of the nominal current and of the current rating of the fuse-link		N/A
	The current rating of socket-outlet adaptors		N/A
7	**Precautions against accidental contact**		
	The external portions of the current-carrying parts of pins adjacent to a plug base or a socket-outlet adaptor base are insulated with sleeves of the min. length	(see appended table 7)	P
	No part of them shall be less than the min. distance		N/A
	Plugs, socket-outlets and adaptors shall be so constructed as to :	Plug	P
	- prevent an earthing-pin from making contact with a current-carrying contact in any circumstances		P
	- prevent a current-carrying pin from making contact with a current-carrying contact while either or both of the other pins are completely exposed, and		P
	- when a plug is withdrawn from a shuttered socket-outlet the current-carrying socket contacts are automatically screened by shutters not operated solely by the insertion of one current-carrying pin		N/A
	Such shutters shall be deemed to constitute compliance with Sub-clause b		N/A
	The current-carrying contacts shall be sunk below the surface of the socket-outlet or socket-outlet adaptor		N/A
8	**Engagement of pins and contacts**		

BS 546 : 1950			
Clause	Requirement – Test	Result - Remark	Verdict
	On insertion of pins into contacts the travel from the first point of contact of current-carrying parts to complete engagement shall not less than the min., or more than the max. of the table 2	Required: 0,164~0,246in Measured: 0,180in	P
	There shall be electrical connection between pins and contacts throughout the travel		P
	An earthing pin shall make and break contact before and after current-carrying contacts		P
	There shall be no projections on the face of a plug base, or on the face of a socket-outlet.		P
	Within a circle having a radius in table 3	5A, 1.07in	P
9	**Spacing of pins and contacts**		
	The nominal distance between centres of pins shall be as given in table 4.	(see appended table 9)	P
	The spacing of contacts shall correspond to that of pins		N/A
10	**Earthing of exposed metal parts**		
	Any metal parts of a plug, or of a socket-outlet adaptor shall be in effective electrical connection with the earthing pin	No such metal parts	N/A
	For socket-outlet, metal parts on or screws in or through non-conducting material		N/A
	and separated by such material from current-carrying parts cannot become live		N/A
11	**Clearance and Creepage**		
	The min. clearance distance in air shall be 0.1 in	>0,1 in.	P
	The min. creepage distance shall be 0.1 in	>0,1 in.	P
12	**Materials**		
12.1	All materials shall comply with the requirements given in 12.2 to 12.8, where relevant		P

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Clause	Requirement – Test	Result - Remark	Verdict
12.2	Parts made of insulating material and deterioration do not be unduly affected by abnormal heat and fire		P
	Ceramic material parts and small components are checked by the test described in 12.4		N/A
12.3	Current-carrying parts are made of brass, copper, phosphor-bronze or other suitable material		P
12.4	The glow-wire test is performed in accordance with clause 4 to 10 of BS 6458 : Section 2.1 : 1984 with the test temperature given in table 5		P
	Parts necessary to retain current carrying parts in position ..... :	750 (enclosure)	P
	Parts not necessary to retain current carrying parts in position ..... :	650 (cord anchorage)	P
	The results of the glow test ..... :	No visible flame	P
12.5	Current carrying parts of copper alloy containing less than 80% of copper, and which are press formed or produced in a manner are resistant to failure in use due to brittleness		P
12.6	The test specimen is degreased in a suitable alkaline degreasing solution or organic solvent,		P
	then immersed in an aqueous solution of mercurous nitrate		P
	There is no cracks visible with normal or corrected vision without additional magnification		P
12.7	Ferrous parts are adequately protected against rusting.	Assembly screw	P
	Compliance is checked by the test of 12.8		P
12.8	The test for the ferrous		P

	Section Three - Special requirement for plugs		
13	**Fuse-links**		
	Provision shall be made within a fused-plug for Type A fuse-link to BS 646		N/A
	The fuse-link shall be mounted in appropriate fixed contacts		N/A

BS 546 : 1950			
Clause	Requirement – Test	Result - Remark	Verdict
	It cannot be displaced when the plug is in use		N/A
	Means shall be provided to protect the hand against damage from blowing of the fuse		N/A
	The plug as a whole shall be strong enough not to fracture should the fuse-link burst on blowing in service		N/A
	It shall be impossible to replace a fuse-link in a fused-plug		N/A
	Unless the plug is completely withdrawn from the socket-outlet		N/A
14	**Plug cover and plug base**		
	The plug cover and the plug base shall be firmly secured to one another		P
	It shall be impossible to remove the plug cover		P
	unless the plug is completely withdrawn from socket-outlet		P
	The min. thickness of a plug base shall be as given in table 6	(see appended table 14)	P
	The diameter of the holes in the plug base through which they pass shall be such that they have a total lateral movement of not more than 0.006 in		N/A
	Unless the plug pins are rigidly fixed in the plug base		N/A
	Ensure adequate mechanical strength for the normal usage of plus tends to be rough		P
15	**Plug pins**		
	Plug pins shall be substantially cylindrical in form		P
	Plug pins shall have radius ends to facilitate entry into corresponding socket contacts		P
	The dimensions shall be given in table 7	(see appended table 15)	P
	The plug pins shall be solid, split, or slotted axially with a single slot		P
	The dimensions of the slots shall be as given in table 8		N/A

BS 546 : 1950			
Clause	Requirement – Test	Result - Remark	Verdict
	The construction of a split plug pin or of a slotted plug pin shall be an integral part of the plug pin		N/A
16	**Construction of plug pins and terminals**		
	Each plug pin is formed in one piece with the fixed part of its terminal		P
	Each terminal may be of substantial construction		P
	The terminals of a non-fused plug, and the earthing terminal and the neutral terminal of a fused-plug shall each provide for clamping and securing its flexible conductor		P
	efficient electrical connection is made direct with an integral part of the plug pin		P
	The connection of the flexible conductor to the earthing plug pin shall be visible		P
	Contact for the fuse-link shall be formed in one piece with the fixed part of the terminal	No fuse	N/A
	It cannot work loose under normal service conditions		P
	The other contact shall be similarly connected to the corresponding plug pin		N/A
	The line terminal shall provide for clamping and securing the conductor		P
	Efficient electrical connection is made with the contact for the fuse-link	No fuse	N/A
	The plug pins and the plug base shall be so designed that it is impossible to assemble them		P
	The fuse is connected to the neutral terminal		N/A
	The pillar terminals are either		
	a) meet the requirements given in Table 9 and	(see appended table 16)	P
	have cheese-headed clamping screws long enough under the head to extend to the far side of the conductor holes and		P
	with slightly rounded ends to minimize damage to conductors; or		P

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Clause	Requirement – Test	Result - Remark	Verdict
	b) meet the requirements given in Table 9a and		N/A
	terminal screws used in marking electrical connections have a root area not less than that of the appropriate screws in Table 9a and		N/A
	withstand the minimum torques given in Table 9a		N/A
	ISO metric screws comply with BS 3643		N/A
17	**Separation of terminals and conductor**		
	Insulating barriers shall be provided so as to separate metal at different potentials		P
	The barriers shall be such that there is negligible risk that a wire or strand that may become loose shall touch other parts with which contact may be dangerous		P
18	**Method of entry of flexible cord or cable**		
	The flexible cord or cable shall enter the plug through one hole, groove, or gland		P
	There shall be provision for gripping and protecting at the point of entry		P
	Overall diameters of 3-core circular flexible cord or cable according to table 10		P
	The flexible cord or cable enter at the side opposite to the earthing pin and between current-carrying pins		P
19	**Finger grip**		
	A finger grip or other suitable means shall be provide for inserting and withdrawing		P
	The plug without subjecting the flexible cord or cable to any stress		P
	Such grip shall be so designed as to discourage gripping the plug by the fingers at the point of entry of the flexible cord or cable		P
	Section Four - Special requirement for socket-outlet		

BS 546 : 1950			
Clause	Requirement – Test	Result - Remark	Verdict
20	**Socket contacts**		
	The socket contacts shall be so shaped at the point of entry as to provide easy access for appropriate plug pins		N/A
	They shall be self-adjusting as to contact marking		N/A
	They shall be self-adjusting to accepted the gauges specified in clause 41		N/A
	Each socket contact shall be such as to make and maintain, under normal service condition, effective electrical and mechanical contact		N/A
	The corresponding plug pin diameters are specified in clause 15		N/A
	The means for producing the contact pressure shall be associated with each socket contact independently		N/A
	The diameter of the holes in the socket-outlet plate or cover shall be not greater than that shown in table 11		N/A
	Unless there is a shutter intended to touching the socket contacts		N/A
21	**Construction of socket contacts and terminals**		
	Each socket contact shall be provided with a terminal		N/A
	which shall be of substantial construction		N/A
	and it cannot word loose under normal service conditions		N/A
	Each terminal shall provide adequate means of clamping firmly a max. of two appropriate conducts		N/A
	30 ampere socket contacts shall provide for clamping firmly only one conductor		N/A
	The pillar terminals are either		
	a) meet the requirements given in Table 12 and		N/A
	have chees-headed clamping screws long enough under the head to extend to the far side of the conductor holes and		N/A
	with slightly rounded ends to minimize damage to conductors; or		N/A

BS 546 : 1950			
Clause	Requirement – Test	Result - Remark	Verdict
	b) meet the requirements given in Table 12a		N/A
	terminal screws have minimum root areas and withstand the minimum torques given in Table 12a		N/A
	ISO metric screws comply with BS 3643		N/A
22	**Separation of terminals and conductors**		
	Insulating barriers securely fixed into, or forming an integral part of, the socket-outlet shall be provided to separate metal at different potentials within the socket-outlet		N/A
23	**Fixing-holes**		
	The fixing-holes in the socket-outlet shall be suitable for wood screws of the sizes given in table 13		N/A
24	**Position of fixing-holes**		**Delete**
25	**Base of surface-type socket-outlet**		**Delete**
26	**Plate for flush-type socket-outlet**		
	A socket-outlet plate shall be provided for flush-type socket-outlets		N/A
	For preventing if from turning relatively to an associated socket-outlet base		N/A
	the requirement of adjustment of the socket-outlet plate		N/A
	Provision made for a relative rotational angular movement of 5°		N/A
	Section Five - Special requirements for socket-outlet adaptors		
27	**General**		
	Socket-outlet adaptors, in addition to complying with the relevant clause of the standard in features of plugs and socket-outlets common to socket outlet adaptors shall comply with the clauses in this section		N/A

BS 546 : 1950			
Clause	Requirement – Test	Result - Remark	Verdict
28	**Fuse-links**		
	Provision shall be made within the body a socket-outlet adaptors for Type A fuse-link to B.S. 646		N/A
	The fuse-links shall be mounted in appropriate fixed contacts between the line pin and the line contacts of outlet in accordance with table 16		N/A
	They cannot become displaced when the socket-outlet adaptor is in use		N/A
	Protection shall be provided the hand against from the blowing of a fuse-link		N/A
	The socket-outlet adaptor as a whole shall be strong enough		N/A
	It shall be impossible to replace a fuse-link in a socket-outlet adaptor		N/A
	Unless the socket-outlet adaptor is completely withdrawn from the socket-outlet		N/A
29	**Current rating of pins and contacts**		
	The current rating of a plug protion shall be the same as the current rating of the socket-outlet; 5A or 15A		N/A
	The number and the current ratings of outlets is according to table 16		N/A
	Section Six - Marking		
30	**Marking**		
	Plugs, socket outlets and adaptors are legible and durably marked with the followings:		
	- the name or trade mark of the manufacturer or responsible vendor	See page 1	P
	- the number of this British Standard	BS 546/A	P
	For plugs :		
	a) the terminals for the connection of line and neutral conductors are identified by L and N respectively	L, N	P

BS 546 : 1950			
Clause	Requirement – Test	Result - Remark	Verdict
	the protective terminal is marked by symbol or the letter E	E ⏚	P
	b) the word FUSED		N/A
	it is visible when the plug is engagement with a socket-outlet		N/A
	c) the words USE CORRECT FUSE_LINKS or words to this effect		N/A
	For socket-outlet:		
	a) The rated current in amperes		N/A
	b) The rated voltage		N/A
	c) Nature of supply		N/A
	d) the terminals for the connection of line and neutral conductors are identified by L and N respectively		N/A
	the protective terminal is marked by symbol or the letter E		N/A
	For socket-outlet adaptors:		N/A
	- current rating of the plug portion		N/A
	- the word FUSED		N/A
	- the words USE CORRECT FUSE_LINKS or similar words		N/A
	- the words TOTAL LOADING MUST NOT EXCEED ..... AMPERES or words to this effect		N/A
	The required markings are placed on screws, removable washers or the removable parts, or on parts intended for separate sale		N/A
	Section Seven - Sampling tests		
31	**General**		
	The tests specified in clause 32 to 36 shall be sampling test		P
	The samples used for the tests shall be in clean.		P
	New condition at the commencement of the test, and		P
	Shall be identical in all essential details with those to be used in service		P

BS 546 : 1950			
Clause	Requirement – Test	Result - Remark	Verdict
32	**Interchangeability**		
	Plugs, socket-outlets, and socket-outlet adaptors shall be tested for interchangeability by means of gauges in clause 41		P
	the gauges shall be deemed to prove accuracy in respect of the relevant dimensions		P
33	**Effectiveness of contact**		
	The minimum withdrawal-pull of a gauge is according to table 17:		
	a) from an individual socket contact in a complete socket-outlet, and		N/A
	b) from an individual adaptor contact in a complete socket-outlet adaptor,		N/A
	The voltage-drop between an individual socket contact in a complete socket-outlet and corresponding plug pin (mV).....:		N/A
	Measured between the earthing terminal of the socket contact and the terminal of the plug pin shall be 25 mV at current rating		N/A
	The resistance between the terminal and any other part are not exceed 0.05Ω		N/A
34	**Withdrawal-pull**		
	The max. withdrawal-pull of a plug from a socket-outlet, current rating (amp.); max. pull (lb.)		N/A
35	**Insulation resistance**		
	Each plug and socket-outlet and each socket-outlet adaptor tested shall pass an insulation resistance		P
	The tests is conducted before being subjected to high-voltage test as required by clause 36		P
	The results of the insulation resistance at different points	(see appended table 35)	P

BS 546 : 1950			
Clause	Requirement – Test	Result - Remark	Verdict
36	**High-voltage test**		
	Each plug and socket-outlet and each socket-outlet adaptor tested shall pass a momentary high-voltage test		P
	The results of the high-voltage test at different parts	(see appended table 36)	P
	Section Eight - type test		
37	**General**		
	The test specified in clause 38 to 40 shall be type test		N/A
	The samples used for the test shall be in clean, new condition at the commencement of the test, and		N/A
	Shall be identical in all essential details with those to be used in service		N/A
38	**Current-breaking**		
	The breaking capacity contacts are adequate		N/A
	Socket-outlet or adaptors are connected and mounted as in normal use		N/A
	The socket contacts are capable of marking and breaking a current (A); the test voltage (V) .....:		N/A
	The plug and socket-outlet are break the circuit 10 times in succession		N/A
	After the test, the socket-outlet are capable of satisfying the subsequent tests detailed in clause 33 and 39		N/A
39	**Temperature-rise of fused-plugs and socket-outlet adaptors**		
	Fuse-plugs are tested in socket-outlets for temperature-rise at their current rating	Non-fused plug	N/A
	Socket-outlet adaptors are fitted into socket-outlets and equipped with non-fused plugs		N/A
	The fused outlet are loaded to their full rated capacity		N/A
	The non-fused outlet carry between the sum of the currents carried by the fused outlets and the current rating of the plug portion		N/A

BS 546 : 1950			
Clause	Requirement – Test	Result - Remark	Verdict
	Sufficient time has elapsed for the temperature to become steady		N/A
	The temperature-rise of any terminal and of the pins of socket-outlet adaptors shall not exceed 35°C (63°F)		N/A
	The fuse-links used shall have dissipation of not less than: power (W); current of fuse-link (A)		N/A
	and not more than: power (W); current of fuse-link (A)		N/A
	The thermocouples attached by low-melting-point		N/A
	Or some effective means of attachment		N/A
40	**Shutters**		
	Shutters shall be capable of continuing to work		N/A
	Operated mechanically 5000 times by the pins of corresponding plugs not carrying current		N/A
	At a rate: ... complete cycles/ min .....: (not exceeding 20 cycles/ min.)		N/A
	At regular intervals (s) .....:		N/A
	to give a speed of 6 inches per second		N/A
40a	The gauges illustrated in figures 2, 3, 4, and 5 are considered to comply with the dimensional requirements		N/A
	Section Nine - Gauges		
41	**'Go' gauge for plug**		
	The gauge is to prove correct spacing of plug-pins		P
	It accepts the plugs with plug-pins		P
	It proves the absence of axial projections on the face of the plug-base		P
	'Go' gauge for socket-outlet		
	Two gauges are required		N/A
	They have the requirements according to the standard		N/A
	Withdrawal-pull gauges for effectiveness of contact		N/A
	These gauge are to test the withdrawal-pull specified in clause 33		N/A
	And for suitable tests		N/A

BS 546 : 1950			
Clause	Requirement – Test	Result - Remark	Verdict
	SUPPLEMENT No. 1 (1960)		
	Plugs made of resilient material		
1	**Scope**		
	Material of the plugs	Non-resilient plug	N/A
	Type of the plugs		N/A
	Rated current (ampere) ..... :		N/A
2	**Definitions**		
2.1	Rubber		N/A
2.2	Overhang		N/A
3	**General requirements**		
	Plugs comply with the following clause of BS 546		N/A
	Section two - General Requirements, clauses 3 to 12		N/A
	Section three - clauses 13 and 17 to 19		N/A
	Section six - clause 30		N/A
	Section seven - clauses 31 to 36		N/A
	Section eight - clauses 37 to 39		N/A
	Section nine - clause 41		N/A
	The following amendments to the clauses of BS 546 indicated are applicable:		N/A
	Clause 12, Materials		N/A
	The requirements of clause 12 of BS 546 for the base and cover do not apply to such components		N/A
	Clause 35, insulation resistance		N/A
	Replace clause 35 of BS 546 for plugs having live metal in contact with rubber		N/A
4	**Materials**		
	Rubber used for the cover or base shall be free from blisters, cracks embedded foreign matter		N/A
	and other physical properties		N/A
	and defect likely to affect insulating and mechanical properties		N/A
	Shall have a hardness not less than 85 British Standard degrees		N/A

BS 546 : 1950			
Clause	Requirement – Test	Result - Remark	Verdict
5	**Construction of plugs**		
	Plugs shall be so designed and constructed that they cannot readily be deformed to allow access to live parts, nor		N/A
	shall it be possible for separated metal parts to be brought into contact with each other		N/A
	To provide the user with adequate protection against shock		N/A
	Sufficiently strong to resist mechanical damage		N/A
	Comply with the ′Plug pin deflection test′ specified in clause 15		N/A
	Plugs with integral flexible cord		N/A
	The size of the flexible cord shall be appropriate to the current rating		N/A
	Not subject to clause 18 of BS 546		N/A
	The current rating of the fuse appropriate to the flexible cord shall be clearly marked on the plug		N/A
	The current rating (A) .....:		N/A
6	**Precautions against accidental contact**		**Delete**
7	**Plug pins**		
	Plug pins shall be substantially cylindrical in form		N/A
	They shall have radiused ends to facilitate entry into corresponding socket outlets		N/A
	They shall not be split or slotted		N/A
8	**Construction of plug pins and terminals**		
	Each plug pin of a non-fused plug, each earthing plug pin, and each neutral plug pin of a fused plug shall be formed in one piece with the fixed part of its terminal		N/A
	Each terminal shall each provide for clamping and securing of its flexible conductor		N/A
	Efficient electrical connection is made directly with an integral part of the plug pin		N/A
	Contact for the fuse-link shall be formed in one piece with the fixed part of the terminal or connection		N/A
	It cannot work loose under normal service condition		N/A

BS 546 : 1950			
Clause	Requirement – Test	Result - Remark	Verdict
	The other contact shall be similarly connected to the corresponding plug pin		N/A
	The line terminal shall also provide for clamping and securing of the conductor		N/A
	The pin and the plug base shall be so deigned that it is impossible to assemble them		N/A
	The pillar terminals are either		
	a) meet the requirements given in Table 9 and		N/A
	have chees-headed clamping screws long enough under the head to extend to the far side of the conductor holes and		N/A
	with slightly rounded ends to minimize damage to conductors; or		N/A
	b) meet the requirements given in Table 9a and		N/A
	terminal screws used in marking electrical connections have a root area not less than that		N/A
	of the appropriate screws in Table 9a and		N/A
	withstand the minimum torques given in Table 9a		N/A
	ISO metric screws comply with BS 3643		N/A
9	**Connection between cover and base of plug**		
	The plug cover and base shall be firmly secured to one another		N/A
	Any screws or other devices used for securing the plug cover and the plug base shall only accessible from the under side of the base of the plug		N/A
10	**Ageing**		
	Plugs shall be sufficiently resistant to ageing		N/A
	Proved by the type test specified in clause 14 of the supplement		N/A
11	**Marking**		
	Plugs shall be marked ′B.S. 546/A′		N/A
	For fused plugs with integral flexible cord comply with the requirements of clause 5c		N/A
12	**Tests**		

BS 546 : 1950			
Clause	Requirement – Test	Result - Remark	Verdict
	The tests specified in clause 14 and 15 of this supplement shall be type tests		N/A
13	**Insulation resistance test**		
	Every plug having live metal in contact with rubber shall pass the insulation resistance test		N/A
	This tests are lieu of the test specified in clause 35 of BS 546		N/A
	Before the tests, the samples are being subjected to a high voltage test as required by clause 36		N/A
	The insulation resistance	~~(see appended table 35)~~	N/A
14	**Ageing test**		
	An accelerated ageing test is made in an atmosphere having the composition and pressure of the ambient air		N/A
	The sample are suspended freely in a heating cabinet		N/A
	The air is renewed by natural draught		N/A
	They are kept at a temperature of 70°C ±2°C for 240 hours		N/A
	After the test, the samples comply in all respects with the other requirements and the clause 13 and 15 of this supplement		N/A
15	**Plug pin deflection test**		
	Plugs shall be tested for deflection of plug pins under the conditions of the test		N/A
	The test is carried out in an ambient temperature		N/A
	Deflecting force of 1 lb. Is applied of 1 inch from the face of the plug and at right angles to the axis of the pin under test		N/A
	The deflection of the pin from the horizontal		N/A
	Deflection in the lower position		N/A
	Deflection in the upper position		N/A
	The arithmetical mean		N/A
	0.5 times the diameter of the pin under test		N/A
	Specification for switched socket-outlets		N/A
	SUPPLEMENT NO. 2 (1987)		

BS 546 : 1950			
Clause	Requirement – Test	Result - Remark	Verdict
	Switched Socket-Outlets		
1	Scope		
	Rated Current (Ampere) …… :		N/A
2	Definition		
	(a) Type of Socket-outlet		N/A
	(b) Type of Actuating member		N/A
3	General Requirements		
	Switched socket-outlets comply with the following clauses of BS 546.		N/A
(i)	Engagement of pins and contacts - Clause 8		N/A
	Compliance was checked by inspection and measurement.		N/A
(ii)	Clearance and creepage - Clause 11		N/A
	Minimum clearance between switch contacts in the open position was 1.2mm (0.047in)		N/A
(iii)	Marking - Clause 30		N/A
(iv)	Interchangeability - Clause 32		N/A
(v)	Effectiveness of contact - Clause 33		N/A
(vi)	Insulation resistance - Clause 35		N/A
(vii)	High-voltage Test - Clause 36		N/A
(viii)	Current-breaking - Clause 38		N/A
	(a) For socket contacts test changed to AC supply		N/A
	(b) For switch contacts test used a AC supply of 275V at rated current for 10 times in succession at intervals of 30sec.		N/A
(ix)	'Go' gauges for plugs and socket-outlets		N/A
4	Terminals		
	Terminals were of such design that under normal use they did not overheat.		N/A
	In pillar-type terminals the screws were sufficient length extend to the far side of the terminal hole.		N/A
	The screws were so shaped that the conductor might securely held and not unduly deformed.		N/A
	The clearance between the sides of the major diameter		N/A

BS 546 : 1950			
Clause	Requirement – Test	Result - Remark	Verdict
	of the clamping screw and the conductor did not exceed 0.6mm.		
	Terminals did prevent conductor strands from spreading.		N/A
	Terminals did accept 2 conductors appropriate to the rated current of the switch.		N/A
	Clearance of any live part of the terminal from any non-current carrying parts did comply with the dimension stated in Clause 11.		N/A
	A root area of terminal screws were not less than that shown in Table A.		N/A
5	Internal connection was so arranged that correct polarity was maintained.		N/A
6	Switch Action		
	The actuating member of switch did not remain in the off position while the switch contacts were closed.		N/A
	The actuating mechanism was so constructed when operated the switch could remain only in adequate position.		N/A
	Switches were so constructed that undue arcing could not occur even the switch was operated slowly.		N/A
	Switches did disconnect at least the supply to the line socket contact.		N/A
	Double pole switches did make or break each pole with one movement of the actuator.		N/A
	After clause 38, the circuit was broken a further 10 times in a manner such as to attempt to stop the moving contact in an intermediate position causing arcing. The actuating member did release after 2 seconds and any arcing did cease.		N/A
7	Temperature Rise		
	Switched socket-outlets did not attain excessive temperature in normal use.		N/A
	Temperature rise on terminals can not exceed ≤ 35K	Measured: Max. K	N/A

BS 546 : 1950			
Clause	Requirement – Test	Result - Remark	Verdict
8	Electrical Endurance of Switches		
	After the test of making and breaking rated current at 250 volts for 15,000 times. The switches were still capable of making and breaking its rated current at rated voltage.		N/A
	The voltage drop across each pole at rated current did not exceed 75mV.		N/A
	The switch did comply with the requirements of Clause 35 and 36. The insulation resistance was reduced to 5MΩ and 2MΩ		N/A
9	Moisture Resistance		
	Switched socket-outlets were proof against humid conditions		N/A
	The samples were placed in the cabinet with a relatively humidity of 95% and a saturated solution of KNO_3 or Na_2SO_4 in water.		N/A
	After the test, samples did not show any appreciable damage. They did comply with the clauses 35 and 36 with the insulation resistance reduced to 5Ω and 2Ω.		N/A

BS 546 : 1950			
Clause	Requirement – Test	Result - Remark	Verdict

7	**TABLE 1: Lengths and Distances**				P
Sample	Length of sleeve at (in.)	Minimum length (in.)	Distance of base (in.)	Minimum distance (in.)	—
	0,275	0,250	-	0,312	P

9	**TABLE 4: Spacing of pins and contact**				P
Sample	Nominal distance between L-N (in.)	Required nominal distance (in.)	Nominal distance between E-L (in.)	Nominal distance between E-N (in.)	Required nominal distance (in.)
	0,746	0,750	0,868	0,868	0,875

14	**TABLE 6: Plug cover and plug base**			P
Sample	Thickness of plug base (in.)	Minimum thickness (in.)	Total lateral movement (in.)	Limit (in.)
	0,182	0,125	0,002	0,006

15	**TABLE 7: Dimension of plug pins**						P
Sample	Plug pins	Diameter (in.)		Length of radiused end portion (in.)		Total projection (in.)	
		Data	Required value	Data	Required value	Data	Required value
	Enclosure	0,200	0,200±0.001	0,063	$0{,}062\,^{+0.01}_{-0}$	0,613	$0{,}585\,^{+0.030}_{-0.005}$
	Earhting	0,277	0,278±0.001	0,078	$0{,}078\,^{+0.01}_{-0}$	0,840	$0{,}812\,^{+0.030}_{-0.005}$

16	**TABLE 9: Dimensions of Pillar Terminals**		P
Sample	Nominal diameter of hole for conductor (mm)	Min. thickness of the wall where clamping screw passes through (mm)	Size of clamping screw (B.A.) thread
	0,126	0,065	No. 6

35	**TABLE : insulation resistance measurements**		P
insulation resistance R between:		R (MΩ)	required R (MΩ)

BS 546 : 1950			
Clause	Requirement – Test	Result - Remark	Verdict

Live and neutral	>199	≥100
Live and neutral connected together and:		
a) any other parts insulated there-form	>199	≥100
b) earthing terminals	>199	≥100

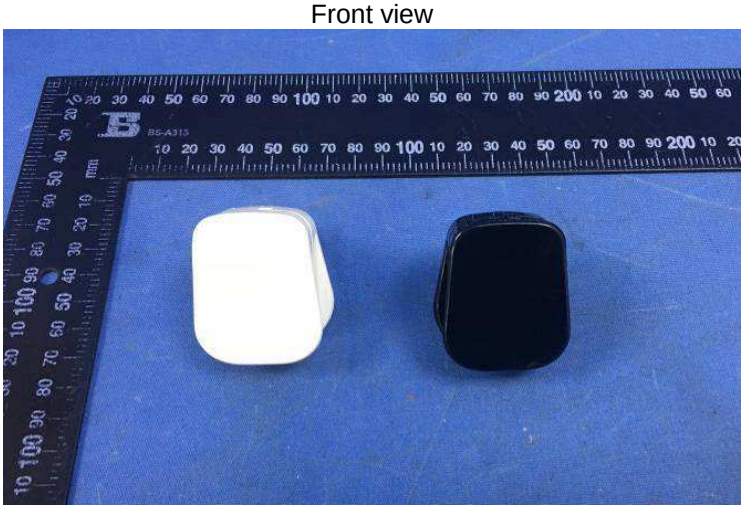
36	**TABLE : high-voltage measurements**		P
test voltage applied between:		test voltage (V)	breakdown
Live and neutral		1500	No
Live and neutral connected together and:			
a) any other parts insulated there-form		1500	No
b) earthing terminals		1500	No

Appendix 1: National Evaluation

GSO NATIONAL DIFFERENCES			
Clause	Requirement + Test	Result - Remark	Verdict
	Label / marking with Gulf Conformity Marking		P
	Electrical equipment bears a type number, and batch or serial number or other element allowing its identification, except, where the size or nature of the electrical equipment does not allow it, the required information is provided on the packaging or in a document accompanying the electrical equipment		P
	Manufacturer and importer indicate on the electrical equipment their names, registered trade name or registered trade mark, and the postal addresses at which they can be contacted except, where it is not possible, the required information is provided on the packaging or in a document accompanying the electrical equipment		P
	Safety information and instructions for use are provided in Arabic language		P
	Rating takes into account the voltage and frequency of each Member State	☒UAE: 230/400 V 50 Hz ☐Bahrain: 230/400 V 50 Hz ☐ KSA: 220/380 V 60 Hz or 230/400 V 60Hz ☐ Oman: 240/415 V 50 Hz ☒ Qatar: 240/415 V 50 Hz ☐ Kuwait: 240/415 V 50 Hz ☒ Yemen: 220/380 V 50 Hz or 230/400 V 50 Hz	P
	Type and shape of the plugs and socket outlets used in each Member State	☒ UAE: C/D/G ☐ Bahrain: G ☐ KSA: G ☐ Oman: C/G ☒ Qatar: D/G ☐ Kuwait: C/G ☒ Yemen: A/D/G ☐ A ☐ C ☒D ☐ G	P
	Electrical equipment intended to operate in non-air-conditioned or external atmospheres shall be designed to work in those atmospheres commensurate with the weather conditions in the Member States	☐ AC: T3 ☐ Refrigerating: T ☐ Fans: T ☐ Washing machines and clothes dryers: 40 °C ambient	N/A

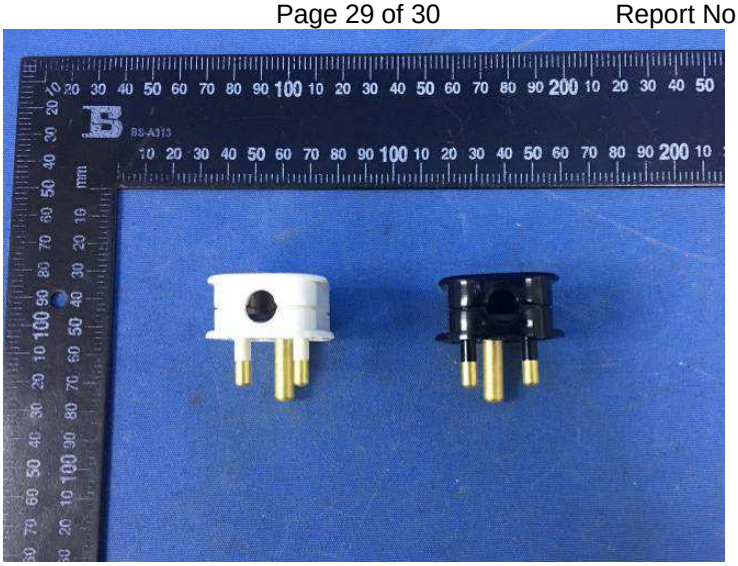
Photos

Front view



Back view

Side view



Cord entry

Open view

Plug pins

Cord anchorage