

Test Report No. 55S071315/ZHY/PKS
dated 10 JUL 2007



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Subject

TYPE TESTING OF 13A SOCKET-OUTLETS

Client

Legrand Singapore Pte Ltd
15, Jalan Kilang Barat
Frontech Centre
Singapore 159357

Attn: Mr. Poh Tze Koon

Sample Submission Date

21 Jun 2007



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LA-2007-0380-A-1
LA-2007-0381-F
LA-2007-0382-B
LA-2007-0383-G
LA-2007-0384-G
LA-2007-0385-E
LA-2007-0386-C

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Test Report No. 55S071315/ZHY/PKS
dated 10 JUL 2007



TEST REPORT BS 1363 : Part 2 / MS 589 : Part 2 / SS 145 : Part 2 13 A Switched and Unswitched Socket-Outlets	
Report Reference No. :	55S071315/ZHY/PKS
Tested by (+ signature) :	Zhou Hong Yu 
Approved by (+ signature) :	Phua Kim Suah 
Date of issue	10 July 2007
Testing Laboratory	TUV SUD PSB Pte Ltd
Address	No. 1 Science Park Drive, Singapore 118221
Testing location	Same
Applicant's name	Legrand Singapore Pte Ltd
Address	15, Jalan Kilang Barat, Frontech Centre, Singapore 159357
Test specification:	
Standard	BS 1363 : Part 2 : 1995 with A1 and A2 / MS 589 : Part 2 : 1998 / SS 145 : Part 2 : 1997
Test procedure	same
Non-standard test method	N/A
Test item description	
Trade Mark	Legrand
Manufacturer name	Legrand (Beijing) Electrical Co. Ltd
Model/Type reference	1-gang:- 281110, 281310, 281510 & 281710 2-gang:- 281112, 281312, 281512 & 281712
Test item particulars	
Rating	13 A 250 V ac
Method of application	Flush
Method of connecting the cable	Rewirable
Type and size cable	-
Type of terminals / termination	Screw
Existence of fuse	Without fuse
Existence of switch	Unswitched
Existence of indicator lamp	Without indicator lamp

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Test case verdicts

Test case does not apply to the test object .. : N(A)

Test item does meet the requirement : P(ass)

Test item does not meet the requirement : F(ail)

Testing

Date of receipt of test item : 21 Jun 2007

Date(s) of performance of test : 22 Jun 2007 to 6 Jul 2007

General remarks

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

This report shall not be reproduced, except in full, without the written approval of the Issuing testing laboratory.

"(see Enclosure #)" refers to additional information appended to the report.

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

Copy of marking plate

Front

legrand

Base

BS 1363-2

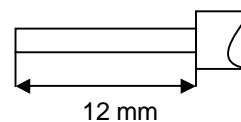
SS 145-2

MS 589-2

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Summary of testing:

The submitted samples are deemed to comply with BS 1363: Part 2 : 1995 with A1 and A2 /
MS 589 : Part 2 : 1998 / SS 145 : Part 2 : 1997.

Product information:

(1) 1 Gang Socket Outlet

- 281110 — White Colour
- 281310 — Silver Colour
- 281510 — Champagne Colour
- 281710 —

(2) 2 Gang Socket Outlet

- 281112 — White Colour
- 281312 — Silver Colour
- 281512 — Champagne Colour
- 281712 —

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BS 1363-2:1995			
Clause	Requirement – Test	Result – Remark	Verdict

	Inspection, measurement, gauging and manipulation		
	Sequence no.1		
5	General conditions for type testing	Noted	—
5.1	All tests shall be type test	Noted	—
	Socket-outlets shall be tested as delivered	Noted	—
	Socket-outlets shall be tested at an ambient temperature of 20°C ± 5°C and after being conditioned at normal laboratory temperature and humidity levels for at least 4 days	Noted	—
	Socket-outlets for flush mounting tested in a box complying with BS 4662 : 1970. Fixing screws tightened with a torque of 0.6 Nm.	Noted	—
	Other types shall be mounted according to the manufacturer's instructions.	Noted	—
	Socket-outlets used for the tests shall be representative of normal production items in respect of all details which may affect the test results	Noted	—
	Non-rewirable socket-outlet shall be supplied with an appropriate flexible cord which shall be at least 1 m long	Noted	—
5.2	All inspections and tests, of any one classification (see cl. 6) shall be carried out as specified in the clauses listed in table 1 on the number of specimens in the sample column and in the order given	Noted	—
5.3	Gauges in accordance with the fig. 11, 12, 14 and 16 shall be considered to comply with the dimensional requirements if the results of the measure values are within the specified dimensions and the uncertainty of measurement at not less than 95% confidence level not exceed ± 0.005 mm	Noted	—

6	Classification		—
	Single or multiple	Single and multiple	P
	Switched or unswitched	Unswitched	P
	Fused or unfused	Unfused	P

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BS 1363-2:1995			
Clause	Requirement – Test	Result – Remark	Verdict

	Fixed or portable	Fixed	P
	(if fixed) flush or surface or panel mount	Flush	P
	(if portable) rewirable or non-rewirable		N/A
	With or without indicator lamp	Without indicator lamp	P

7	Marking and Labelling		—
7.1	Socket-outlets legibly and durably marked with the following information:		—
	- manufacturer's or responsible vendor's name	legrand	P
	- the number of this standard	BS1363-2	P
	- for portable socket-outlets the number of this Standard followed by 'A'		N/A
	- on rewirable socket-outlets; the terminals intended for connection of various conductors shall be identified by the symbols given in subclause 7.5		P
	- the words 'FUSE' or 'FUSED' or symbol (as given in cl. 7.5) on the engagement surface of the socket		N/A
	- fixed fused multiple socket-outlets marked with max. rated current on engagement surface		N/A
	Socket-outlets shall be marked with:		—
	- rated current	13A	P
	- rated voltage	250V	P
	- nature of supply	~	P
	Portable socket-outlets shall be marked on the accessible external surface		N/A
	Non-rewirable socket-outlets; the rated current shall be the maximum current appropriate to the attached flexible cord as given in table 2.		N/A
7.1.1	Marking durables and easily legible. Test: 15 s with water and 15 s with aliphatic solvent hexane		—
	Markings produced by engraving or moulding process shall be deemed to comply without test	Moulding marking	P

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BS 1363-2:1995			
Clause	Requirement – Test	Result – Remark	Verdict

7.2	Portable fused socket-outlets shall have a removable tag or label indicating the rating of the fuse link fitted		N/A
7.2.1	Compliance checked by inspection		N/A
7.3	Portable socket-outlets fitted with a flexible cable supplied with a label indicating the colour coding of the cores of the flexible cord as follows:		N/A
	Wires in the mains lead are coloured in accordance with the following code		N/A
	Green/yellow		N/A
	Blue		N/A
	Brown		N/A
7.3.1	Compliance checked by inspection		N/A
7.4	Rewirable portable socket-outlets provided adequate instructions concerning safe connection and removable of insulation		N/A
7.4.1	Compliance checked by inspection		N/A
7.5	Symbols shall be as follows:		—
	Amperes A	A	P
	Volts V	V	P
	Line L	L	P
	Neutral N	N	P
	Earth E or earth symbol		P
	Fuse symbol		N/A
	If a symbol for nature of supply is used, it shall be placed next to the marking for rated current and rated voltage		P

9	Accessibility of live parts		—
9.1	Socket-outlets: live parts not accessible		—
9.1.1	Test with test pin shown in fig. 1 to accessible external surface of the socket-outlet with a force of 5 N; it shall not be possible to touch live parts		P

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BS 1363-2:1995			
Clause	Requirement – Test	Result – Remark	Verdict

11	Terminals and terminations		—
11.1	Terminals and terminations provide for effective clamping and securing of conductors; so that efficient electrical connection is made		—
11.1.1	Checked in accordance with 11.2 to 11.9		P
11.2	Rewirable socket-outlets provided with screw type terminals		P
11.2.1	Checked by inspection		P
11.3	Non-rewirable socket-outlets provided with soldered, welded, crimped or equally effective permanent connections		N/A
	Not more than one strand of a 0.5 mm ² conductor or 2 strands of other sized conductors fractured during connection		N/A
	Screwed and snap-on connections not used		N/A
	Connections made by crimping a pre-soldered flexible conductor not permitted		N/A
11.3.1	Checked by inspection and measurement		N/A
11.4	Terminals of rewirable portable socket-outlet allow the flexible cord to be connected without special preparation, having nominal conductor cross section areas of 0.5 mm ² to 1.5 mm ²		N/A
11.4.1	Checked by fitting the appropriate conductors		N/A
11.5	Line and neutral terminals of fixed socket-outlets: conductor connected without special preparation, of one, two or three 2.5 mm ² solid or stranded or of one or two 4 mm ² stranded conductors		P
11.5.1	Checked by fitting the appropriate conductors		P
11.6	Earthing terminals of fixed socket-outlets the conductor connected without special preparation, of one, two or three 2.5 mm ² solid or stranded or of one or two 4 mm ² stranded conductors		P
11.6.1	Checked by fitting the appropriate conductors		P
11.7	Pillar terminals:		—
	- clamping screws of sufficient length		P
	- end of screw slightly rounded		P

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BS 1363-2:1995			
Clause	Requirement – Test	Result – Remark	Verdict

	- clearance not exceed 0.4 mm for flexible cords and 0.6 mm for fixed wiring	Req. < 0.6mm Mea . 0.46 mm	P
11.7.1	Checked by measurement		P
11.8	Terminal screw outside diameter not less than 3 mm	Req. ≥ 3.0mm Mea .4.88 mm	P
11.8.1	Checked by measurement		P
11.9	Terminals in rewirable portable socket-outlet located or shielded that should a stray strand of a flexible of conductor escape, there is negligible risks of accidental connection between live parts and accessible external surfaces, or fuse link (if any)		N/A
11.9.1	Checked by the following tests		N/A
	According to the manufacturer instruction, insulation of flexible conductors of 1.5 mm ² is removed and connected to the terminal. The free strand connected to alive terminal shall not		N/A
	-touch any metal part, so as to bypass any fuse link		N/A
	-touch any metal part which is accessible or is connected to an accessible metal part		N/A
	-reduce creepage distance and clearances to accessible surfaces to less than 1.3 mm		N/A
	The free strand of a flexible conductor connected to an earthing terminal shall not touch any live parts		N/A

9	Accessibility to live parts		—
9.2	Socket-outlets: protect the user against accidental contact with live part during insertion / withdrawal plugs		P
9.2.1	Checked by satisfying the dimensional and gauging requirements of this clause		P
9.4	Not possible to introduce a conducting device through the earthing socket aperture that there is risk of making contact with any live conductor with or without insulation		P
9.4.1	Checked by introducing a rigid metal pin (1mm dia. x 60 mm) with a force of 5 N		P

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BS 1363-2:1995			
Clause	Requirement – Test	Result – Remark	Verdict

10	Provision for earthing		—
10.1	Socket-outlets earth connection made before the current-carrying pins of the plug become live during insertion and break last during withdrawing of the plug		P
10.1.1	Checked by electrical test		P

13	Construction of socket-outlets		—
13.1	The disposition of the socket contacts as shown in fig. 3		P
	No projection on the engagement surface to prevent full insertion of a plug		P
	The spacing of the socket contacts shall correspond with plug pins according to BS1363 / SS145 / MS589 Part 1		P
13.1.1	Checked by the use of gauge shown in fig. 11		P
	Raised markings not projects more than 0.5 mm from the engagement face and comply with 13.2		P
13.2	The line and neutral contact make satisfactory contact with the corresponding pins of a plug when correctly and fully inserted		P
13.2.1	Check by the use of the gauge in fig. 12 and the circuit shown in figure 13. Both indicator lamps shall light	Contact gauge	P
13.3	Distance between front surface and to the first point of contact not less than 9.6 mm		P
13.3.1	Checked by used of gauge of fig. 14 and the circuit shown in fig. 13. Neither indicator shall light	Non-contact gauge	P
13.9	Entry holes of the line and neutral plug pins not exceed 7.2 mm x 4.8mm and for the earthing plug pin 8.8 mm x 4.8 mm	L : 7.07mm X 4.56mm N : 6.94mm X 4.75mm E : 8.70mm X 4.75mm	P
	The holes shall have sufficient insulating material around if entry holes in metal plates to comply with clause 8		P
	Earth socket contacts flush with the front face cover not depend for their effectiveness on insulating material of the cover. In such a case the aperture shall be measured between the contact faces at the maximum separation		P

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BS 1363-2:1995			
Clause	Requirement – Test	Result – Remark	Verdict
13.10	No part of the entry hole for the line and neutral pin less than 9.5 mm from the outline of the engagement surface		P
	Distance not less than 18 mm if the shutter is operated by the simultaneous insertion of the current-carrying plug pins		N/A
13.10.1	Checked by measurement		P
13.12	Multiple socket-outlets shall be capable of simultaneous use of all socket-outlets		P
13.12.1	Checked by fitting gauge gauges shown in fig. 11 in adjacent socket-outlets of the multiple socket-outlets		P
13.14	Conductive components of socket-outlets located and separated they cannot be displaced to affect the safety or proper operation of the socket-outlet		P
13.14.1	Checked by manipulation		P
13.15	Flush socket-outlets for use in enclosure according to BS 4662 : 1970 size of the base shall be such:		—
	- that clearance of wiring between the base and the inside walls of the box not less than 6mm		P
	- that the base and the bottom of a 35.0 mm deep box not less than 14 mm		P
	No live metal parts protruding from or flush with socket-outlet base		P
	Any exposed live metal part recessed to give necessary clearance distance from any earthed metal which may come into contact with the base		P
	Socket-outlets for use in other enclosure shall provide adequate wiring space		P
	Holes for wiring large enough to accept three 2.5 mm ² cable core with their insulation, the sheath, if any be removed		P
13.15.1	Checked by inspection and measurement		P
13.16	Fixed surface mounted socket-outlets provided with fixing holes accept No. 6 wood screws complying with BS 1210 : 1963		N/A

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BS 1363-2:1995			
Clause	Requirement – Test	Result – Remark	Verdict
	Flush or semi-flush mounted socket-outlet plates use on boxes according to BS 4662 shall have provision for:		—
	- two M3.5 fixing screw screws at centre of 60.3 mm on the horizontal or vertical centreline for 1 gang or		P
	- 120.6 mm on the longitudinal centreline for 2 gang socket-outlets		P
	- 180.9 mm on the longitudinal centreline for 3 gang socket-outlets		N/A
	Size and disposition of fixing holes to allow satisfactory attachment to boxes having centre manufactured to 'a' \pm 0.8 mm tolerance		P
13.16.1	Checked by measurement		P
13.17	Flush socket-outlet plates of insulating material, metal or a combination of both, min. 82.5 mm x 82.5 mm for a single socket-outlet and min. 82.5 mm x 142.5 mm for multiple socket-outlets	1-G: 85.78mm X 85.57mm 2-G: 85.98mm X146.08mm	P
13.17.1	Checked by measurement		P
13.18	Base and cover of non-rewirable portable socket-outlets permanently attached, flexible cord cannot be separated without making it permanently useless		N/A
	Base and cover of non-rewirable portable socket-outlets cannot opened by hand or by using general purpose tool		N/A
	Base and cover of rewirable portable socket-outlets firmly secured, they cannot be detached from each other without the aid of a tool		N/A
13.18.1	Checked by inspection		N/A
13.20	Non-rewirable portable socket-outlets means provided to prevent loose strands of a conductor from reducing the minimum insulation thickness requirements between such parts and all accessible external surfaces of the socket-outlet		N/A
13.20.1	Checked by test in 15.2		N/A

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BS 1363-2:1995			
Clause	Requirement – Test	Result – Remark	Verdict

19	Connection of flexible cords and cord anchorage		—
19.2	Cord anchorage of rewirable portable socket-outlets securely and correctly designed		—
	Design of cord anchorage shall be as follows:		—
	- cord anchorage not removable from the outside without the use of a tool		N/A
	-not possible to touch cord anchorage screws, if any, with test probe B of BS 3042 : 1998 when the socket-outlet is energized		N/A
	-cord anchorage designed that no metal part bearing directly on the flexible cord		N/A
	- at least one part of the cord anchorage is securely fixed to the socket-outlet		N/A
	- clamping the cord does not require a special tool		N/A
	- tightening the cord anchorage screws to the torque prescribed in table 3 does not distort the engagement face of the plug to such an extent that compliance with 12.2 is affected		N/A
	- cover fitted correctly without damage after fitted the socket-outlet with the largest specified flexible cable and cord anchorage screws are tightened with the torque specified in table 3		N/A
19.2.1	Compliance shall be checked by inspection and test		N/A
19.3	Screws which are used when clamping the flexible cord not serve to fix any other component		N/A
	Unless the portable socket-outlet is rendered manifestly incomplete if the component is omitted or replaced in an incorrect position		N/A
	Or the component intended to be fixed cannot be removed without further use of a tool		N/A
19.3.1	Compliance shall be checked by inspection		N/A
19.4	Non-rewirable portable socket-outlets shall be fitted with 3 core flexible cords complying with BS 6500:2000		N/A
	Connections shall be as given in table 6		N/A
19.4.1	Compliance shall be checked by continuity test		N/A

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BS 1363-2:1995			
Clause	Requirement – Test	Result – Remark	Verdict

19.6	The cord entry to rewirable portable socket-outlets shall be so shaped as to prevent damaged to the cord		N/A
19.6.1	Compliance shall be checked by inspection		N/A

21	Screws, current-carrying parts and connection		—
21.1	Screwed connections withstand mechanical stresses occurring in normal use		—
	Screws and nuts which transmit contact pressure in engagement with metal thread		P
	Screws not of metal which is soft and liable to creep		P
	Screws not of insulating material if their replacement by a metal screw would affect the safety or performance requirements of the socket-outlet		P
	Contact pressure not transmitted through insulating material other than ceramic, pure mica or other material no less suitable unless there is sufficient resiliency in metallic parts		P
21.1.1	Compliance shall be checked by inspection and for screws and nuts which are intended to be tightened during installation, or use, or during replacement of the fuse link by the following test		P
	- 10 times for screws in engagement with a thread of insulating material and for screws of insulating material		N/A
	- 5 times for all other cases		P
	- terminals: screw diameter (mm); torque (Nm); times.....:	4.88 mm; 2 Nm; 5 times	P
	- earthing terminals: screw diameter (mm); torque (Nm); times.....:	4.88 mm; 2 Nm; 5 times	P
	- cord anchorage: screw diameter (mm); torque (Nm); times.....:		N/A
	- other screws or nuts: screw diameter (mm); torque (Nm);times.....:	3.38 mm; 0.8 Nm; 5 times	P
	During the test no damage impairing the further use of the screwed connections		P

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BS 1363-2:1995			
Clause	Requirement – Test	Result – Remark	Verdict

21.2	Thread-forming and or/ thread cutting screws not used for the making of current-carrying or earth continuity connections		P
	Screws which make a mechanical connection between different parts of the socket-outlet locked against loosening		P
	Rivets for current-carrying parts locked against loosening, if connections are subject to torsion in normal use which is likely to loosen the connection		P
21.2.1	Compliance shall be checked by inspection and by manual test		P
21.3	Current-carrying parts and earthing contacts of brass, copper, phosphor-bronze or other metal at least equivalent with regards to its conductivity, resistance to abrasion and resistance to corrosion		P
21.3.1	Compliance checked by inspection and by the relevant test described in 10.2 and clauses 16 and 24		P

8	Clearances, creepage distances and solid insulation		—
	Accessories shall be constructed that the clearances, creepage distances and solid insulation are adequate to withstand the electrical stresses that may occur taking account the environmental influences.		—
	Clearances, creepage distances and solid insulation shall comply with the relevant sub clauses 8.1, 8.2 and 8.3		—
8.1	Clearances		—
	Accessories energised directly from the low voltage supply fall into Overvoltage Category III		—
	- rated voltage and overvoltage category as in annex E	250V; 4000V	P
	- pollution degree declared by the manufacturer according with annex F	Degree 2	P
	For the measurements		—
	- Detachable parts are removed and movable parts which can be assembled in different orientations placed in the most unfavourable position.		P

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BS 1363-2:1995			
Clause	Requirement – Test	Result – Remark	Verdict
8.1.1	Clearances for basic insulation		—
	- \geq the values given in table 8	Req. :-3 mm Mea. :>3 mm	P
	Smaller clearances except those values marked in table 6 with note b may be used if the accessories meets the impulse withstand voltage test of annex E		N/A
	- only if the parts are rigid or located by mouldings		N/A
	- or if the construction is such that there is no likelihood of the distances being reduced by distortion,		N/A
	- or by movement of the parts during mounting, connection and normal use		N/A
8.1.2	Clearances for functional insulation		—
	- \geq the values for basic insulation in table 8	> 3 mm	P
8.1.3	Clearances for supplementary insulation		—
	- \geq the values given in table 8.		N/A
8.1.4	Clearances for reinforced insulation		—
	\geq the values specified for basic insulation in 20.1.1 but using the next higher step for the rated U_{imp} in table 22.	Req.:- Mea.:-	N/A
8.2	Creepage distances		—
	Creepage distances is dimensioned for the voltage expected to occur in normal use taking into account the pollution degree and the material group as declared by the manufacturer. For the measurements:		—
	- Detachable Parts are removed and movable parts and parts which can be assembled in different orientations placed in the most unfavourable position		P
	Relationship between material group and proof tracking index (PTI) values:		—
	Material group I $600 \leq PTI$		N/A
	Material group II $400 \leq PTI < 600$		N/A
	Material group IIIa $175 \leq PTI < 400$	175 V	P
	Material group IIIb $100 \leq PTI < 175$		N/A

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Clause	Requirement – Test	Result – Remark	Verdict
	PTI values are obtained in accordance with test of annex D.		P
8.2.1	Creepage distances for basic insulation		—
	- \geq the values given in table 9	> 3 mm	P
8.2.2	Creepage distances for functional insulation		—
	- \geq the values given in table 9	> 3 mm	P
8.2.3	Creepage distances for supplementary insulation		—
	- \geq the values specified for basic insulation in 8.2.1		N/A
8.2.4	Creepage distances for reinforced insulation		—
	- \geq double of the values specified for basic insulation in table 9		N/A
8.3	Solid insulation is capable of withstanding electrical and mechanical stresses as well as thermal and environmental influences which may occur during the anticipated life of the switch		—
	- checked during the tests of clauses 14, 15, 16 and 17.		P
8.3.1	Basic and supplementary solid insulation shall withstand the required impulse voltage declared by the manufacturer, as specified in 8.1.1 for Overvoltage Category III	Declared 4 KV	P
	Compliance checked by test in accordance with clause 15		P
8.3.2	Reinforced solid insulation		—
	Reinforced insulation shall be dimensioned to withstand the required impulse voltage, but one step higher than that for basic and supplementary insulation with clause 8.3.1		N/A
	Compliance checked by test in accordance with clause 15		N/A

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BS 1363-2:1995			
Clause	Requirement – Test	Result – Remark	Verdict

Sequence no. 2			
General			
9	Accessibility of live parts		—
9.3	Resilient accessible external surfaces of socket-outlets so designed and constructed that when assembled and wired there is no risk that, due to undue pressure, live parts could penetrate accessible external surfaces or reduced creepage and clearance below those given in clause 8		P
9.3.1	Compliance shall be checked by pressure test at 240 N for 60 s		P
	During the test a test voltage of 2000 V applied		P
	No flashover or breakdown shall occur		P
	After the test no live parts accessible		P

21	Screws, current-carrying parts and connections		—
21.3	Current-carrying parts and earthing contacts of brass, copper, phosphor-bronze or other metal at least equivalent with regards to its conductivity, abrasion and corrosion		P
21.3.1	Compliance shall be checked by inspection and by the relevant test described in 10.2 and clauses 16 and 24		P

10	Provision for earthing		—
10.2	Accessible metal parts of socket-outlets in effective electrical contact with the earthing socket-outlet, except that metal parts on, or screws in or through, non-conducting material, need not be in effective electrical contact with the earthing socket-contact		—
10.2.1	Compliance checked by inspection and by the following:		—
	a) for metal parts insulated from live parts, by the test described in 15.1.3		N/A
	b) for metal parts connected to an earthing terminal or earthing plug pin; test current 25 A; resistance not exceed 0.05 Ohm	<u>1 Gang socket outlet</u> 0.011Ω; 0.011Ω; 0.015Ω <u>2 Gang socket outlet</u> 0.012Ω; 0.011Ω; 0.011Ω	P

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Clause	Requirement – Test	Result – Remark	Verdict
10.3	If means are provided for electrically bonding the mounting box to the earthing circuit of the socket-outlet by means of fixing screws the connection between the screw and the earthing terminal shall be of low resistance		N/A
10.3.1	Compliance checked by the test described in 10.2.1b applied between the socket-outlet earthing terminals and any fixing screw in electrical contact with the earthing circuit		N/A
19	Connection of flexible cords and cord anchorage		—
19.1	Rewirable portable socket-outlets suitable for flexible cords as given in tables 4,5,6,9,15 and 16 of BS 6500, with nominal cross-sectional areas not exceeding 1.5 mm ²		N/A
	Non-rewirable portable socket-outlet provided with cable entry and adequate retention		N/A
	Cord anchorage: the conductors are relieved from strain, including twisting, where they are connected to the terminals or terminations		N/A
	Method such as tying the flexible cord in a knot or tying the end with string or the like not be used		N/A
19.1.1	Compliance shall be checked by inspection and by the following test		—
	A rewirable portable socket-outlets provided with a 3-core flexible cord having a nominal cross-sectional area of 0.5 mm ² as given in table 15 of BS 6500		N/A
	Clamping screw tightened with two-thirds of that given in table 3		N/A
	Assembly left untouched for min. 24 h		N/A
	Pull test: 25 times, 3 kg		N/A
	Torque test; 0.15 Nm, 60 s		N/A
	After the test the flexible cable cord not displaced by more than 2 mm		N/A
	A rewirable portable socket-outlets provided with a 3-core flexible cord having a nominal cross section area of 1.5 mm ² as given in table 15 of BS 6500		N/A

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	Clamping screw tightened with two-thirds of that given in table 3		N/A
	Assembly left untouched for min. 24 h		N/A
	Pull test: 25 times, 3 kg		N/A
	Torque test; 0.35 Nm, 60 s		N/A
	After the test the flexible cable cord not displaced by more than 2 mm		N/A
	Non-rewirable portable socket-outlets tested with the flexible cord as delivered		N/A
	Type of cord.....:		N/A
	Load.....:		N/A
	Torque.....:		N/A
	After the test the flexible cable cord not displaced by more than 2 mm		N/A
	After the test a voltage of 3750V is applied for 60 s		N/A
	No breakdown or flashover		N/A

14	Resistance to ageing and to humidity		—
14.2	Socket-outlets proof against humid conditions which may occur in normal use		P
14.2.1	Compliance checked by a humidity treatment carried out in humidity cabinet containing air with relative humidity maintained between 85 % and 95 % followed by the test of clause 15	25°C @ 93%	P
	Specimens kept in cabinet for 2 days (48 h)	48 hours	P
	After this treatment the specimens show no damage		P

15.1	Insulation resistance (500 V +250V for 1 min) :-		—
	a) between line and neutral terminals/terminations $\geq 5M\Omega$:	> 100M Ω	P
	b) line and neutral terminals/ terminations connected together and:		—
	i) metal foil in contact with the entire accessible external surface $\geq 5 \Omega$:	> 100M Ω	P
	ii) the earthing terminal/ termination $\geq 5 M\Omega$	> 100M Ω	P

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	iii) any metal part of a cord anchorage $\geq 5 \text{ M}\Omega$		N/A
	c) each switched pole terminal and corresponding socket-outlet contact $\geq 2 \text{ M}\Omega$		N/A
15.1.3	Electric strength 2000 V short circuit current of 200 mA for 1 min.		—
	a) between line and neutral terminals/terminations		P
	b) line and neutral terminals/ terminations connected together and:		—
	i) metal foil in contact with the entire accessible external surface		P
	ii) the earthing terminal/ termination		P
	iii) any metal part of a cord anchorage		N/A
	c) each switched pole terminal and corresponding socket-outlet contact		N/A
	During the test no breakdown or flash over shall occur		P
15.1.4	High voltage test for non-rewirable socket-outlets between current-carrying parts connected together and a conducting electrode in contact with the entire accessible surface; test voltage 6000 V for 3-5 s		N/A
	During the test no breakdown or flash over shall occur		N/A

13	Construction of socket-outlets		—
13.13	Socket-outlets provided with fuse link complying with BS 1362		N/A
	Fuse link shall be mounted in appropriate contacts only between the line terminal and corresponding socket-contact or contacts		N/A
	Fuse link cannot be displaced accidentally during use or be left in incorrect contact when the fuse cover or fuse carrier is replaced and secured in position		N/A
	Fuse link replaceable without dismantling the socket-outlet and no live parts shall become accessible		N/A

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Clause	Requirement – Test	Result – Remark	Verdict
	The contact of the fuse link connected to the line terminal shall be formed in one piece with a fixed part of the terminal or connected to it in such a way that it cannot work loose in normal use, and the other contact for the fuse link shall similarly connected to the corresponding socket-contact or contact		N/A
13.13.1	Compliance checked by inspection and by the application of the standard test probe B of BS 3042 and the test pin shown in fig.1 applied in accordance with 9.1.1		N/A
	Fuse link clips in socket-outlets shall be checked for mechanical strength by the insertion and withdrawal test describe in 17.1.4. After this test clause 16 shall be carried out		N/A
9	Accessibility of live parts		—
9.1	Socket-outlets mounted and wired as in normal use, live parts not accessible		P
9.1.1	Checked by application of the test pin shown in fig. 1 perpendicular to the accessible external surface of the socket-outlet with a force of 5 N; it shall not be possible to touch live parts		P
13	Construction of socket-outlets		—
13.4.1a	Voltage drop not exceed 25 mV at 13 A between any individual line or neutral socket-contact and corresponding plug pin	<u>1 Gang socket outlet</u> L:8.25mV;8.38mV;8.21mV N:14.98mV;14.75mV;15.76mV <u>2 Gang socket outlet</u> L:6.73mV;6.25mV;6.59mV N:12.61mV;16.45mV;13.75mV	P
13.4.1b	Withdrawal force with the gauge shown in fig. 16b. the socket contact shall retain the gauge not less than 30 s		P
13.5	Line and neutral contacts shall withstand the stresses imposed upon them by the use of socket-outlet adaptor and the like		P
13.5.1	Compliance checked by the gauge shown in fig. 15. the socket-contact shall retain the weight gauge shown in fig 16b not less than 30 s		P

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Clause	Requirement – Test	Result – Remark	Verdict

13.6	Earth socket-contact shall withstand the stresses imposed upon them by the attempted incorrect insertion of plugs		P
13.6.1	Compliance checked by the gauge shown in fig. 15, the earth socket contact shall retain the weight shown in fig.16a not less than 30 s		P

	Sequence no. 3		
	General		
13	Construction of socket-outlets		—
13.13	Socket-outlets provided with fuse link complying with BS 1362		N/A
	Fuse link mounted in appropriate contacts only between the line terminal and corresponding socket-contact		N/A
	Fuse link cannot be displaced accidentally during use or be left in incorrect contact when the fuse cover or fuse carrier is replaced and secured in position		N/A
	Fuse link replaceable without dismantling the socket-outlet and no live parts shall become accessible		N/A
	The contact of the fuse link connected to the line terminal formed in one piece with a fixed part of the terminal or connected to it that it cannot work loose, and the other contact for the fuse link similarly connected to the corresponding socket-contact or contact		N/A
13.13.1	Compliance checked by inspection and by the application of the standard test probe B of BS 3042 and the test pin shown in fig.1 applied in accordance with 9.1.1		N/A
	Fuse link clips in socket-outlets checked for mechanical strength by the insertion and withdrawal test describe in 17.1.4. After this test clause 16 shall be carried out		N/A

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Clause	Requirement – Test	Result – Remark	Verdict

20	Mechanical strength		—
20.1.2	Solid link of stainless steel is inserted and withdraw from the fuse clips 20 times. After test a normal fuse link complying with BS 1362 is inserted and the appropriate mechanical test completed		N/A

17	Breaking capacity of socket-outlets		—
17.1	The breaking capacity of socket contacts, switches, and fuse contacts incorporated in socket-outlets adequate		—
17.1.1	Compliance shall be checked by the tests describe in 17.1.2, 17.1.3 and 17.1.4		P
17.1.2	Making and breaking capacity of socket-contacts:		—
	Test current 1.25 times the rated current. Test voltage 250 V ~; 10 times	I = 16.3 A	P
	After the test samples shall be capable of satisfying the test subsequent detained in table 1		P
17.1.3	Making and breaking capacity of switch:		—
	Test current 1.25 time the rated current. Test voltage 275 V~, 10 time		N/A
	After the test samples shall be capable of satisfying the test subsequent detained in table 1		N/A
17.1.4	Making and breaking capacity of the fuse contacts:		—
	Test current 1.25 times the rated current for single socket-outlets and 1.6 time the rated current for multiple socket-outlets. Test voltage 275 V~, 10 times		N/A
	After the test samples shall be capable of satisfying the test subsequent detained in table 1		N/A

13	Construction of socket-outlets		—
13.11	The actuating member of a switch not remain at rest in the off position whilst the switch contacts remained closed		N/A
	Switch constructed that when operated can remain only in a position giving adequate contact or separation of the contacts		N/A

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Clause	Requirement – Test	Result – Remark	Verdict

	Switch disconnect at least the supply to the line socket-contact		N/A
	Double pole switches shall make and break each pole with one movement of the actuating member		N/A
13.11.1	Compliance shall be checked by inspection and by the following test:		N/A
	Test as described in clause 17. 10 times switching by hand over a period of 2 s any arcing shall cease		N/A

16	Temperature rise		—
16.1	Socket-outlets not attain excessive temperatures in normal use		—
16.1.1	Test carried out at rated voltage	250 Vac	P
	Terminal tightened with two thirds of the values given in table 3	Screw Ø: 4.88 mm 2/3Torque: 1.33 Nm	P
16.1.2	Fixed socket-outlets:		—
	Cross-sectional area (mm ²) :	2.5 mm ²	P
	Test current (A) :	1-g socket outlet: 14A; 6A 2 g socket outlet: 14A+6A	P
16.1.3	Rewirable portable socket-outlets are tested with 1000 mm of 1.25 mm ² 3-core PVC insulated flexible cord as given in table of BS 6500		N/A
	Non-rewirable accessories tested with 1000 mm of the flexible cord supplied with them		N/A
	- type of flexible cable; number of conductors and nominal cross sectional area (mm ²)		N/A
	- test current specified in table 2 for a minimum period of 4 h or longer until steady state < 8 hr.		P
	- terminals or terminations not exceed 47 K for fixed socket and not exceed 52 K for portable socket-outlet.....:	<u>1-Gang socket outlet</u> L : 29.6K; 28.3K; 29.4K N : 28.1K; 27.2K; 27.1K <u>2-Gang socket outlet</u> L : 39.8K; 42.8K; 42.5K N : 35.6K; 40.6K; 35.2K	P
	- accessible external surfaces < 52(K).....:	<u>1-Gang socket outlet</u> 22.4K; 22.3K; 22.7K <u>2-Gang socket outlet</u> 24.7K; 21.2K; 15.9K	P

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19	Connection of flexible cords and cord anchorage		—
19.5	Non-rewirable portable socket-outlets flexible cable is protected against excessive bending		N/A
	Flexing test (10,000 flexings)		N/A
	- type of flexible cable and nominal cross-sectional area (mm ²)	Type: Area:	N/A
	- test current (A)		N/A
	- mass (N)		N/A
	During the test no interruption of the test current and no short-circuit between the conductors		N/A

21	Screws, current-carrying parts and connections		—
21.3	Current-carrying parts and earthing contacts of brass, copper, phosphor-bronze or other metal at least equivalent with regards to its conductivity, abrasion and corrosion		P
21.3.1	Compliance shall be checked by inspection and by the relevant test described in 10.2 and clauses 16 and 24		P

	Sequence no. 4		
	General test		
14	Resistance to ageing and to humidity		—
14.1	Socket-outlets shall be resistant to ageing		P
14.1.1	Socket-outlets subjected to a test in a heating cabinet at 70°C ± 2 °C for seven days (168 h)	168 hours	P
	After the tests, samples shall show:		—
	- no crack visible with normal or corrected vision without additional magnification		P
	- no sticky or greasy material		P
	- no trace of cloth (forefinger pressed with 5 N)		P
	- no damage		P

15	Insulation resistance and electric strength		—
15.1	Insulation resistance (500 V +250V for 1 min) :		—

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Clause	Requirement – Test	Result – Remark	Verdict

	a) between line and neutral terminals/terminations $\geq 5M\Omega$:	> 100M Ω	P
	b) line and neutral terminals/ terminations connected together and:		—
	i) metal foil in contact with the entire accessible external surface $\geq 5 \Omega$:	> 100M Ω	P
	ii) the earthing terminal/ termination $\geq 5 M\Omega$	> 100M Ω	P
	iii) any metal part of a cord anchorage $\geq 5 M\Omega$		N/A
	c) each switched pole terminal and corresponding socket-outlet contact $\geq 2 M\Omega$		N/A
15.1.3	Electric strength 2000 V short circuit current of 200 mA for 1 min.		—
	a) between line and neutral terminals/terminations		P
	b) line and neutral terminals/ terminations connected together and:		—
	i) metal foil in contact with the entire accessible external surface		P
	ii) the earthing terminal/ termination		P
	iii) any metal part of a cord anchorage		N/A
	c) each switched pole terminal and corresponding socket-outlet contact		N/A
	During the test no breakdown or flash over shall occur		P
15.1.4	High voltage test for non-rewirable socket-outlets between current-carrying parts connected together and a conducting electrode in contact with the entire accessible surface; test voltage 6000 V for 3-5 s		N/A
	During the test no breakdown or flash over shall occur		N/A

18	Normal operation of socket-outlets		—
18.1.2	Normal operation test:		—
	Test current (A):	13 A	P
	Test voltage 250 V ~		P
	No. operation 15,000 times		P

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	After the test the shutter operating satisfactory, the socket contact safely shielded and the socket-outlets shall be in accordance with 9.1, 10.2, 13.4a, 13.6, 13.7, 13.8, 15 and 16		P
9	Accessibility of live parts		—
9.1	Socket-outlets: when mounted and wired live parts are not accessible		P
9.1.1	Checked by application of the test pin shown in fig. 1 perpendicular to the accessible external surface of the socket-outlet with a force of 5 N; it shall not be possible to touch live parts		P
16	Temperature rise		—
16.1	Socket-outlets and their surroundings not attain excessive temperatures in normal use		—
16.1.1	Test carried out at rated voltage	250 Vac	P
	Terminal tightened with two thirds of the values given in table 3	Screw Ø: 4.88 mm 2/3Torque: 1.33 Nm	P
16.1.2	Fixed socket-outlets:		—
	Cross-sectional area (mm ²)	2.5 mm ²	P
	Test current (A)	1-Gang socket outlet: 14A; 6A 2-Gang socket outlet: 14A+6A	P
16.1.3	Rewirable accessories are tested with 1000 mm of 1.25 mm ² 3-core pvc insulated flexible cord as given in table of BS 6500		N/A
	Non-rewirable accessories tested with 1000 mm of the flexible cord supplied with them		N/A
	- type of flexible cable; number of conductors and nominal cross sectional area (mm2)		N/A
	- test current as specified in table 2 for a minimum continuous period of 4 h or longer until steady state		P
	- terminals or terminations for fixed socket outlet not exceed 47 K and not exceed 52 K for portable socket-outlet.....	<u>1-Gang socket outlet</u> L : 27.9K; 27.0K; 28.5K N : 28.1K; 26.6K; 27.1K <u>2-Gang socket outlet</u> L : 39.9K; 43.9K; 37.4K N : 36.1K; 36.6K; 34.7K	P

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	- accessible external surfaces < 52 K.....:	<u>1 Gang socket outlet</u> 21.1K; 21.1K; 22.3K <u>2 Gang socket outlet</u> 23.4K; 16.7K; 27.9K	P
--	---	--	---

15	Insulation resistance and electric strength		—
15.1	Insulation resistance (500 V +250V for 1 min) :		—
	a) between line and neutral terminals/terminations $\geq 5 \text{ M}\Omega$:	>100 M Ω	P
	b) line and neutral terminals/ terminations connected together and:		—
	i) metal foil in contact with the entire accessible external surface $\geq 5 \text{ }\Omega$:	>100 M Ω	P
	ii) the earthing terminal/ termination $\geq 5 \text{ M}\Omega$	>100 M Ω	P
	iii) any metal part of a cord anchorage $\geq 5 \text{ M}\Omega$:		N/A
	c) each switched pole terminal and corresponding socket-outlet contact $\geq 2 \text{ M}\Omega$		N/A
15.1.3	Electric strength 2000 V short circuit current of 200 mA for 1 min.		—
	a) between line and neutral terminals/terminations		P
	b) line and neutral terminals/ terminations connected together and:		—
	i) metal foil in contact with the entire accessible external surface		P
	ii) the earthing terminal/ termination		P
	iii) any metal part of a cord anchorage		N/A
	c) each switched pole terminal and corresponding socket-outlet contact		N/A
	During the test no breakdown or flash over shall occur		P
15.1.4	High voltage test for non-rewirable socket-outlets between all current-carrying parts connected together and a conducting electrode in contact with the entire accessible surface; test voltage 6000 V for 3-5 s		N/A
	During the test no breakdown or flash over shall occur		N/A

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13	Construction of socket-outlets		—
13.4.1a	Voltage drop not exceed 40 mV at 13 A between individual line or neutral socket contact and the corresponding plug pin	<u>1-Gang socket outlet</u> L:11.52mV;7.6mV;6.44mV N:13.73mV;18.25mV;17.31mV <u>2-Gang socket outlet</u> L:8.52mV;7.15mV;7.67mV N:19.72mV;16.78mV;15.27mV	P
13.4.1b	Withdrawal force with the gauge shown in fig. 16b. The socket-contact shall retain the gauge not less than 30 s		P

10	Provision for earthing		—
10.2	Accessible metal parts of socket-outlets in effective electrical contact with the earthing socket-outlet, except that metal parts on, or screws in or through, non-conducting material, need not be in effective electrical contact with the earthing socket-contact		—
10.2.1	Compliance checked by inspection and by the following:		—
	a) for metal parts insulated from live parts, by the test described in 15.1.3		N/A
	b) for metal parts connected to an earthing terminal or earthing plug pin; test current 25 A; resistance not exceed 0.05 Ohm	<u>1-Gang socket outlet</u> 0.011Ω; 0.011Ω; 0.015Ω <u>2-Gang socket outlet</u> 0.012Ω; 0.011Ω; 0.011Ω	P

13	Construction of socket-outlets		—
13.6	Earth socket-contact withstand the stresses imposed upon them by incorrect insertion of plugs		P
13.6.1	Compliance checked by the gauge shown in fig. 15. After the test the earth socket contact shall retain the weight shown in fig. 16a not less than 30 s		P
13.7	Current-carrying socket contacts automatically screened by shutters		P
13.7.1	Compliance shall be checked by inspection, by the test described in 18.1.2, and by the application of the gauge shown in fig 16b. The gauge and test pin, shown in fig. 1 applied to the shutter with 5 N		P

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	- by the test described in 18.1.2		P
	- by the gauge shown in fig 16b.		P
	- by gauge and test pin, shown in fig. 1 applied to the shutter with 5 N		P
	Not possible to touch current carrying parts		P
13.8	Construction of socket-outlets allow easy withdrawal of the plug		P
13.8.1	Compliance checked by the following test:		—
	Withdrawal test – max pull 36 N.	< 36N	P
	Plug come out of socket-outlet		P

	Sequence no. 5		
	General test		
14	Resistance to ageing and to humidity		—
14.2	Socket-outlets proof against humid conditions which may occur in normal use		—
14.2.1	Compliance checked by a humidity treatment carried out in humidity cabinet containing air with relative humidity maintained between 85 % and 95 % followed by the test of clause 15	25°C @ 93%	P
	Specimens kept in cabinet for 2 days (48 h)	48 hours	P
	After this treatment the specimens show no damage		P

15	Insulation resistance and electric strength		—
15.1	Insulation resistance (500 V +250V for 1 min) :		—
	a) between line and neutral terminals/terminations $\geq 5 \text{ M}\Omega$:	> 100M Ω	P
	b) line and neutral terminals/ terminations connected together and:		—
	i) metal foil in contact with the entire accessible external surface $\geq 5 \text{ }\Omega$:	> 100M Ω	P
	ii) the earthing terminal/ termination $\geq 5 \text{ M}\Omega$	> 100M Ω	P
	iii) any metal part of a cord anchorage $\geq 5\text{M}\Omega$:		N/A
	c) each switched pole terminal and corresponding socket-outlet contact $\geq 2 \text{ M}\Omega$		N/A

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Clause	Requirement – Test	Result – Remark	Verdict

15.1.3	Electric strength 2000 V short circuit current of 200 mA for 1 min.		—
	a) between line and neutral terminals/terminations		P
	b) line and neutral terminals/ terminations connected together and:		—
	i) metal foil in contact with the entire accessible external surface		P
	ii) the earthing terminal/ termination		P
	iii) any metal part of a cord anchorage		N/A
	c) each switched pole terminal and corresponding socket-outlet contact		N/A
	During the test no breakdown or flash over shall occur		P
15.1.4	High voltage test for non-rewirable socket-outlets between all current-carrying parts connected together and a conducting electrode in contact with the entire accessible surface; test voltage 6000 V for 3-5 s		N/A
	During the test no breakdown or flash over shall occur		N/A

18	Normal operation of socket-outlets		—
18.1.3	Voltage drop across each switched pole in switches socket-outlets not exceed 60 mV at rated current	L :	N/A
	Normal operation of switch:		—
	Test current (A):		N/A
	Test voltage 250 V ~		N/A
	No. of operation 15,000 times		N/A
	After the test the voltage drop across each switched pole not exceed 75 mV at rated current	L :	N/A

15	Insulation resistance and electric strength		—
15.1	Insulation resistance (500 V +250V for 1 min) :		N/A
	a) between line and neutral terminals/terminations $\geq 5M\Omega$:		N/A
	b) line and neutral terminals/ terminations connected together and:		N/A

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Clause	Requirement – Test	Result – Remark	Verdict

	i) metal foil in contact with the entire accessible external surface $\geq 5 \text{ M}\Omega$:		N/A
	ii) the earthing terminal/ termination $\geq 5 \text{ M}\Omega$		N/A
	iii) any metal part of a cord anchorage $\geq 5 \text{ M}\Omega$		N/A
	c) each switched pole terminal and corresponding socket-outlet contact $\geq 2 \text{ M}\Omega$		N/A
15.1.3	Electric strength 1500 V short circuit current of 200 mA for 1 min.		N/A
15.1.3	a) between line and neutral terminals/terminations		N/A
	b) line and neutral terminals/ terminations connected together and:		N/A
	i) metal foil in contact with the entire accessible external surface		N/A
	ii) the earthing terminal/ termination		N/A
	iii) any metal part of a cord anchorage		N/A
	c) each switched pole terminal and corresponding socket-outlet contact		N/A
	During the test no breakdown or flash over shall occur		N/A
15.1.4	High voltage test for non-rewirable socket-outlets between all current-carrying parts connected together and a conducting electrode in contact with the entire accessible surface; test voltage 6000 V for 3-5 s		N/A
	During the test no breakdown or flash over shall occur		N/A

20	Mechanical strength		—
20.1	Socket-outlets: adequate mechanical strength and be so constructed as to withstand such handling as may be expected in normal use		—
20.1.1	Compliance checked by the tests given in 20.1.2 and 20.1.3	20.1.3	P
20.1.2	Solid link is inserted and withdraw from the fuse clips 20 times. After test a normal fuse link complying with BS 1362 is inserted and the appropriate mechanical test completed		N/A

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Clause	Requirement – Test	Result – Remark	Verdict

20.1.3	Fixed socket-outlets: impact test, height 150 mm (apparatus shown in fig. 21a)		—
	After the test: no damage and in accordance with clauses 8, 9 and 15		P
20.1.4	Tumbling barrel test :		—
	- rewirable single and twin portable socket-outlets are fitted with a 3-core PVC 1.25 mm ² flexible cord as given in table 16 of BS 6500		N/A
	-terminals and cover screws tightened with the torque in table 3		N/A
	- non-rewirable single and twin portable socket-outlet tested as delivered		N/A
	After the test portable socket-outlet not show external damage which may affect the safety and no components have become detached		N/A
	Earthing terminal, if any, still tightened with a torque not less than 70% of the original torque		N/A
	After the test the samples shall comply with appropriate test describe in clause 13.4b, 15 and 16		N/A
20.1.5	Rewirable portable socket-outlets with more than two outlets are fitted with 3-core 1.25mm ² flexible cord as given in table 16 of BS 6500		N/A
	Non-rewirable accessories are tested as delivered		N/A
	Socket-outlet fall eight times on the concrete floor, the flexible cord being rotated through approx. 45°		N/A
	After the test the samples comply with appropriate test described in clause 13.4b, 15 and 16		N/A

	Sequence no. 6		
	Materials		
22	Resistance to heat		—
22.1	Socket-outlets shall be resistant to heat		—
22.1.1	Compliance checked by the tests of 22.1.2 or 22.1.3		P
22.1.2	Heating cabinet 70°C for 1 h for portable socket-outlets, mounting boxes, separate covers and separate cover plates		N/A

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BS 1363-2:1995			
Clause	Requirement – Test	Result – Remark	Verdict
	Heating cabinet 100°C for 1 hour for all other socket-outlets		P
	During the test not undergo any change impairing their further use and the sealing compound if any, not flow such that live parts exposed		P
	After the test socket-outlet comply with 9.2 and 15.1.3, and it not possible to touch live parts with test probe 11 of BS 3042 applied with a force of 30 N		P
22.1.3	Portable socket-outlets external parts of resilient material subjected to test by means of an apparatus shown in fig. 23, at 70°C for 1 h		N/A
	After the test socket-outlet satisfy tests of 15.1.2b and 15.1.3 and shall comply with the gauges of fig. 11		N/A
22.2	Parts of the insulating material sufficiently resistant to heat with regard to their location and function in the socket-outlet		—
22.2.1	-parts of ceramic material are deemed to comply without testing		N/A
	- external parts tested according to 22.1.3 are deemed to comply without further testing		N/A
	-other parts of insulating material subjected to a ball pressure test shown in fig. 24		P
	For insulating parts necessary to retain current-carrying part in position and the material forming the front surface of socket-outlets, within a zone of 2 mm around the pin entry holes		—
	20N, 1 h at 125°C for fixed socket-outlet	base	P
	20N, 1 h at 75°C for portable socket-outlet		N/A
	After the test diameter of impression ≤ 2 mm	< 2 mm	P
	For insulating parts not necessary to retain current-carrying part in position even though they may be in contact with them (for fixed and portable socket outlet)		—
	20N, 1 h at 75°C for fixed and portable socket-outlet	cover	P
	After the test diameter of impression ≤ 2 mm	< 2 mm	P

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BS 1363-2:1995			
Clause	Requirement – Test	Result – Remark	Verdict

Sequence no. 7			
Materials			
23	Resistance to abnormal heat, fire and tracking		—
23.1	Socket-outlets proof against abnormal heat, fire and tracking		—
23.1.1	Compliance shall be checked by the tests of 23.2 and 23.3		P
23.2	Glow-wire test:		—
	Glow wire test is performed according to clauses 4 to 10 of BS 6458 : Section 2.1 : 1984		—
	Parts necessary to retain live parts in position:		—
	Portable socket-outlets – 750°C		N/A
	Fixed socket-outlets – 850°C	base	P
	No visible flame and no sustained glowing		N/A
	Flame and glowing extinguish within 30 s	< 30s	P
	No ignition of the tissue paper		P
	For insulating parts not necessary to retain current-carrying part in position even though they may be in contact with live parts:		—
	Portable socket-outlets – 650°C		N/A
	Fixed socket-outlets – 650°C	covers	P
	No visible flame and no sustained glowing		P
	Flame and glowing extinguish within 30 s		N/A
	No ignition of the tissue paper		P

Sequence no. 8			
Materials			
23	Resistance to abnormal heat, fire and tracking		—
23.3	Tracking test		—
	Parts of insulating material supporting or in contact with live parts of socket-outlets – test voltage 175 V, 50 drops of solution A	50 drops	P
	No flashover or breakdown		P

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BS 1363-2:1995			
Clause	Requirement – Test	Result – Remark	Verdict

24	Resistance to excessive residual stresses and rusting		—
24.1	Press-formed or similar current-carrying parts of copper alloy containing less than 80% of copper resistant to failure in use due to stress		—
24.1.1	Checked by the following test:		—
	Immersion in a aqueous solution for 30 min at temperature of 20°C		P
	After test no cracks visible		P
24.2	Ferrous parts protected against rusting		—
24.2.1	Test: 10 min in carbontetrachloride, trichloroethane or equivalent degreasing agent, 10 min 10 % solution of ammonium chloride, 10 min in a box with air saturated with moisture and 10 min at 100 °C ± 5 °C:		N/A
	Their surfaces shall show no signs of rust		N/A

21	Screws, current-carrying parts and connection		—
21.3	Current-carrying part and earthing contacts of brass, copper, phosphor-bronze or other metal at least equivalent with regard to its conductivity, resistance to abrasion and resistance to corrosion		P
21.3.1	Compliance shall be checked by inspection and by the relevant test described in 10.1 and clauses 16 and 24		P

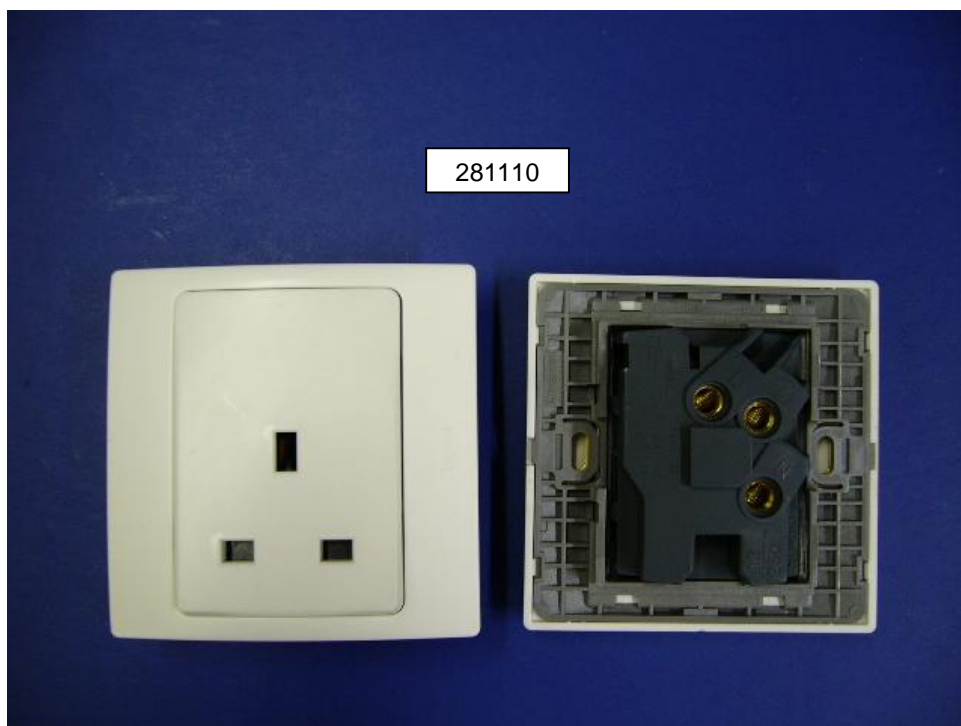
	Sequence no. 9		
	Positive break		—
13.7	The actuating member of a switch shall not remain at rest in the off position whilst the switch contacts remained closed		N/A
	The actuating mechanism shall be so constructed that when operated the switch can remain only in a position giving adequate separation of contact		N/A
13.7.1	Compliance shall be checked by inspection and by the test of 13.7.2		N/A
13.7.2	The force to switch off shall be measured and the force should be applied to the extremity of the actuating member		N/A

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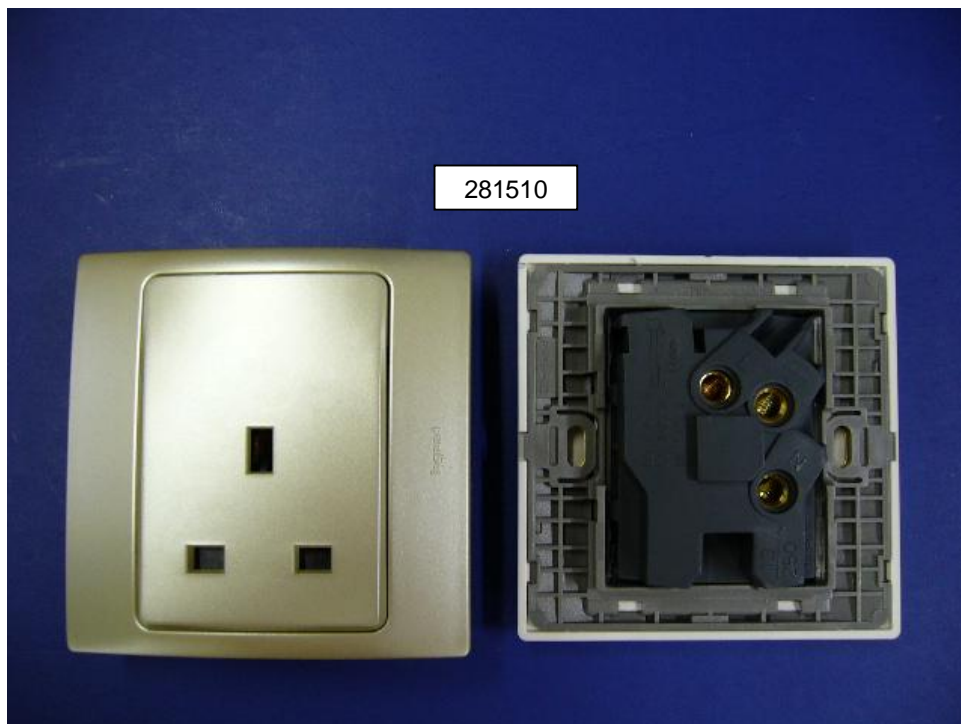
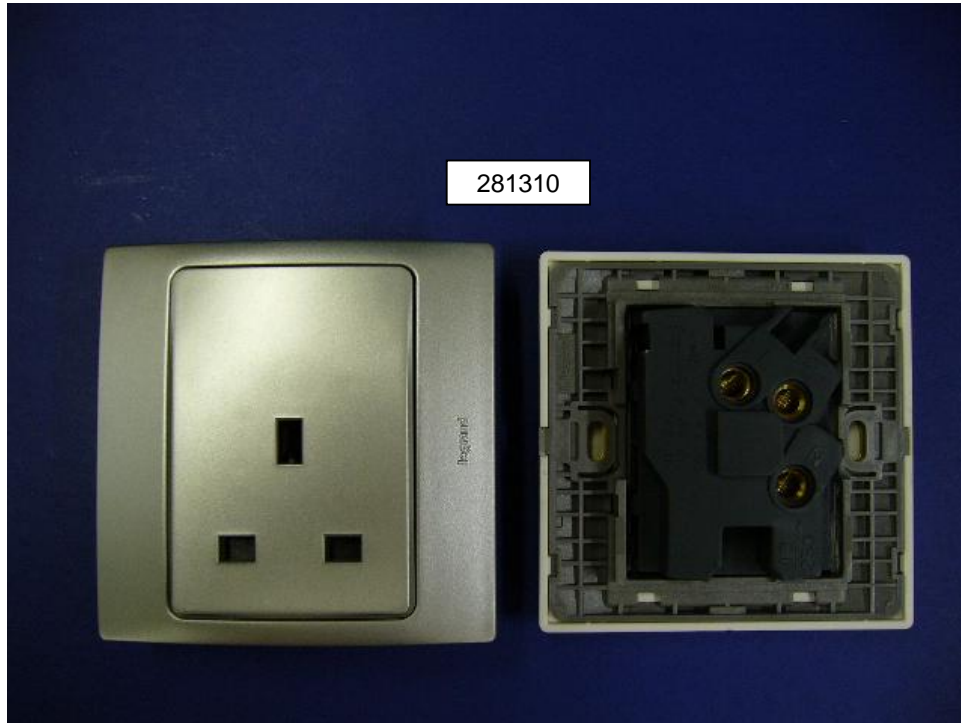


BS 1363-2:1995			
Clause	Requirement – Test	Result – Remark	Verdict
	The actuating member being in the closed position, fixed and moving contact of the pole shall be maintained closed by mechanical means.		N/A
	Test force apply to actuating member as in table 3b to open the contacts for 10s		N/A
	Test force 3F.....:		N/A
	Min. test force.....:	50 N	N/A
	Max. test force.....:	150 N	N/A
	If locking means are designed to lock the actuating members in opened position, it shall no be possible to lock the actuating members in this position while the force is applied		N/A
	After the test and when test force is no longer applied, the actuating member shall not remain at rest in the “OFF” position		N/A

Appendix I
'Legrand' 13A 1 Gang socket outlet



Appendix I (Cont'd)
'Legrand' 13A 1 Gang socket outlet



Appendix I (Cont'd)
'Legrand' 13A 1 Gang socket outlet



Appendix I (Cont'd)
'Legrand' 13A 2 Gang socket outlet



Appendix I (Cont'd)
'Legrand' 13A 2 Gang socket outlet



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