

Test Report No. S09EEC00078/MLM/PKS
dated 09 MAR 2009

Note: This report is issued subject to TÜV SÜD PSB's "Terms and Conditions Governing Technical Services".
The terms and conditions governing the issue of this report are set out as attached within this report..



PSB Singapore

Choose certainty.
Add value.

Subject

TYPE TESTING OF 13A FUSED CONNECTION UNITS

Client

Legrand Singapore Pte Ltd
15 Jalan Kilang Barat, #07-05, Frontech Centre
Singapore 159357

Attn: Mr. Poh Tze Koon

Sample Submission Date



13 Jan 2009



Laboratory:
TÜV SÜD PSB Pte. Ltd.
Testing Services
No.1 Science Park Drive
Singapore 118221

Phone: +65-6885 1333
Fax: +65-6776 8670
E-mail: testing@tuv-sud-psb.sg
www.tuv-sud-psb.sg
Co. Reg : 199002667R

Regional Head Office:
TÜV SÜD Asia Pacific Pte. Ltd.
3 Science Park Drive, #04-01/05
The Franklin, Singapore 118223
TUV®

		LA-2007-0380-A 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	The results reported herein have been performed in accordance with the laboratory's terms of accreditation under the Singapore Accreditation Council - Singapore Laboratory Accreditation Scheme. Tests/Calibrations marked "Not SAC-SINGLAS Accredited" in this Report are not included in the SAC-SINGLAS Accreditation Schedule for our laboratory.
---	---	--	--

Test Report No. S09EEC00078/MLM/PKS
dated 09 MAR 2009



PSB Singapore

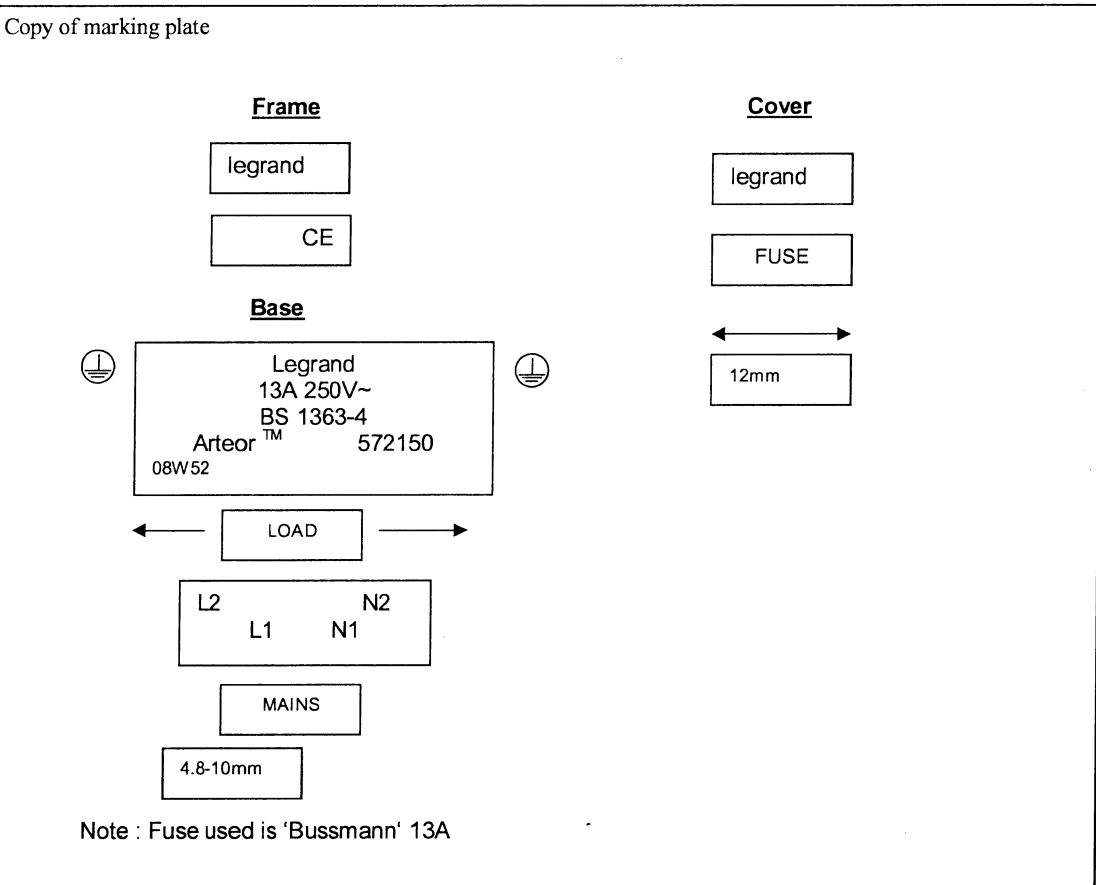
TEST REPORT BS 1363 Part 4 : 1995 Specification for 13A fused connection units switched and unswitched	
Report Reference No.	S09EEC00078/MLM/PKS
Compiled by (+ signature)	Mak Lai Meng <i>[Signature]</i>
Approved by (+ signature)	Phua Kim Suah <i>[Signature]</i>
Date of issue	09 Mar 2009
Testing Laboratory	TÜV SÜD PSB Pte Ltd
Address	No.1, Science Park Drive Singapore 118221
Testing location	Same as above
Applicant's name	Legrand Singapore Pte.Ltd
Address	15 Jalan Kilang Barat, #07-05, Frontech Centre, Singapore 159357
Test specification	
Standard	BS 1363 Part 4 : 1995 with A1, A2 and A3
Test procedure	Same as above
Non-standard test method	N/A
Test item description	13A Switched fused connection unit with Flex Outlet
Trade Mark	Legrand / Arteor
Manufacturer	Legrand (Beijing) Electrical Co, Ltd
Model/Type reference	572150
Test item particulars	
Rating	13A 250V ac
Method of application	Flush
Provision for flexible cord	With flex outlet
Type of terminals	Screw-type
Existence of switch	With switch
Existence of indicator lamp	Without lamp

Test Report No. S09EEC00078/MLM/PKS
dated 09 MAR 2009



PSB Singapore

<p>Test case verdicts</p> <p>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)</p>
<p>Testing</p> <p>Date of receipt of test item : 13 Jan 2009 Date(s) of performance of test : 14 Jan 2009 to 09 Mar 2009</p>
<p>General remarks</p> <p>This report shall not be reproduced except in full without the written approval of the testing laboratory. The test results presented in this report relate only to the item(s) tested. "(see remark #)" refers to a remark appended to the report. "(see Annex #)" refers to an annex appended to the report. Throughout this report a point is used as the decimal separator.</p>



Test Report No. S09EEC00078/MLM/PKS
dated 09 MAR 2009



PSB Singapore

Summary of testing

The switched fused connection units submitted were deemed to comply with BS 1363: Part 4: 1995 with A1, A2 and A3.

Product information:

<u>Models</u>	<u>Descriptions</u>
572150	13A Switched fused connection unit with Flex Outlet

Test Report No. S09EEC00078/MLM/PKS
dated 09 MAR 2009



PSB Singapore

BS 1363 : Part 4			
Clause	Requirement – Test	Result – Remark	Verdict

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	23°C	—
	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	N/A
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		
6.1	Fused connection units shall be classified as follows:		—
	Switched or unswitched	switched	—
	- Flush or surface or panel	Flush	—
	- With or without provision for outgoing cord	With provision	—
	- With or without indicator lamp	Without lamp	—

Test Report No. S09EEC00078/MLM/PKS
dated 09 MAR 2009



PSB Singapore

BS 1363 : Part 4			
Clause	Requirement – Test	Result – Remark	Verdict

7	Marking and Labelling		
7.1	Connection units shall be legibly and durably marked with the following information:		—
	- (a) manufacturer's or responsible vendor's name	legrand	P
	- (b) the number of this standard	BS 1363-4	P
	- (c) the terminals intended for connection of various conductors shall be identified by the symbols given in 7.2		P
	- (d) the words 'FUSE' or 'FUUSED' or symbol (as given in d. 7.2) on the external accessible surface of a connection unit or fuse carrier	FUSE	P
	All connection units shall be marked with:		—
	- (1) rated current	13A	P
	- (2) rated voltage	250V	P
	- (3) nature of supply	~	P
	- (4) incoming (in or supply) terminals	MAINS	P
	- (5) outgoing (out or load) terminals	LOAD	P
7.1.1	Marking durables and easily legible. Test: 15 s with water and 15 s with aliphatic solvent hexane		P
	Markings produced by engraving or moulding process shall be deemed to comply without test	moulding	P
7.2	If symbols are used shall be as follows:		—
	Amperes A	A	P
	Volts V	V	P
	Alternating current ~	~	P
	Line L	L	P
	Neutral N	N	P
	Earth E or earth symbol		P
	Fuse symbol	FUSE	P
	For the marking of the rated current and rated voltage of the connection unit figures may be used alone, the figures for the current rating being placed before or above that of the rated voltage and separated by a line.	13A 250V	P
	If a symbol of nature of supply is used, it shall be placed next to the marking for the rated current and rated voltage.	13A 250V~	P

Test Report No. S09EEC00078/MLM/PKS
dated 09 MAR 2009



PSB Singapore

BS 1363 : Part 4			
Clause	Requirement – Test	Result – Remark	Verdict

9	Accessibility of live parts		
9.1	Connection units shall be so designed that when they are mounted and wired as in normal use, live parts are not accessible even after removal of parts which can be removed without the use of a tool		P
9.1.1	Checked by application of the test probe B of BS EN 60132 : 1998 to the accessible external surface of the connection unit with a force of 5 N in the most unfavourable position; it shall not be possible to touch live parts		P

11	Terminals and terminations		
11.1	Terminals shall provide for effective clamping and securing of conductors connected to them, so that efficient electrical connection is made	Screw-type	P
11.1.1	Checked in accordance with 11.2 to 11.8		—
11.2	Connection units shall be provided with line, neutral and earth terminal as in 3.12		P
11.2.1	Checked by inspection		P
11.3	Incoming or supply line and neutral terminals shall permit the connection, without special preparation of one, two or three 2.5 mm ² solid or stranded, or of one or two 4 mm ² stranded conductor	Stranded 3 x 2.5 mm ² 2 x 4 mm ²	P
11.3.1	Checked by inspection and by fitting the appropriate conductors		P
11.4	Incoming earthing terminals shall permit without special preparation, of one, two or three 1.5 mm ² or 2.5 mm ² solid or stranded or of one or two 4 mm ² stranded conductors	Stranded 3 x 2.5 mm ² 2 x 4 mm ²	P
11.4.1	Checked by inspection and by fitting the appropriate conductors		P
11.5	Outgoing or load line, neutral and earth terminals shall permit without special preparation, of one conductor of solid or stranded cable of 1.5 mm ² or 2.5 mm ² or one conductor of a flexible cord having a nominal cross-sectional area of 0.5 mm ² up to and including 1.5 mm ² where provision is made by the connection unit for the fitting of cord	Stranded 2.5 mm ² Flexible cord 0.5 mm ² to 1.5mm ²	P
11.5.1	Checked by inspection and by fitting the appropriate conductors		P
11.6	Where pillar terminals are used they shall have :-		—
	- clamping screws of sufficient length		P

Test Report No. S09EEC00078/MLM/PKS
dated 09 MAR 2009



PSB Singapore

BS 1363 : Part 4			
Clause	Requirement – Test	Result – Remark	Verdict

	- end of screw slightly rounded		P
	- clearance not exceed 0.4 mm for flexible cords and 0.6 mm for fixed wiring	Req. < 0.6mm Mea. 0.24mm	P
11.6.1	Checked by inspection and by measurement		P
11.7	Outside diameter of screw terminal not less than 3 mm or not smaller than 6 B.A	Req. ≥ 3.0mm Mea. 3.88mm	P
11.7.1	Checked by inspection and measurement		P
11.8	Outgoing terminals of cord outlet connection unit 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 stray strand bypassing the fuse-link		P
11.8.1	Checked by inspection and by the following tests:-		—
	A 6 mm length of insulation is removed from the end of flexible conductors of 1.5 mm ² . One strand is left free and the other strands are fully inserted and clamped in the terminal. The free strand connected to a live terminal shall not -		P
	- (a) touch any metal part, so as to bypass any fuse link		P
	- (b) touch any metal part which is accessible or is connected to an accessible metal part		P
	- (c) reduce creepage distance and clearances to accessible surfaces to less than 1.3 mm		P
	The free strand of a flexible conductor connected to an earthing terminal shall not touch any live parts		P

13	Construction of connection units		
13.1	Surface mounted connection units shall be provided with means to ensure proper seating on a flat surface and with fixing holes which will accept No. 6 wood screws complying wit BS 1210		N/A
	Flush or semi mounted connection unit for use on boxes according to BS 4662 shall have provision for:	Flush	P
	- two M3.5 fixing screw screws at centre of 60.3 mm on the horizontal or vertical centreline for 1 gang or	60.3 mm	P
	- 120.6 mm on the longitudinal centreline for 2 gang socket-outlets		N/A
	- 180.9 mm on the longitudinal centreline for 3 gang socket-outlets		N/A

Test Report No. S09EEC00078/MLM/PKS
dated 09 MAR 2009



PSB Singapore

BS 1363 : Part 4			
Clause	Requirement – Test	Result – Remark	Verdict

	Size and disposition of fixing holes shall be such as to allow satisfactory attachment to boxes having centre manufactured to a ± 0.8 mm tolerance	0.8mm	P
13.1.1	Checked by inspection and measurement		P
13.2	Flush connection units plates of insulating material, metal or a combination of both, shall be min. 82.5 mm x 82.5 mm.	With cover remove 78.4 mm x 78.5 mm	P
13.2.1	Checked by inspection and measurement		P
13.3	Flush connection units for use in enclosure according to BS 4662 : 1970 size of the base shall be such:		P
	- that clearance of wiring between the base and the inside walls of the box is not less than 6 mm	10.6 mm	P
	- that the base and the bottom of a 35.0 mm deep box is not less than 14 mm	16.8 mm	P
	No live metal parts protruding from or flush with socket-outlet base		P
	Any exposed live metal part shall be recessed to give necessary clearance distance from any earthed metal which may come into contact with the base		P
	Connection units for use in other enclosure shall provide adequate wiring space		N/A
	Holes for wiring large enough to accept three 2.5 mm ² cable core with their insulation, the sheath, if any be removed		N/A
13.3.1	Checked by inspection and measurement		P
13.4	Conductive components parts of connection unit so located and separated that in normal use, they cannot be displaced so as to affect adversely the safety or proper operation of the connection units		P
13.4.1	Checked by inspection and manipulation		P

19	Connection of flexible cords and cord anchorage		
19.2	Cord anchorage shall anchor the cord securely to the connection unit and correctly installed		P
	Design of cord anchorage shall be as follows:		—
	- (a) cord anchorage shall not be removable from the outside without the use of a tool		P

Test Report No. S09EEC00078/MLM/PKS
dated 09 MAR 2009



PSB Singapore

BS 1363 : Part 4			
Clause	Requirement – Test	Result – Remark	Verdict

	-(b) it shall not be possible to touch cord anchorage screws, if any, with test probe B of BS EN 61032 : 1998 when the connection unit is energized		P
	-(c) cord anchorage so designed that no metal part bearing directly on the flexible cord		N/A
	- (d) at least one part of the cord anchorage is securely fixed to the connection units		P
	- (e) so that clamping the cord does not require a special tool		P
19.2.1	Checked by inspection		P
19.3	Screws used when clamping the flexible cord not used to serve other components		P
19.3.1	Compliance checked by inspection		P
19.4	The cord entry shall be so shaped as to prevent damaged to the cord		P
19.4	Checked by inspection		P

21	Screws, current-carrying parts and connections		
21.1	Screwed connections withstand mechanical stresses occurring in normal use		P
	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
	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:		—
	- 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.....	3.88mm; 1.2Nm; 5x	P

Test Report No. S09EEC00078/MLM/PKS
dated 09 MAR 2009



PSB Singapore

BS 1363 : Part 4			
Clause	Requirement – Test	Result – Remark	Verdict

	- earthing terminals: screw diameter (mm); torque (Nm); times.....	3.40mm; 0.8Nm; 5x	P
	- cord anchorage: screw diameter (mm); torque (Nm); times.....	4.78mm; 2.0Nm; 5x	P
	- other screws or nuts: screw diameter (mm); torque (Nm);times.....		N/A
	During the test no damage impairing the further use of the screwed connections		P
21.2	Thread-forming and or/ thread cutting screws shall not be used for the making of current-carrying or earth continuity connections		P
	Screws which make a mechanical connection between different parts of the connection units shall be locked against loosening, if the connection carries current		N/A
	Rivets used for current-carrying parts shall be locked against loosening, if these connections are subject to torsion in normal use which is likely to loosen the connection		P
21.2.1	Checked by inspection and manual test		P
21.3	Current-carrying parts and earthing circuits shall be 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 shall be 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.		P
	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		P
	- rated voltage and overvoltage category as in annex D	Rated 240 V; 4000 V	P
	- pollution degree declared by the manufacturer according with annex E	Degree 2	P

Test Report No. S09EEC00078/MLM/PKS
dated 09 MAR 2009



PSB Singapore

BS 1363 : Part 4			
Clause	Requirement – Test	Result – Remark	Verdict
	For the measurements		
	- Detachable parts are removed and movable parts which can be assembled in different orientations placed in the most unfavourable position.		N/A
8.1.1	Clearances for basic insulation		—
	- \geq the values given in table 6.	Req. :-1.5 mm Mea. :- > 1.5 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 D		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 6		N/A
8.1.3	Clearances for supplementary insulation		—
	- \geq the values given in table 6.		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.:- 3 mm 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:		P
	- Detachable Parts are removed and movable parts and parts which can be assembled in different orientations placed in the most unfavourable position		—
	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	175V	P

Test Report No. S09EEC00078/MLM/PKS
dated 09 MAR 2009



PSB Singapore

BS 1363 : Part 4			
Clause	Requirement – Test	Result – Remark	Verdict
	Material group IIIb $100 \leq PTI < 175$		N/A
	PTI values are obtained in accordance with test of annex C.		P
8.2.1	Creepage distances for basic insulation		
	- \geq the values given in table 7	Req 2.5mm Mea >3mm	P
8.2.2	Creepage distances for functional insulation		—
	- \geq the values given in table 7		N/A
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		N/A
	- \geq double of the values specified for basic insulation in table 7		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		P
	- 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	4kV	P
	Compliance checked by test in accordance with clause 15	2.5 KV	P
8.3.2	Reinforced solid insulation		N/A
	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

Test Report No. S09EEC00078/MLM/PKS
dated 09 MAR 2009



PSB Singapore

BS 1363 : Part 4			
Clause	Requirement – Test	Result – Remark	Verdict

Sequence 2			
10	Provision for earthing		
10.1	All accessible metal parts of connection units shall be in effective electrical contact with the earthing terminal, except that metal parts on, or screws in or through, non-conducting material from the current-carrying parts in such a way that in normal use they cannot become live, need not be in effective electrical contact with the earthing of the connection units		P
10.1.1	Compliance checked by inspection and the following:		—
	a) for metal parts insulated from live parts, by the test described in 15.1.3		P
	b) for metal parts connected to an earthing terminal ; test current 25 A; resistance not exceed 0.05 Ohm		N/A
10.2	If means are provided for electrically bonding the mounting box to the earthing circuit of connection units by means of fixing screws the connection between the screw and the earthing terminal shall be of low resistance		P
10.2.1	Compliance shall be checked by the test described in 10.1.1b applied between the connection units earthing terminals and any fixing screw in electrical contact with the earthing circuit		P
	Connection units shall be attached to its mounting box, the fixing screw tightened to 2/3 torque given in table 2	Screw size:-3.4mm Torque (2/3):-0.5Nm	P
	Resistance measured not exceed 0.05 Ohm	0.017Ω, 0.016Ω, 0.015Ω	P

19	Connection of flexible cords and cord anchorage		
19.1	For connection units with cord outlets		
	Connection units shall be suitable for flexible cords as given in tables 10, 11, 12, 13, 26 & 27 of BS 6500, having nominal conductor cross-sectional areas not exceeding 1.5 mm ²		P
	Cord anchorage shall be such that the conductors are relieved from strain, including twisting, where they are connected to the terminals or terminations		P
	The cord anchorage shall contain the sheath		P
	The cord anchorage shall either be of insulating material or if metal shall be provided with an insulating lining fixed to the metal parts		P

Test Report No. S09EEC00078/MLM/PKS
dated 09 MAR 2009



PSB Singapore

BS 1363 : Part 4			
Clause	Requirement – Test	Result – Remark	Verdict

	Method such as tying the flexible cord in a knot or tying the end with string or the like not be used		P
19.1.1	Compliance shall be checked by inspection and by the following test:		—
	Connection units fitted with a 2-core flexible cord having a nominal cross-sectional area of 0.5 mm ² as given in table 26 of BS 6500		P
	Clamping screw tightened with two-thirds of that given in table 2		P
	Assembly left untouched for min. 24 h		P
	It shall not be possible to push the flexible cord into the connection unit as to impair safety		P
	Pull test in the most unfavourable position momentarily: 25 times, 3 kg		P
	Immediately afterwards, the cord is subjected to Torque test; 0.15 Nm, 60 s		P
	After the test the flexible cable cord not displaced by more than 2 mm	< 2mm	P
	Repeat above tests with a 3-core flexible cord having a nominal cross section area of 1.5 mm ² as given in table 27 of BS 6500		P
	Clamping screw tightened with two-thirds of that given in table 2		P
	Assembly left untouched for min. 24 h		P
	Pull test in the most unfavourable position momentarily: 25 times, 6 kg		P
	Immediately afterwards, the cord is subjected to Torque test; 0.35 Nm, 60 s		P
	After the test the flexible cable cord not displaced by more than 2 mm	< 2mm	P

14	Resistance to ageing and humidity		
14.2	Resistance to humidity		
	Connection units shall be 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%	—

Test Report No. S09EEC00078/MLM/PKS
dated 09 MAR 2009



PSB Singapore

BS 1363 : Part 4			
Clause	Requirement – Test	Result – Remark	Verdict

	Specimens kept in cabinet for 2 days (48 h)		—
	After this treatment the specimens show no damage and shall me the requirement of clause 15		P
15	Insulation resistance and electric strength		
15.1	The insulation resistance and electric strength of connection units shall be adequate		P
15.1.1	Compliance checked by the tests given in 15.1.2 and 15.1.3		—
15.1.2	Insulation resistance (500 V +250v for 1 min) :		—
	a) between line and neutral terminals $\geq 5M\Omega$:	> 100M Ω	P
	b) line and neutral terminals connected together and:		—
	i) metal foil in contact with the entire accessible external surface $\geq 5M\Omega$:	> 100M Ω	P
	ii) the earthing terminal $\geq 5M\Omega$	> 100M Ω	P
	iii) any metal part of a cord anchorage $\geq 5M\Omega$		N/A
	c) each switched pole terminal and corresponding load terminal with switch open.....		—
	1) between L and N $\geq 5M\Omega$	> 100M Ω	P
	2) between parts of L and N connected together and other parts insulated there from including earthed metal $\geq 5M\Omega$	> 100M Ω	P
	3) across switch contact $\geq 2M\Omega$	> 100M Ω	P
15.1.3	Electric strength test		—
	An a.c. of 2000 V with a short circuit current of not less than 200 mA is applied for 1 min. between:		—
	a) line and neutral terminals/terminations		P
	b) line and neutral terminals/ termination connected together and:		—
	1) a metal foil in contact with the entire accessible external surface		P
	2) the earthing terminal/termination		P
	3) any metal part of a cord anchorage		N/A
	During the test no flashover or breakdown		P
	Glow discharges without drop in voltage shall be ignored		N/A
	One pole of neon indicators and the like shall be disconnected before making this test		N/A

Test Report No. S09EEC00078/MLM/PKS
dated 09 MAR 2009



PSB Singapore

BS 1363 : Part 4			
Clause	Requirement – Test	Result – Remark	Verdict

15.2	Switch connection units shall be suitable for isolation		
	Switch connection units are classified as Overvoltage category III		—
	They shall be tested in clean new condition		—
	Compliance check by the following test:-		—
	Impulse withstand voltage test U_{imp} is carried out with a voltage having a 1,2/50 μ s wave-form in Fig 6 of BS 923-1 1990	4.8kV	P
	The test is conducted for a minimum of 3 impulses of each polarity with an interval of at least 1 s between pulses apply between line terminals connected together and the load terminals connected together with the contact in open position		P

13	Construction of connection units		
13.5	Fuse-link		
	Fuse link complying to BS 1362 shall be mounted in suitable contacts between supply line terminal and the corresponding load terminal	BS 1362 fuse	P
	When a switch is incorporated the fuse link shall be mounted between the outgoing contact of the line pole of the switch and the corresponding load terminal		P
	The fuse link cannot be displaced accidentally during the use or be left in incorrect contact when the fuse cover or carrier is replaced		P
	It shall be possible to remove and replace the fuse link with current passing without dismantling the connection unit.		P
	No part which are lives shall become accessible during its removal or replacement		P
	The connection of fuse link contact shall formed in one piece or connected in an efficient electric connection		P
	These connection not make by means of a screw		P
	The connection of fuse link contact shall formed in one piece or connected in an efficient electrical connection		P

Test Report No. S09EEC00078/MLM/PKS
dated 09 MAR 2009



PSB Singapore

BS 1363 : Part 4			
Clause	Requirement – Test	Result – Remark	Verdict

13.5.1	Compliance checked by inspection and by application of test probe B and probe 13		P
9.1	Apply test probe B and probe 13 to the accessible external surface with a force of 5 N in the most unfavourable position		P
	It shall not touch like parts		P

20 Mechanical strength			
20.1.3	Connection units : impact test, height 150 mm (apparatus shown in fig. 21a)		P
	After the test: no damage and in accordance with clauses 8, 9 and 15		P
	After the tests on the lens might be crack and or dislodged, but still not possible to touch live parts with test probe 13 applied with torque of 5 N		P
	Damage to the finish, small dents which do not reduce creepage distances and clearances and small chips not adversely affect the protection against electric shock or moisture shall be ignored	No dent	P
	Crack not visible shall be ignored	No crack	P

Sequence 3			
14 Resistance to ageing and humidity			
14.1	Connection unit shall be resistant to ageing		P
14.1.1	Compliance checked by following test:		—
	Connection units are subject to heat test at 70°C for 168 h	70°C	—
	After the tests, samples shall show no damage:		—
	- that would lead to non-compliance with this standard		P
	- that would impair safety		P
	- that would prevent further use		P

15 The insulation resistance and electric strength			
15.1	The insulation resistance and electric strength of connection units shall be adequate		P
	Compliance checked by the tests given in 15.1.2 and 15.1.3		
	Insulation resistance (500 V +250V for 1 min) :		—

Test Report No. S09EEC00078/MLM/PKS
dated 09 MAR 2009



PSB Singapore

BS 1363 : Part 4			
Clause	Requirement – Test	Result – Remark	Verdict

	a) between line and neutral terminals $\geq 5M\Omega$:	> 100M Ω	P
	b) line and neutral terminals connected together and:		—
	i) metal foil in contact with the entire accessible external surface $\geq 5M\Omega$:	> 100M Ω	P
	ii) the earthing terminal $\geq 5M\Omega$	> 100M Ω	P
	iii) any metal part of a cord anchorage $\geq 5M\Omega$		N/A
	c) each switched pole terminal and corresponding load terminal with switch open		—
	1) between L and N $\geq 5M\Omega$	> 100M Ω	P
	2) between parts of L and N connected together and other parts insulated therefrom including earthed metal $\geq 5M\Omega$	> 100M Ω	P
	3) across switch contact $\geq 2M\Omega$	> 100M Ω	P
15.1.3	Electric strength test		—
	An a.c. of 2000 V with a short circuit current of not less than 200 mA is applied for 1 min. between:		—
	a) line and neutral terminals/terminations		P
	b) line and neutral terminals/ termination connected together and:		—
	1) a metal foil in contact with the entire accessible external surface		P
	2) the earthing terminal/termination		P
	3) any metal part of a cord anchorage		N/A
	c) each switched pole terminal and corresponding load terminal with switch open		P
	During the test no flashover or breakdown		P
	Glow discharges without drop in voltage shall be ignored		N/A
	One pole of neon indicators and the like shall be disconnected before making this test		N/A

13	Construction of connection units		
	Fuse-link		
	Fuse link complying to BS 1362 shall be mounted in suitable contacts between supply line terminal and the corresponding load terminal		P

Test Report No. S09EEC00078/MLM/PKS
dated 09 MAR 2009



PSB Singapore

BS 1363 : Part 4			
Clause	Requirement – Test	Result – Remark	Verdict

	When a switch is incorporated the fuse link shall be mounted between the outgoing contact of the line pole of the switch and the corresponding load terminal		P
	The fuse link cannot be displaced accidentally during the use or be left in incorrect contact when the fuse cover or carrier is replaced		P
	It shall be possible to remove and replace the fuse link with current passing without dismantling the connection unit.		P
	No part which are lives shall become accessible during its removal or replacement		P
	The connection of fuse link contact shall formed in one piece or connected in an efficient electric connection		P
	These connection not make by means of a screw		P
	The connection of fuse link contact shall formed in one piece or connected in an efficient electrical connection		P
13.5.1	Fuse link clips in connection units shall be checked for mechanical strength by insertion and withdrawal test describe in clause 20.1.2		P
20.1.2	A solid link of stainless steel shown in fig. 19 is inserted and withdrawn from the fuse clip 20 time in succession in the normal way at a rate of 10 per minute		P
	After that a fuse link complying with BS 1362 is then fitted and the test given in clause 13.5.1 is completed		P
	Current making and breaking of fuse link shall be checked by the test describe in clause 17.1.3		P
17.1.3	The fuse contact make and break current by insertion and removal of a fuse in a substantially non-inductive a.c. circuit		P
	BS 1362 fuse link shall be use for this test		P
	All metal parts shall be connected to the earth circuit		P
	Test voltage at 275 V		P
	Test current 1.25 times rated current	16.3A	P
	Insert and withdraw 10 times in succession at 30 s		P
	After the test, the connection units still capable of satisfying the subsequence test in table 1		P

Test Report No. S09EEC00078/MLM/PKS
dated 09 MAR 2009



PSB Singapore

BS 1363 : Part 4			
Clause	Requirement – Test	Result – Remark	Verdict

17.1.2	The switch shall make and break a current in a substantially non-inductive circuit		P
	Test voltage at 275 V ~		P
	Test current 1.25 x rated current	16.3A	P
	Make and break 10 time in succession at interval of 30 s.		P
	After test, still be capable to proceed with test in table 1		P
13.6	Switch so constructed that when operated the switch can remain only in a position giving adequate contact or separation of the contacts		P
	Switches shall be so constructed that undue arcing cannot occur when the switch is operated slowly		P
13.6.1	Compliance shall be checked by inspection and by making and breaking of switch:-		—
	Test current 1.25 time the rated current. Test voltage 275 V~, 10 time	16.3A	P
	Each time moving the actuating member by hand over a period of 2 s, such as to attempt to stop the moving contact in an intermediate position		P
	The actuating member shall be released after about 2 s and any arcing shall cease		P
	After the test samples shall be capable of satisfying the test subsequent detained in table 1		P

16	Temperature rise		
16.1	Connexion units and their surroundings shall not attain excessive temperatures in normal use		P
	Test carried out at rated voltage		P
	Terminal tightened with two thirds of the values given in table 2		P
	Surface mounted connexion units are mounted as in normal use fixed to a vertical plywood board of thickness 24 mm and having a surface extending at least 150 mm in each direction beyond the extremity of the connexion unit		N/A
	Flush mounted connexion units are mounted using flush mounted box to BS 4662 having internal depth of 35 mm, surrounded and fitted into a block of wood measuring 25 mm thick on all four sides and the back .		P

Test Report No. S09EEC00078/MLM/PKS
dated 09 MAR 2009



PSB Singapore

BS 1363 : Part 4			
Clause	Requirement – Test	Result – Remark	Verdict

	For surface mounted connection units the length of each cables within its enclosure shall be 75 mm		N/A
	For flush mounted connection units the length of each cable within its enclosure shall be 150 mm.		P
	Cables outside the box or enclosure minimum 1 m		P
	Fuse link replaced by calibrated link annex A		P
	Test carried out at rated voltage	250V	P
	Terminal screws tightened with two-third torque give in table 2	Screw dia.: -3.88mm Torque (2/3) :-0.8Nm	P
	The supply L, N & E terminals are connected to an incoming and outgoing 2.5 mm ² cable and with a 1.5 mm ² 3-core flexible cord for the load.		P
	Electrical loading as follows:-		—
	(a) Total load on supply cables: 20 A		P
	(b) connected load on outgoing terminal: 14 A		P
	(c) balance of load on supply terminal: 6 A		P
	The connection unit subjected to the loading for a minimum continuous period of 4 h or longer until stability is reached with max. 8 h		P
	Temperature rise of :- - terminals must not exceed 52 K ; - accessible surfaces not exceed 52 K	Mains L1:-26.1K, 25.5K, 26.5K Mains N1:-25.3K, 25.6K, 26.4K Load L2:-26.3K, 27.0K, 27.1K Load N2:-27.2K, 27.3K, 28.4K Surface :-7.9K, 8.8K, 8.7K	P

21	Screws, current-carrying parts and connections		
21.3	Current carrying parts shall be of brass, copper, phosphor-bronze or other metal at least equivalent with regard to its conductivity, and resistance to rust		P
21.3.1	Compliance checked by inspection and by relevant tests in 10.1 and clauses 16 and 24		P

Sequence 4			
14	Resistance to ageing and humidity		
14.1	Connection unit shall be resistant to ageing		P
	Compliance checked by following test:		—
	Connection units are subjected to heat test at 70°C for 168 h	70°C	—

Test Report No. S09EEC00078/MLM/PKS
dated 09 MAR 2009



PSB Singapore

BS 1363 : Part 4			
Clause	Requirement – Test	Result – Remark	Verdict

	After the tests, samples shall show no damage:		—
	- that would lead to non-compliance with this standard		P
	- that would impair safety		P
	- that would prevent further use		P

15	Insulation and electric strength test		
15.1	The insulation and electric strength of connection units shall be adequate		P
15.1.2	Compliance checked by clauses 15.1.2 and 15.1.3		—
	Insulation resistance (500 V +250v for 1 min) :		—
	a) between line and neutral terminals $\geq 5\text{M}\Omega$:	> 100M Ω	P
	b) line and neutral terminals connected together and:		—
	i) metal foil in contact with the entire accessible external surface $\geq 5\text{M}\Omega$:	> 100M Ω	P
	ii) the earthing terminal $\geq 5\text{M}\Omega$	> 100M Ω	P
	iii) any metal part of a cord anchorage $\geq 5\text{M}\Omega$	> 100M Ω	N/A
	c) each switched pole terminal and corresponding load terminal with switch open		—
	1) between L and N $\geq 5\text{M}\Omega$	> 100M Ω	P
	2) between parts of L and N connected together and other parts insulated therefrom including earthed metal $\geq 5\text{M}\Omega$	> 100M Ω	P
	3) across switch contact $\geq 2\text{M}\Omega$	> 100M Ω	P
15.1.3	Electric strength test		—
	An a.c. of 2000 V with a short circuit current of not less than 200 mA is applied for 1 min. between:		—
	a) line and neutral terminals/terminations		P
	b) line and neutral terminals/ termination connected together and:		—
	1) a metal foil in contact with the entire accessible external surface		P
	2) the earthing terminal/termination		P
	3) any metal part of a cord anchorage		N/A
	c) each switched pole terminal and corresponding load terminal with switch open		P
	During the test no flashover or breakdown		P

Test Report No. S09EEC00078/MLM/PKS
dated 09 MAR 2009



PSB Singapore

BS 1363 : Part 4			
Clause	Requirement – Test	Result – Remark	Verdict

	Glow discharges without drop in voltage shall be ignored		N/A
	One pole of neon indicators and the like shall be disconnected before making this test		N/A

18	Normal operation of connection units		
18.1	Switched connection units shall withstand without excessive wear or other harmful effects, the electrical and mechanical stresses occurring in use		P
18.1.1	Compliance shall be checked by the following tests		—
	Voltage across each switch pole measured at point immediately adjacent to the switch		P
	mV drop shall not exceed 60 mV at rated current	L :-15.8mV, 20.2mV, 24.0mV N :-13.9mV, 26.3mV, 30.8mV	P
	Normal operation of switch:		—
	Test current (A).....:	13A	P
	Rated voltage (V).....:	250V	P
	Rate of operation	12 per minute	P
	No. of operation.....:	30000	P
	After the test the voltage drop across each switched pole not exceed 75 mV at rated current	L:-38.6mV, 21.3mV, 16.0mV N:-23.3mV, 33.6mV, 22.4mV	P
15	Insulation resistance test		—
	Insulation resistance (500 V +250v for 1 min) :		—
	a) between line and neutral terminals $\geq 5M\Omega$:	> 100M Ω	P
	b) line and neutral terminals connected together and:		—
	i) metal foil in contact with the entire accessible external surface $\geq 5 M\Omega$:	> 100M Ω	P
	ii) the earthing terminal $\geq 5 M\Omega$	> 100M Ω	P
	iii) any metal part of a cord anchorage $\geq 5 M\Omega$		N/A
	c) each switched pole terminal and corresponding load terminal with switch open		—
	1) between L and N $\geq 5 M\Omega$	> 100M Ω	P
	2) between parts of L and N connected together and other parts insulated therefrom including earthed metal $\geq 5 M\Omega$	> 100M Ω	P
	3) across switch contact $\geq 2 M\Omega$	> 100M Ω	P

Test Report No. S09EEC00078/MLM/PKS
dated 09 MAR 2009



PSB Singapore

BS 1363 : Part 4			
Clause	Requirement – Test	Result – Remark	Verdict
15.1.3	Electric strength test		—
	An a.c. of 1500 V with a short circuit current of not less than 200 mA is applied for 1 min. between:		—
	a) line and neutral terminals/terminations		P
	b) line and neutral terminals/ termination connected together and:		—
	1) a metal foil in contact with the entire accessible external surface		P
	2) the earthing terminal/termination		P
	3) any metal part of a cord anchorage		N/A
	c) each switched pole terminal and corresponding load terminal with switch open		P
	During the test no flashover or breakdown		P
	Glow discharges without drop in voltage shall be ignored		N/A
	One pole of neon indicators and the like shall be disconnected before making this test		N/A
16	Temperature rise (repeat)		—
	Fuse link replaced by calibrated link annex A		P
	Test carried out at rated voltage	250V	P
	Terminal screws tightened with two-third torque give in table 2	Screw dia.: -3.88mm Torque (2/3) :-0.8Nm	P
	The supply L, N & E terminals are connected to an incoming and outgoing 2.5 mm ² cable and with a 1.5 mm ² 3-core flexible cord for the load.		P
	Electrical loading as follows:-		—
	(a) Total load on supply cables: 20 A		P
	(b) connected load on outgoing terminal: 14 A		P
	(c) balance of load on supply terminal: 6 A		P
	The connection unit subjected to the loading for a minimum continuous period of 4 h or longer until stability is reached with max. 8 h		P
	Temperature rise of :- - terminals must not exceed 52 K ; - accessible surfaces not exceed 52 K	Mains L1:-37.1K, 36.1K, 36.8K Mains N1:-29.9K, 36.1K, 30.6K Load L2:-38.5K, 34.7K, 36.5K Load N2:-37.1K, 44.9K, 37.2K Surface :-12.1K, 11.2K, 12.3K	P

Test Report No. S09EEC00078/MLM/PKS
dated 09 MAR 2009



PSB Singapore

BS 1363 : Part 4			
Clause	Requirement – Test	Result – Remark	Verdict

Sequence 5			
22	Resistance to heat		
22.1	Connection units shall be resistant to heat		P
22.1.1	Compliance shall be checked as follows.		—
	Heating cabinet 70°C for 1 h for mounting boxes, separate covers and separate cover plates	Removable cover	P
	Heating cabinet 100°C for 1 hour for connection units	Complete unit	P
	During the test they shall 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 connection units shall still comply with 9.1.1 and 15.1.3, and it shall not possible to touch live parts with test probe 11 of BS 3042 applied with a force of 30 N		P
22.2	Parts of the insulating material shall be sufficiently resistant to heat particular with regard to their location and function in the complete connection units		N/A
	- (a) parts of ceramic material are deemed to comply without testing		N/A
	- (b) all other parts of insulating material shall be subjected to a ball pressure test by means of the apparatus shown in fig. 24		N/A
	For insulating parts necessary to retain current-carrying part in position	Base	P
	20N, 1 h at 125°C		P
	After the test, the specimen is then cooled down by immersion for 10 s in water at room temperature.		P
	The diameter of the impression \leq 2 mm	1.9mm, 1.9mm, 1.8mm	P
	For insulating parts not necessary to retain current-carrying part in position even though they may be in contact with them	Cover, Frame	P
	20N, 1 h at 75°C		P
	After the test, the specimen is then cooled down by immersion for 10 s in water at room temperature.		P
	The diameter of the impression \leq 2 mm	Cover 0.9mm, 0.8mm, 0.8mm Frame 0.9mm, 0.9mm, 0.9mm	P

Test Report No. S09EEC00078/MLM/PKS
dated 09 MAR 2009



PSB Singapore

BS 1363 : Part 4			
Clause	Requirement – Test	Result – Remark	Verdict

Sequence 6			
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:	Base	—
	Test conducted at 850°C		P
	No visible flame and no sustained glowing		P
	Flame and glowing extinguish within 30 s		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:	Cover, Frame	P
	Test conducted at 650°C		P
	No visible flame and no sustained glowing	No flame	P
	Flame and glowing extinguish within 30 s		P
	No ignition of the tissue paper		P

Sequence 7			
24	Resistance to excessive residual stresses and to rusting		
24.1	Compliance shall be checked by the following test		
	Press-formed or similar current-carrying parts of copper-alloy containing less than 80% of copper shall be resistant to failure in use due to stress and corrosion		—
	Compliance checked by the following test:		—
	Immersion in an aqueous solution for 30 min. at temperature of 20°C		P
	After the test no cracks visible	No crack	P
24.2	Ferrous parts protected against rusting		P
24.2.1	Compliance shall be checked by the following test		P
	The sample is degrease in an alkaline solution, then immersed for 10 min in a 10% solution of ammonium chloride in water at temp of 27°C		P
	Without drying but shaking off any drops, the parts are placed for 10 min in a box containing air saturated with moisture at temperature of 27°C		P

Test Report No. S09EEC00078/MLM/PKS
dated 09 MAR 2009



PSB Singapore

BS 1363 : Part 4			
Clause	Requirement – Test	Result – Remark	Verdict

	After the parts have dried for at least 10 min in a heating cabinet at temperature of 100°C		P
	Their surfaces shall show no signs of rust		P

21	Screws, current-carrying parts and connections		
21.3	Current-carrying parts and earthing contacts shall be 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 shall be checked by inspection and by the relevant test described in 10.2 and clauses 16 and 24		P

Sequence 8			
	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		P
	The actuating mechanism shall be so constructed that when operated the switch can remain only in a position giving adequate separation of contact		P
13.7.1	Compliance shall be checked by inspection and by the test of 13.7.2		P
13.7.2	The force to switch off shall be measured and the force should be applied to the extremity of the actuating member	10.3N, 11.3N, 11.3N	P
	The actuating member being in the closed position, fixed and moving contact of the pole shall be maintained closed by mechanical means.		P
	Test force apply to actuating member as in table 3b to open the contacts for 10s		P
	Test force 3F.....	3x11.3=33.9N	
	Min. test force.....	50 N	P
	Max. test force.....	150 N	P
	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

Test Report No. S09EEC00078/MLM/PKS
dated 09 MAR 2009



PSB Singapore

BS 1363 : Part 4			
Clause	Requirement – Test	Result – Remark	Verdict

	After the test and when test force is no longer applied, the actuating member shall not remain at rest in the "OFF" position		P
--	--	--	---

Sequence 9			
Isolation			
15.2	Impulse withstand voltage test U_{imp} is carried out with a voltage having a 1,2/50 μ s wave-form as in BS 923-1 and is intended to simulate overvoltage of atmospheric origin.....		---
	The test is conducted for a minimum of 3 impulses between line terminals connected together and the load terminal connected together with the contact in open position with an interval of at least 1 s between pulses.	Impulse test voltage: 4.8kV Across breaks: OK Bet. L & N: OK Bet. live parts & E: OK	P

Annex C	Proof tracking test (PTI) (normative)		
	Proof tracking test made in accordance with BS 5901		---
	For the purpose of this standard, the following applies:		---
	a) Clause 3, test specimen, the last sentence of the first paragraph does not apply.		---
	Notes 2 and 3 also apply to the proof-tracking test of 6.3.		---
	b) Test solution "A" described in sub-clause 5.4 used.	0.1% ammonium chloride	---
	c) If the test is carried out with electrodes of materials other than platinum, that is reported.	Platinum	N/A
	d) The tolerance on the interval between drops shall be ± 1 s.		---
	e) Clause 6, procedure, the voltage in clause 6.1 is set to the value from 20.2 dependent on the material group taken from table 23 or table 24 of this standard for the measured creepage distance considering the declared pollution degree and the voltage (rated voltage) expected to occur in normal use.	Test voltage 175 V	---
	Sub-clause 6.2 does not apply		---
	Proof tracking test of sub-clause 6.3 is performed on 5 specimens.	no breakdown	P

Test Report No. S09EEC00078/MLM/PKS
dated 09 MAR 2009

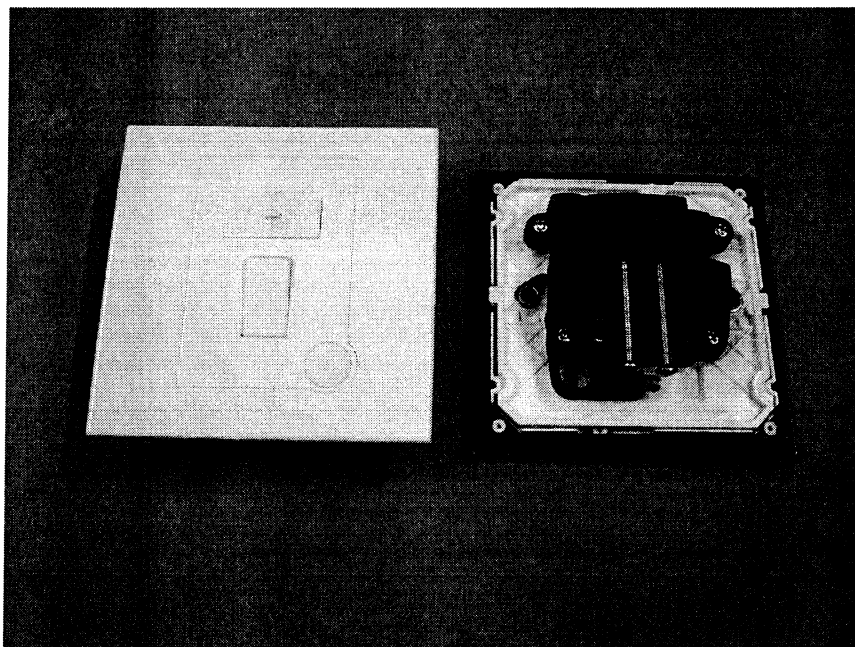


PSB Singapore

Appendix I

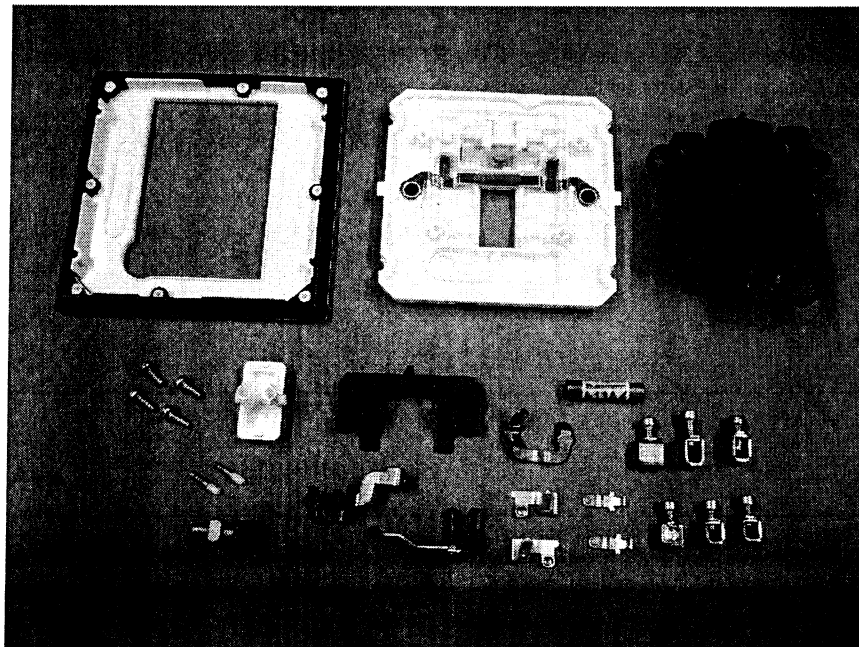
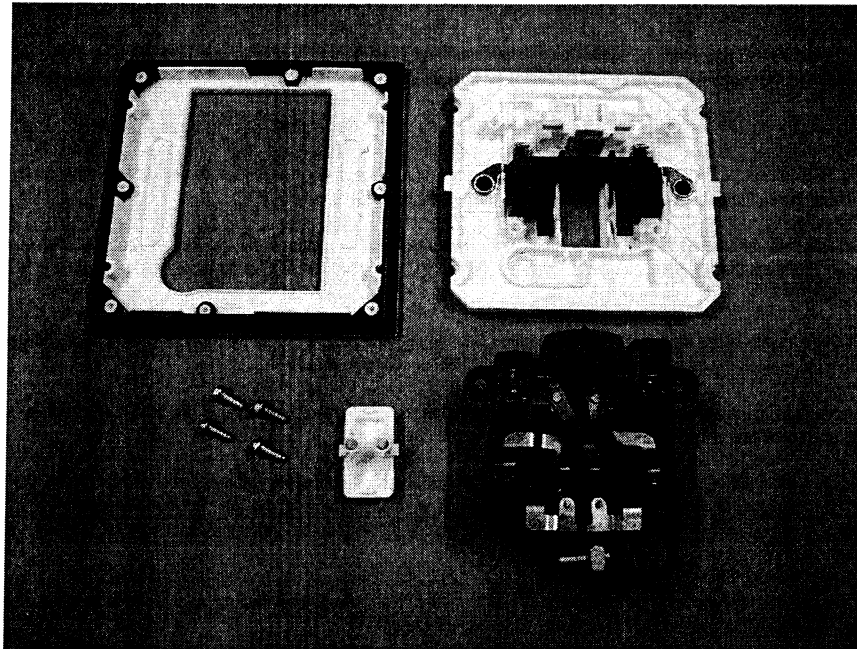
'Legrand' / 'Arteor' switched fused connection unit
13A 250V

Model 572150



Appendix I (cont'd)

'Legrand' / 'Arteor' switched fused connection unit



Test Report No. S09EEC00078/MLM/PKS
dated 09 MAR 2009



PSB Singapore

This Report is issued under the following conditions:

1. Results of the testing/calibration in the form of a report will be issued immediately after the service has been completed or terminated.
2. Unless otherwise requested, a report shall contain only technical results. Analysis and interpretation of the results and professional opinion and recommendations expressed thereupon, if required, shall be clearly indicated and additional fee paid for, by the Client.
3. This report applies to the sample of the specific product/equipment given at the time of its testing/calibration. The results are not used to indicate or imply that they are applicable to other similar items. In addition, such results must not be used to indicate or imply that TÜV SÜD PSB approves, recommends or endorses the manufacturer, supplier or user of such product/equipment, or that TÜV SÜD PSB in any way "guarantees" the later performance of the product/equipment.
4. The sample/s mentioned in this report is/are submitted/supplied/manufactured by the Client. TÜV SÜD PSB therefore assumes no responsibility for the accuracy of information on the brand name, model number, origin of manufacture, consignment or any information supplied.
5. Additional copies of the report are available to the Client at an additional fee. No third party can obtain a copy of this report through TÜV SÜD PSB, unless the Client has authorised TÜV SÜD PSB in writing to do so.
6. TÜV SÜD PSB may at its sole discretion add to or amend the conditions of the report at the time of issue of the report and such report and such additions or amendments shall be binding on the Client.
7. All copyright in the report shall remain with TÜV SÜD PSB and the Client shall, upon payment of TÜV SÜD PSB's fees for the carrying out of the tests/calibrations, be granted a license to use or publish the report to the third parties subject to the terms and conditions herein, provided always that TÜV SÜD PSB may at its absolute discretion be entitled to impose such conditions on the license as it sees fit.
8. Nothing in this report shall be interpreted to mean that TÜV SÜD PSB has verified or ascertained any endorsement or marks from any other testing authority or bodies that may be found on that sample.
9. This report shall not be reproduced wholly or in parts and no reference shall be made by the Client to TÜV SÜD PSB or to the report or results furnished by TÜV SÜD PSB in any advertisements or sales promotion.
10. Unless otherwise stated, the tests are carried out in TÜV SÜD PSB Pte Ltd, No.1 Science Park Drive Singapore 118221.

January 2008