Form No : NTH (WR)/MUM-5

001248

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Government of India
उपभोक्ता मामले, खाद्य एवं सार्वजनिक वितरण मंत्रालय,उपभोक्ता मामले विभाग
Ministry of Consumer Affairs, Food & Public Distribution, Department of Consumer Affairs
राष्ट्रीय परीक्षण शाला (पश्चिमी क्षेत्र)
NATIONAL TEST HOUSE (Western region)
प्लॉट सं. एफ-१०, एम.आई.डी.सी., मरोल, अंधेरी (पूर्व), मुंबई - 400 093
Plot No. F-10, M.I.D.C., Marol, Andheri (E), Mumbai - 400 093

सत्यमेव जयते 612

परीक्षण प्रमाण पत्र / TEST CERTIFICATE

INTERIM/FINAL REPORT

परीक्षण प्रमाण पत्र सं Test Certificate No	जारी होने की तिथि Date of Issue	कोड नं Code No	पृष्ठ Page	पृष्ठों की संख्या No of Pages
NTH(WR)/EL(A)/2018/00358A	27/09/2018	1535019512796	1	2

जिसे जारी करना है Issued To	:	**BEEKAY INDUSTRIES**
पता Address	:	**UNIT No50/408, MOTILAL NAGAR-1, ROAD NO.12, GOREGAON(W), MUMBAI-400104**
ग्राहक का सन्दर्भ सं एवं दिनांक Customer's Ref. No.	:	**NIL** Date: **23/08/2018**
पंजिका सं एवं दिनांक Register No & Date	:	**00358/NTH(WR)/EL(A)/27/08/2018**
परीक्षण सामग्री का विवरण Description of Test Item	:	**32A/240V flush type DP switch with indicator along with cover plate for domestic & similar purposes, AC, pattern 2, normal gap, unenclsed, ordinary (IPX0), rocker operated, design A with terminal having screw type**
परीक्षण सामग्री का पहचान Identification of Test Item	:	--
नमुना का विशिष्टि (यदि हों) Product Specification (If any)	:	**IS: 3854-1997 (Amendment 1 to 7)**
नमुना प्राप्ति की तिथि Date of Receipt of the Test Item	:	**23/08/2018**
कार्य सम्पादन की तिथि Date(s) of Performance of Tests	:	**From: 27/08/2018 To: 21/09/2018**
व्यावहृत प्रणाली का पहचान Method(s) used for Test	:	**In accordance with IS: 3854-1997 (Amendment 1 to 7)**
नमुना प्रकिया जहाँ प्रासंगिक हों Sampling Procedure where relevant	:	**N/A**

Tested By	Checked By	Approved By
Anil Kumar Pandey	Daleep G. Desai	Rane Narendra Dodhu
SO Electrical	Scientist- B (Electrical)	Scientist- C (Electrical)

Note : Please See Overleaf / सूचनार्थ : कृप्या पृष्ठ के पीछे ध्यान दें ।

26167

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Government of India
001348
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Sl. No.	Test Name	Test Result	Limit
1	type tests	Refer Annexure (Total page: 8 only)	As per Annexure

टिप्पणी
Note : 1)Annexure(8 pages) forms a part of the test certificate.
2)The average ambient condition inside the laboratory during the period of above tests
Temperature, deg.C : 30 ; Relative humidity % : 68

कैफियत
Remarks : The sample complies with the requirements of the specification IS:3854-1997(Amdt 7) in respect of the tests carried out.

Tested By	Checked By	Approved By
Anil Kumar Pandey	Daleep G. Desai	Rane Narendra Dodhu
SO Electrical	Scientist- B (Electrical)	Scientist- C (Electrical)

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Annexure

10 nos. of flush type DP **switch with indicator along with cover plate** for domestic & similar purposes, **32A/240V**, AC, pattern 2, **"Kundan"** brand.
Switches marked A, B, C,D, E, F,G,H,I & J and subjected to the following examinations, measurements and tests in accordance with **IS: 3854-1997(Amendment 1 to 7),** the result is noted below:

Tests

Sr.	Description of tests	Requirements	Observation
a)	**Rating (cl.6)**		A
	Rated Current and Rated Voltage	**Inspection of marking**	**32A ; 240V**
b)	**Classification (cl.7)**		
i.	According to possible connection (cl.7.1.1)		Pattern No. 2
ii.	According to contact opening (cl.7.1.2)		Normal gap
iii.	According to Protection against electric shock (cl.7.1.3)		Unenclosed
iv.	According to harmful ingress of water (cl.7.1.4)		Ordinary (IPX0)
v.	According to method of activating switch (cl.7.1.5)		Rocker
vi.	According to method of application (cl.7.1.6)		flush type
vii.	According to method of installation (cl.7.1.7)		Design A
viii.	According to type of terminal (cl.7.1.8)		Screw type
c)	**Marking Test (cl.8)**		
i.	Marking on switch (cl.8.1)		
	Rated Current, Amperes		32A
	Rated Voltage, Volts		240V
	Symbol to indicate nature of supply		~
	Manufacturer's Identification mark		KUNDAN
	Country of Manufacture		MADE IN INDIA
	Any other Marking		
ii.	Inspection of placement of marking (cl.8.3)		On switch base & plate
iii.	Identification of terminal for connection of phase Conductor (cl.8.4)	Shall be identified by L/L1/L2 or ↑	Identified by L1/L
iv.	Identification of terminal intended exclusively for Neutral Conductor (cl.8.5)	Shall be identified by letter N	Identified by N1/N
iv.	Direction of actuating movement for switch of Pattern 2/3/03 and having rated voltage exceeding 250V or rated current exceeding 16A (cl.8.6)	Marking shall clearly indicate affect achieved by each position	Indicator provided to indicate ON/OFF position
v.	Inspection of push button switch (cl.8.7)	Shall be marked red only if it serves to open the circuit to be controlled & serves to control the auxiliary circuit	N/A
vi.	Test for Durability & Legibility of marking (cl.8.9)	Shall be legible & durable	Legible & durable
vii.	Standard Mark on switch (cl.8.10)	IS:	--
	CML		- - - - - - - -

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परीक्षण प्रमाण पत्र TEST CERTIFICATE 001348

सत्यमेव जयते 036612

Test Certificate No.	Date of Issue	Code No.	No. of Pages
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Annexure

Sr.	Description of tests	Requirements	Observation A B C
d)	**Protection against electric shock (cl.10)**		
i.	Accessibility of live parts (cl.10.1)	Shall not be accessible	Live parts not accessible
ii.	Material of knob, operating lever, push button, rockers and the likes (Cl.10.2)	Shall be of insulating material	Made of insulating material
e)	**Provision foe Earthing (Cl.11)**		No earthing terminal/ contact provided
f)	**Terminals (cl.12)** *(Tested after test of cl.15)*		
i.	General (Cl.12.1)	Screw clamping or screwless	Provided with terminals having screw clamping
	Test for terminals with screw clamping for external copper conductor (cl.12.2)		
	Inspection/Test of terminals with screw clamping for external copper conductor (Clause 12.2.1)	Shall allow connection of copper conductor of cross section area 4-10mm²	Allows connection of conductor of cross section area 4-10mm²
ii.	Inspection of terminal (Clause 12.2.2)	Shall allow conductor to be connected without special preparation	No special preparation for connection
•	Minimum dimension (D) of conductor space (Ref.: Fig 4)	4.0 mm Minimum	4.8
ii.	Test for Adequacy of Mechanical Strength of Terminals with screw clamping (Clause 12.2.3)	Shall have adequate mechanical strength & shall not be of soft metal	Screw of adequate mechanical strength & not of soft material
iii.	Test of terminal with screw clamping for resistance to corrosion (Clause 12.2.4)	Shall be resistant to corrosion	No sign of rust observed
iv.	Test for design of terminal (Clause 12.2.5) (Note: Range nominal diameter of terminal, mm: 4.1 to 4.7 Applicable torque as per col 3 of table 5:1.8Nm	Solid conductor or any strands of conductor shall not come out or break at the terminal	No damage to conductor observed
v.	Test for terminal with screw clamping for reliability of clamping of conductor (Clause 12.2.6)	Terminal shall be so designed that they clamp the conductor reliably and between metal surfaces	Conductor did not move noticeably in the terminal
vi.	Test for design of terminal with screw clamping for reliability of clamping of conductor (Clause 12.2.7)	Neither a rigid solid conductor nor wire of stranded conductor slip out while clamping screw are tightened	No conductor slipped out while clamping screw was tightened
vii.	Test for fixing and location of terminal with screw clamping against loosening from their fixing to switch (Clause 12.2.8)	Terminal shall not work loose from their fixing when clamping screws are fitted with 10mm² and tightened/ loosened 5 times with 1.8Nm	Terminal did not work loose and no damage to screw head slot/ thread etc. occurred.
viii.	Test for Adequacy of Mechanical Strength of earthing terminals with screw clamping (Clause 12.2.9)	Shall have adequate mechanical strength & shall not be of soft metal	N/A

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Test Certificate No.	Date of Issue	Code No.	No. of Pages
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Annexure

Sr.	Description of tests	Requirements	Observation A B C
ix.	Test of earthing terminal with screw clamping for resistance to corrosion (Clause 12.2.10)	Shall be resistant to corrosion	N/A
x.	Test for conductor space for pillar terminal only (cl.12.2.11)		
xi.	Minimum distance (g) between the clamping crew and the end of the conductor (Ref Fig 4)	2.0 mm Minimum	N/A
xii.	Inspection of lug terminal for use with switch (cl.12.12)	Used with 40A/ 63A only	N/A
xiii.	**Test for screwless terminals (cl.12.13)**		N/A
g)	**Constructional requirements (cl.13)**		
i.	Inspection of insulating line barrier after mechanical strength test (cl.13.1)	Shall have adequate mechanical strength	N/A
ii.	**Clause 13.2:** Switch shall permit Easy introduction and connection of conductor in the terminals Correct positioning of conductor		 Satisfactory Satisfactory
v.	**Clause 13.3** Test for effectiveness of cover/cover plate, actuating member which provide protection against electric shock		
·	**Clause 13.3.1**: Inspection of cover, cover plate and actuating members or part of then which intend to provide protection against electric shock	Shall be held in place at least 2 points by screw. Single fixing by screw shall be permitted if they are located by another means such as shoulder	Cover plate provided with provision for fixing by more than 2screw
·	**Clause 13.3.2**: Inspection of cover, cover plate and actuating members or part of them whose fixing is not dependent on screw and removal is obtained by applying force in direction perpendicular to mounting surface	Cover, cover plate and /or actuating member shall come	Removal of actuating member locked by shoulder, gives access to live **(Ref Test Sr. No. (p)(iv))**
·	**Clause 13.3.3**: Inspection of cover, cover plate and actuating members or part of them whose fixing is not dependent on screw and removal is obtained by using tool as per manufacturer instruction	Covers, cover plate and actuating mechanism shall not come off when force ≤ 120N is applied for 1 min in direction perpendicular to mounting surface	N/A
vi.	**Clause 13.4:** Inspection of for free opening in enclosure of ordinary switches when fixed and wired as in normal use with 4mm²	Shall have no opening	Satisfactory
vii.	**Clause 13.5** Inspection of knobs of rotary switch		N/A
viii.	**Clause 13.6**: Inspection of screw or other means of mounting the switch	Shall be easily accessible from front & serve no purpose other than fixing	Satisfactory

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Annexure

Sr.	Description of tests	Requirements	Observation A	B	C
ix.	Inspection of combination of switches and switches with socket outlet with separate base(cl.13.7)	Shall ensure correct positioning of each base	N/A		
x.	Test for accessory combined with switches (cl.13.8)		N/A		
xi.	Test for switches other than ordinary (cl.13.9)		N/A		
xii.	Installation test using conductor of 1.5mm^2 for switches be fixed in a box (cl.13.10)				
xiii.	Inspection of surface type switches other than ordinary (cl.13.11)		N/A		
xiv.	Inspection of inlet opening in surface type switches for introduction of conduit (cl.13.12)		N/A		
xv.	Inspection of ordinary surface type switches for back entry from conduit (cl.13.13)		N/A		
xvi.	Inspection of switches provided with membranes or the like for inlet opening (cl.13.14)	Shall be replaceable	N/A		
xvii	Test for membranes in inlet opening(cl.13.15)		N/A		
h)	**Mechanism (Cl.14)**				
i.	Inspection of actuating mechanism (Clause 14.1)	Actuating mechanism shall automatically take position corresponding to moving contacts	Satisfactory		
ii.	Inspection of actuating mechanism (Clause 14.2)	Moving contacts shall rest in ON /OFF position	Satisfactory		
iii.	Inspection of actuating mechanism (pattern 2 only) (Clause 14.4)	Actuating mechanism shall make & break all poles simultaneously	Satisfactory		
iv.	Inspection of actuating mechanism (pattern 2 only) (Clause 14.5) (if cover plate removable)	Actuating mechanism of shall be independent of the presence of cover/cover plate	N/A		
j)	**Resistance to ageing, to harmful ingress of water and to humidity (cl.15)**				
i.	**Resistance to ageing (cl.15.1) (@ 70± 2 °C -7 days & 4 days @ 45%-55%RH)**	Shall show no crack(s) or stickiness	No stickiness or cracks observed		
ii.	**Resistance to humidity(cl.15.3)**(@ 91%-95%RH for 2 days)	Shall show no damage	No damage observed		
	Insulation resistance (cl.16.1) measured by applying 500VDC for 60s between				
	• all poles (1,2,3 &4) connected together and the body with the switch in "ON" position	5 MΩ Min.	More than 5 MΩ		
	• Poles(1&2) connected together & poles (3&4) connected to the body with switch in "ON" position	2 MΩ Min	More than 5 MΩ		
	• Poles(1&3) connected together & poles (2&4) connected to the body with switch in "OFF" position	2 MΩ Min	More than 5 MΩ		
	• Poles(2 & 4) connected together & poles (1&3) connected to the body with switch in "OFF" position	2 MΩ Min	More than 5 MΩ		
	Electric strength (cl.16.2) of insulation tested by applying 2kV/ 50Hz for 60s between				
	• all poles (1,2,3&4) connected together and the body with the switch in "ON" position	No flashover/ break-down shall occur	Satisfactory		
	• each pole in turn and other poles connected to the body with switch in "ON" position	No flashover/ break-down shall occur	Satisfactory		
	• terminals which are electrically connected together when the switch is in "ON" position, the switch being in "OFF" position	No flashover/ break-down shall occur	Satisfactory		

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Annexure

Sr.	Description of tests	Requirements	Observation
			A B C
k)	**Temperature rise test(cl.17)**		
	Temperature rise when 38A is passed for 1hr, °C	45°C Max.	39 39 40
m)	**Making & Breaking capacity(cl.18)**		
i.	**Poles connected in series (18.1)** (200 operations at 7.5 op/min @ 264V & 40A with 8s ON and 8s OFF at pf:0.3 ± 0.05)	There shall be no sustained arcing	Satisfactory
			D E F
ii.	**One pole at full load (cl.18.1) (Switch of pattern 2 only)** (100 operations at 7.5op/min with both poles in series @ 264V & 40A at pf:0.3 ± 0.05)	There shall be no sustained arcing	Satisfactory
			A B C
iii.	**Test as per cl.18.2**		N/A
n)	**Normal operation (cl.19)**		
i.	**Poles connected in series (cl.19.1)** (10K operation @7.5op/min @240V & 32A; @p.f.0.6±.0.05) with 4s ON &12s OFF)	Shall function correctly during the test	Satisfactory
•	**Electric strength test after above test (cl.16)** Tested by applying 1500V/50Hz for 60s between		
	• all poles (1,2,3&4) connected together and the body with the switch in "ON" position	No flashover/ break-down shall occur	Satisfactory
	• each pole in turn and other poles connected to the body with switch in "ON" position	No flashover/ break-down shall occur	Satisfactory
	• terminals which are electrically connected together when the switch is in "ON" position, the switch being in "OFF" position	No flashover/ break-down shall occur	Satisfactory
•	**Temperature rise test(cl.17)** Temperature rise when 32A is passed for 1hr, °C	45°C Max.	43 43 41
•	Inspection of actuating mechanism (Clause 14.3) (10 operations steadily with actuating moved over 2s)	No undue arcing shall occur	Satisfactory
			J K L
ii.	**One Pole at full load (cl.19.1) (Switch of pattern 2 only)** (5000 operation @7.5op/min @240V & 32A; @p.f.0.6±.0.05)	Shall function correctly	Satisfactory
•	**Electric strength test after above test (cl.16)** Tested by applying 1500V/50Hz for 60s between		
	• all poles (1,2,3&4) connected together and the body with the switch in "ON" position	No flashover/ break-down shall occur	Satisfactory
	• each pole in turn and other poles connected to the body with switch in "ON" position	No flashover/ break-down shall occur	Satisfactory
	• terminals which are electrically connected together when the switch is in "ON" position, the switch being in "OFF" position	No flashover/ break-down shall occur	Satisfactory
	Temperature rise test(cl.17) Temperature rise when 32A is passed for 1hr, °C	45°C Max.	41 41 42
•	Inspection of actuating mechanism (Clause 14.3) (10 operations steadily with actuating moved over 2s)	No undue arcing shall occur	Satisfactory

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Sr.	Description of tests	Requirements	Observation
iii.	**Fluorescent Lamp Load Test (cl.19.2)**		
•	**Poles connected in series**		
	Load A- operation on each side @ op/ min with ON and OFF; @ cosΦ:0.9±0.05; V_n: & I_n:	No sustained arcing or permanent welding of	N/A
	Load B- operation on each side @ op/ min with ON and OFF; Test Voltage: & Test current:	contact shall occur	N/A
•	**Temperature rise test(cl.17)**		
	Temperature rise when 25A is passed for 1 hour, °C	45°C Max.	- N/A -
iv.	**One pole at full load (Switch of pattern 2 only)**		
•	**Load A-** operation on each side @ op/ min with ON and OFF; @ cosΦ:0.9±0.05; V_n: & I_n:	No sustained arcing or permanent welding of	N/A
	Load B- operation on each side @ op/ min with ON and OFF; Test Voltage: & Test current:	contact shall occur	N/A
•	**Temperature rise test(cl.17)**		
	Temperature rise when 25A is passed for 1 hour, °C	45°C Max.	- N/A - A B C
p)	**Mechanical strength (cl.20)**		
i.	Impact test (Cl.20.1)	Shall show no damage & impair its further use	Satisfactory
	• Test for accessibility of live parts with test finger for switches provided with indicator lamp (cl.20.1)	Live parts shall not be accessible	Satisfactory
ii.	Test for base of surface type switch (cl.20.2) (Switch fitted to cylinder (Dia. 20omm Min.) of rigid steel; fixing screw tightened with 1.8Nm torque and then switch is fitted similarly to flat steel sheet.)	Base shall show no damage impairing its further use	N/A
iii.	Test for screwed glands (cl.20.3)		N/A
iv.	Force necessary for covers, cover plate and actuating mechanism or part of them to come off or not come off (cl.20.4)	Covers, cover plate and actuating mechanism :	
	a) Verification of non-removal of covers, cover plate and actuating mechanism when 40N force is applied for 1 minute in directions perpendicular to mounting surface (cl.20.4.1)	Shall not come off	Actuating member did not come off
	b) Verification of removal of covers, cover plate and actuating mechanism when 120N force is applied for 1 minute in directions perpendicular to mounting surface (cl.20.4.2)	Shall come off	Actuating member came off
v.	Verification of non-removal of covers, cover plate and actuating mechanism when removal may give access with standard test finger to non-earthed metal parts separated from live parts by creepage distance and clearance to as in test Sr. No (r) **(cl.20.5)**		N/A
vi.	Verification of non-removal of covers, cover plate and actuating mechanism when removal may give access with standard test finger to insualting parts, earthed metal parts or metal parts separated from live parts by twice the value of creepage distance and clearance to as in test Sr. No (r) **(cl.20.6)**	Covers, cover plate and actuating mechanism shall not come off when 10N force is applied for 1 minute	N/A
vii.	Test for operating member of cord operated switch (cl.20.9)		N/A

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राष्ट्रीय परीक्षण शाला (पश्चिमी क्षेत्र)
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सत्यमेव जयते 056612
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Annexure

Sr.	Description of tests	Requirements	Observation A	B	C
q)	**Resistance to heat (cl.21)**				
i.	Test for legibility of marking (cl.21.1) (Sample kept @ 100±20C for 1 hr.)	Marking shall remain legible	Marking legible		
ii.	Diameter of impression on part retaining current carrying part @125±20C, mm (cl.21.2)	2 Max	1		
iii.	Diameter of impression parts not retaining current carrying part @75±20C), mm (cl.21.3)	2 Max	0.5		
r)	**Screws, current carrying parts & Connections (cl.22)**				
i.	Test for breakage of screws or damage to heads of screw connection when screws and nuts are tightened and loosened 5 times for screws not in engagement with thread of insulating with torque 1.8Nm (clause 22.1)	No damage shall occur to screw and heads that may impair its further use	Satisfactory		
ii.	Inspection of screws in engagement with the thread of insulating material which are operated during installation (cl.22.2)	Shall ensure correct introduction into hole/nut	N/A		
iii.	Inspection of design of electrical connection for transmission of contact pressure through insulating material (cl.22.3)	Shall not be transmitted through material other than mica, ceramic etc	Conforms		
iv.	Inspection of screws and nuts which serve electrical as well as mechanical connection (clause 22.4)	Shall be locked against loosening and rotation	Satisfactory		
v.	Test for resistance to corrosion of material of current carrying parts (clause 22.5)	Shall be resistant to corrosion	Satisfactory		
vi.	Inspection of metal contacts subjected to sliding action during normal use (cl.22.6)	Shall be resistant to corrosion	N/A		
vii.	Inspection of screws used for the connection of current carrying parts (cl.22.7)	Thread forming screws shall not be used	Satisfactory		
s)	**Creepage distance & clearances (cl.23)**				
i.	**Creepage distance (with and without conductor)**				
a.	live parts which are separated when the contacts are open	3	More than 3 mm		
b.	live parts of different polarity	4	More than 4 mm		
c.	live parts and				
	accessible surfaces of pans of insulating material	3	N/A		
ii.	earthed metal parts, including the earthing circuit	3	N/A		
iii.	metal frames supporting the base of flush-type switches	3	N/A		
iv.	screws or devices for fixing bases, covers or cover-plates	3	More than 3 mm		
	metal parts of the mechanism, if required to be insulated from live parts (see 10.4)				
d.	metal parts of the mechanism, if required to be insulated from accessible metal parts{ 10.5), and				
	screws or devices for fixing bases, covers or cover-plates	3	N/A		
ii.	metal frames supporting the base of flush-type switches	3	N/A		
iii.	accessible metal parts				
e.	live parts and accessible unearthed metal parts, with the exception of screws and the like	6	N/A		

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Sr.	Description of tests	Requirements	Observation
			A B C
ii.	**Clearances(with and without conductor)**		
	live parts which are separated when the contacts are open	3	More than 3
	live parts of different polarity	3	More than 3
	Live parts and		
	Accessible surfaces of insulating material	3	N/A
	Earthed metal parts, including the earthing circuit,	3	N/A
	not mentioned under items 9 and 11	3	N/A
	Metal frames supporting the base of flush-type switches	3	N/A
	Screws or devices for fixing bases, covers, or cover-plates	3	More than 3 mm
	Metal parts of the mechanism, if required to be insulated from live parts (see 10.4)	3	N/A
	live parts and		
	exclusively earthed metal boxes with the switch mounted in the most unfavourable position	3	N/A
	unearthed metal boxes, without insulating lining with the switch mounted in the most unfavourable position	4.5	N/A
e.	metal parts of the mechanism, if required to be insulated from accessible metal parts (10.5), and		
	screws or devices for fixing bases, covers or cover-plates	3	N/A
i.	metal frames supporting the base of flush-type switches	3	N/A
ii.	accessible metal parts when the base is fixed directly on the wall	3	N/A
f.	live parts and the surface on which the base of a surface-type switch is mounted when the base is fixed directly on the wall	6	N/A
g.	live parts and the bottom of the space, if any, for external conductors, for surface-type switches	3	N/A
iii.	**Distances through insulating sealing compound (with and without conductor)**		
a.	Between live parts covered with at least 2 mm of sealing compound and toe surface on which the base of a surface type switch is mounted.	4	N/A
b.	Between the parts covered with at least 2 mm of sealing compound and the bottom of the space, if any, for external conductors, for surface-type switches	2.5	N/A
t)	**Resistance of Insulating Material to Abnormal Heat, to Fire and to Tracking (cl.24)**		G
i.	Glow Wire Test (cl.24.1)		
	• Parts of insulating material necessary to retain current carrying parts (@ 850°C)	• No visible flame/ sustained glowing • Flame, if any, shall extinguish in 30s after glow wire is removed	No visible flame or sustained glow
	• Parts of insulating material not necessary to retain current carrying parts (@ 650°C)		No visible flame or sustained glow
			G H I
u)	**Resistance to Rusting (Cl.25)**	• Surface shall show no sign of rusting	No sign of rust observed

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