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# TEST REPORT IEC 60884-2-5

# Plugs and socket-outlets for household and similar purposes Part 2: Particular requirements for adaptors

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Report Reference No	3190585.51v1.1	
Tested by (name + signature):	Hao Jiang	c) ia gher
Witnessed by (name + signature):		
Supervised by (name + signature):		
Approved by (name + signature):	Wenchao Ni	Ni Vencha
Date of issue:	2016-06-27	
Number of pages:	34 pages	
CB Testing laboratory name:	DEKRA Testing and Certification (S	Shanghai) Ltd.
Address:	3F #250 Jiangchangsan Road Build Park Shibei Hi-Tech Park, Zhabei [	•
Testing location/ procedure:		VMT TMP
Testing location/ address:	same as above	
Applicant's name:	Allocacoc B.V.	
Address	Rotterdamseweg 386 B1, 2629HG	Delft, the Netherlands
Test specification:		
Standard	IEC 60884-2-5:1995 (First Edition)	
	[see also IEC 60884-1:1994 (Secon	d Edition) + A1:1994 + A2:1995]
Test procedure:	type test	
Non-standard test method:	N/A	
Test Report Form No:	IEC60884_2_5A (modified by DEKF	RA)
TRF originator:	IMQ	
Master TRF:	Dated 2004-09	
Test item description:	multiway adaptor	
Trade Mark:		
Manufacturer:	Suzhou Bortly Hardware Illumination Fenyue Road, Fenhu Economy & T Zone, Wujiang City, Jiangsu, China	Technology Development
Model/Type reference:	1100/DEORPC, 1202/DEOUPC, 1202/	103/DEORPC, 1203/DEOUPC
Ratings:	250 V~; 16 A	
	USB: 5 Vdc; 2,1 A	



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Copy of marking plate and summary of test results (information/comments):			
see marking in TRF 3190585.50v1.1			
Summary of testing:			
N/A			

#### Remark:

Add the type 1100/DEORPC and 1202/DEOUPC, they are as same as 1103/DEORPC and 1203/DEOUPC, just with different Packaging.

Correction: page 2 1200/DEOUPC to 1202/DEOUPC on 2016.07.08



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Test item particulars:	
Standard Sheet	see datasheet in TRF 3190585.50
Rated current (A) and/or power (W):	16
Rated voltage (V):	250
Degree of protection against harmful ingress of water :	ordinary / splash-proof (IPX4) / jet-proof (IPX5)
Provision for earthing:	without earthing contact / with earthing contact
Method of connecting the cable:	rewirable intermediate adaptor / non-rewirable intermediate adaptor
Type of cable:	-
Nominal cross-sectional areas (mm²)	-
Type of terminals:	screw-type / screwless (rigid) / screwless (rigid and flexible)
Type of connections	soldered / welded / crimped / other
Socket-outlets:	
Degree of protection against electric shock:	normal protection / increased protection
Existence of enclosures:	unenclosed / enclosed
Existence of shutters:	without shutters / with shutters
Method of application / mounting of the socket-outlet .:	surface-type / flush-type / semi-flush-type / panel type / architrave-type / <b>portable-type</b> / table-type (single / multiple) / floor recessed type / appliance type
Method of installation:	design A / design B
Plugs:	
Class of equipment:	0/1/11
Possible test case verdicts:	
- test case does not apply to the test object	
- test object does meet the requirement:	P (Pass)
- test object does not meet the requirement:	F (Fail)
Testing:	
Date of receipt of test object:	
Date (s) of performance of tests	2013-10-14 to 2013-12-13
General remarks:	
This report is not valid as a CB Test Report unles and appended to a CB Test Certificate issued by a	n NCB in accordance with IECEE 02.
The test results presented in this report relate only to the	• • •
This report shall not be reproduced, except in full, with laboratory.	nout the written approval of the Issuing testing
"(see Enclosure #)" refers to additional information ap "(see appended table)" refers to a table appended to	the report.
Throughout this report a Comma or point is used	d as the decimal separator.
This powercube may not be available in countries when Denmark (DK), Finalnd (FI), The Netherlands (NL), Policiass 0 socket-outlets can lead to hazardous situations	rtugal (PT), Spain (ES) and Sweden (SE). Insertion into



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IEC 60884-2-5			
Clause	Requirement – Test	Result - Remark	Verdict
	AMA DIZINO		
8	MARKING		
8.1	Accessories marked with:	1	_
	- rated current (A) and/or power (W)		P
	- rated voltage (V)		Р
	- symbol for nature of supply		Р
	- manufacturer's or responsible vendor's name:		Р
	- type reference	1100/DEORPC, 1202/DEOUPC, 1103/DEORPC and 1203/DEOUPC	Р
	- symbol for degree of protection (first digit):		N/A
	- symbol for degree of protection (second digit):		N/A
	Socket-outlets with screwless terminals marked with	n:	
	- the length of insulation to be removed:		N/A
	- an indication of the suitability to accept rigid conductors only (if any):		N/A
	Marking for rated current and/or power completed by the word MAX		Р
	Maximum admissible power marking easily discernible until the last plug is connected		Р
	Multiway adaptors: maximum admissible power marking not placed on the socket-outlet engagement surface		Р
	Fused adaptors marked to indicate the presence of a fuse within the adaptor		N/A
	Rewirable fused intermediate adaptors marked to indicate the rated current of the fuse within the intermediate adaptor	on intermediate adaptor / on attached label	N/A
	Non-rewirable fused intermediate adaptors permenently marked with the rated current of the fuse appropriate to the attached flexible cable and to associated appliances		N/A
8.2	Symbols used: as required in the standard		Р
	Marking for the nature of supply placed next to the marking for rated current and rated voltage		Р
8.3	Marking of fixed socket-outlets placed on the main p	part:	
	- rated current, rated voltage and nature of supply		N/A
	- identification mark of the manufacturer or of the responsible vendor		N/A
	- length of insulation to be removed, if any		N/A

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	IEC 60884-2-5		
Clause	Requirement – Test	Result - Remark	Verdict
	- type reference		N/A
	Cover plates necessary for safety purposes and intended to be sold separately: marked with the manufacturer's or responsible vendor's name and type reference		N/A
	Symbol for the degree of protection (second digit): marked on the outside of its associated enclosure so as to be easily discernible		N/A
8.4	Plugs and portable socket-outlets: marking specified in 8.1, other than the type reference, easily discernible		Р
	Plugs and portable socket-outlets for equipment of class II not marked with the symbol for class II construction		N/A
8.5	Neutral terminals: N		N/A
	Earthing terminals: [earth symbol]		N/A
	Markings not placed on screws or other easily removable parts		N/A
	Terminals for conductors not forming part of the ma	in function of the socket-outlet:	
	- clearly identified unless their purpose is self evident, or		N/A
	- indicated in a wiring diagram fixed to the accessory		N/A
	Identification of accessory terminals may be achieve	ed by:	
	- their marking with graphical symbols according to IEC 147 or colours and/or alphanumeric system, or		N/A
	- their physical dimension or relative location		N/A
8.6	Fixed socket-outlets other than ordinary: marked with the IP symbol visible when the accessory is installed		N/A
8.7	Marking durable and easily legible. Test: 15 s with water and 15 s with petroleum spirit		Р
8.8	Indication of which position or with which special provision the declared IP of flush-type and semi-flush type fixed socket-outlets is ensured		N/A
	Additional indication for socket-outlets intended only for mounting on certain types of surface		N/A
9	CHECKING OF DIMENSIONS		
9.1	Accessories and surface-type mounting boxes comply with the appropriate standard sheets		Р



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	IEC 60884-2-5		
Clause	Requirement – Test	Result - Remark	Verdict
	Insertion of plugs into fixed or portable socket- outlets ensured by their compliance with the relevant standard sheets		Р
	Compliance checked by measurement and by means of gauges with manufacturing tolerances as shown in table 2		Р
9.2	It shall not be possible to engage a plug with:		
	- a socket-outlet having a higher voltage rating or a lower current rating;		Р
	- a socket-outlet with a different number of live poles (exception admitted provided that no dangerous situation can arise);		Р
	- a socket-outlet with earthing contact (plug for class 0 equipment).		N/A
	Engagement of a plug for class 0 or class I equipment with a socket-outlet designed to accept plugs for class II equipment, not possible		Р
	Impossibility of insertion checked by applying a gauge, for 1 min, with a force of:		
	- 150 N (rated current ≤ 16A);		Р
	- 250 N (rated current > 16A)		N/A
	Accessories with elastomeric or thermoplastic material: test carried out at 35 °C ± 2 °C		Р
9.3	Deviations from standard sheets made only if they provide technical advantage and do not affect the purpose and safety of accessories complying with standard sheet	see Annex datasheet for details	Р
10	PROTECTION AGAINST ELECTRIC SHOCK		
10.1	Socket-outlets: live parts not accessible		Р
·	Live parts of plug portion of adaptors: not		Р

10	PROTECTION AGAINST ELECTRIC SHOCK	
10.1	Socket-outlets: live parts not accessible	Р
	Live parts of plug portion of adaptors: not accessible when the plug portion of an adaptor is in partial or complete engagement with a socket-outlet	Р
	Test with standard test finger shown in figure 2	Р
	Accessories with elastomeric or thermoplastic material: additional test carried out at 35 °C $\pm$ 2 °C with a straight unjointed test finger (75 N for 1 min)	Р
	During the test: accessories not deform and no live parts accessible	Р
	Plugs and portable socket-outlets pressed with a force of 150 N for 5 min as shown in figure 22: specimens not show deformation	Р

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	IEC 60884-2-5	ı	Т
Clause	Requirement – Test	Result - Remark	Verdict
10.101	Fuse adaptor: not possible to remove or replace a fuse-link unless the adaptor is completely withdrawn from the socket-outlet		N/A
10.2	Accessible parts (with exception of small screws and the like for fixing bases and covers or cover plates): made of insulating material		Р
	Cover or cover plates of fixed socket-outlets: made of metal if the requirements of 10.2.1 or 10.2.2 are fulfilled		N/A
10.2.1	Metal covers or cover plates protected by supplementary insulation made by insulating linings or insulating barriers		N/A
	Insulating linings or insulating barriers cannot be removed without being permanently damaged		N/A
	Insulating linings or insulating barriers cannot be replaced in an incorrect position and, if they are omitted, accessories are rendered inoperable or manifestly incomplete		N/A
	There is no risk of accidental contact between live parts and metal covers or cover plates		N/A
10.2.2	Metal covers or cover plates automatically connected, through a low-resistance connection, to the earth during fixing		N/A
10.3	Connection between a pin of an associated plug and a live socket-contact of an adaptor or between a pin of an adaptor and a live socket contact of a socket-outlet not possible while any other current carrying pin is accessible		P
	Compliance checked by manual test and by means of gauges with tolerances as specified in 9.1		Р
	Accessories with elastomeric or thermoplastic material: test carried out at 35 °C $\pm$ 2 °C		Р
	Socket-outlets with enclosure or bodies of rubber or polyvinyl chloride: test carried out with a force of 75 N for 1 min		N/A
	Fixed socket-outlets provided with metal covers or cover plates: clearance of at least 2 mm required between a pin and a socket-contact when another pin(s) is(are) in contact with the metal covers or cover plates	mm	N/A
10.4	External parts of adaptors made of insulating material		Р
	Overall dimensions of rings around pins not exceed 8 mm concentric with respect to the pin		N/A

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	IEC 60884-2-5		
Clause	Requirement – Test	Result - Remark	Verdict
10.5	Shuttered socket-outlets portions of adaptors: live parts not accessible, without a plug in engagement, with the gauge shown in figure 4		Р
	Live contacts automatically screened when the plug is withdrawn		Р
	Means cannot easily be operated by anything other than a plug and not depend upon parts which are liable to be lost		Р
	Gauge applied to the entry holes corresponding to live contacts with a force up to 1 N shall not touch live parts		Р
	Accessories with elastomeric or thermoplastic material: test carried out at 35 °C $\pm$ 2 °C		Р
10.6	Earthing contacts of a socket-outlet designed that they cannot be deformed by the insertion of a plug		Р
	Test plug inserted into the socket-outlet with a force	e of 150 N for 1 min	
	After this test: socket-outlet still comply with the requirements of clause 9		Р
10.7	Socket-outlet with increased protection: live parts not accessible		N/A
	Gauge of figure 4 applied with a force of 1 N on all accessible surfaces shall not touch live parts		N/A
	Accessories with elastomeric or thermoplastic material: test carried out at 35 °C $\pm$ 2 °C		N/A
11	PROVISION FOR EARTHING	_	
11.1	Earth connection made before the current-carrying contacts of the plug become live		Р
	Current-carrying pins shall separate before the earth connection is broken		Р
11.2	Earthing terminals of rewirable accessories comply with clause 12		N/A
	Earthing terminals of the same size as the corresponding terminals for the supply conductors		N/A
	Any additional external earthing terminals of fixed socket-outlets of size suitable for conductors of at least 6 mm <sup>2</sup>		N/A
	Earthing terminals of rewirable accessories: internal		N/A
	Earthing terminals of fixed socket-outlets: fixed to the base or to a part reliably fixed to the base		N/A



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N/A

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Clause	Requirement – Test	Result - Remark	Verdict
	Earthing contacts of fixed socket-outlets:		
	- fixed to the base, or		N/A
	- fixed to the base, of - fixed to the cover (reliably connected to the		N/A
	earthing terminals; contact pieces silver plated or with adequate protection)		IV/A
	Parts of earthing circuit in one piece or reliably connected by riveting, welding, or the like		Р
11.3	Accessible metal parts of fixed socket-outlets: permanently and reliably connected to the earthing terminal		N/A
11.4	Socket-outlets, other than ordinary, with enclosure of insulating material and more than one cable inlet, provided with an internal earthing terminal for the continuity of the earthing circuit, unless		N/A
	earthing terminals allows the connection of an incoming and an outgoing earthing conductor together		N/A
11.5	Connection between earthing terminal and accessible metal parts: of low resistance		N/A
	Test:		
	Test current equal to 1,5 times the rated current or 25 A (A):		-
	Resistance not exceed 0,05 $\Omega$ ( $\Omega$ )	Ω	N/A
12	TERMINALS	T	
	All the test on terminals, with the exception of the test of 12.3 11, made after the test of clause 16		N/A
12.1	General		
12.1.1	Rewirable fixed socket-outlets provided with screw-type terminals or with screwless terminals:		N/A
	Rewirable intermediate adaptors provided with screw-type terminals:		N/A
	Pre-soldered flexible conductors used: pre- soldered area outside the squeezed area of screw-		N/A

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soldered and welded

connection

type terminals

12.1.2

other components

Clamping means of terminals: not serve to fix any

Non-rewirable accessories provided with soldered, welded, crimped or equally effective permanent

connections .....:

Screwed or snap-on connections not used



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Clause	Requirement – Test	Result - Remark	Verdict
	Connections made by crimping a pre-soldered flexible conductor not permitted		N/A
12.2	Terminals with screw clamping for external copper of	conductors	
12.2.1	Accessories provided with terminals which allows the proper connection of copper conductors as shows in table 3		N/A
	Rated current (A); Type of accessories		-
	Type of conductor (rigid / flexible)		-
	Smallest / largest cross-sectional area (mm²):		-
	Diameter of the largest conductor (mm)		-
	Figure of terminal		-
	Minimum diameter D (minimum dimensions) of conductor space: required (mm); measured (mm) .:		N/A
12.2.2	Terminals allow the conductor to be connected without special preparation		N/A
12.2.3	Terminals have adequate mechanical strength		N/A
	Screws and nut for clamping the conductors have metric ISO thread or a comparable thread		N/A
	Screws not of soft metal such as zinc or aluminium		N/A
12.2.4	Terminals resistant to corrosion		N/A
12.2.5	Screw-type terminals clamp the conductor(s) without undue damage		N/A
	Test with apparatus shown in figure 32:		N/A
	- type of conductors:	rigid solid / rigid stranded / flexible	-
	- number of conductors		-
	- smallest cross-sectional area (mm²) (table 3); diameter of bushing hole (mm); height H (mm); mass (kg)		N/A
	- largest cross-sectional area (mm²) (table 3); diameter of bushing hole (mm); height H (mm); mass (kg)		N/A
	- nominal diameter of thread (mm); torque according to table 6 (Nm):		-
	During the test: conductor not slip out, no break near clamping unit and no damage		N/A
12.2.6	Terminals clamp the conductor reliably between metal surfaces		N/A
	Pull test (1 min):		



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	IEC 60884-2-5		
Clause	Requirement – Test	Result - Remark	Verdict
	- type of conductors:	rigid solid / rigid stranded / flexible	-
	- number of conductors:		-
	- smallest cross-sectional area (mm²) (table 3); pull (N):		N/A
	- largest cross-sectional area (mm²) (table 3); pull (N)		N/A
	- torque (Nm) (2/3 table 6):		-
	During the test: conductor not move noticeably		N/A
12.2.7	Terminals designed or placed that the conductor cannot slip out while the clamping screws or nuts are tightened		N/A
	- largest cross-sectional area (mm²) (table 3):		-
	- number of wires and nominal diameter of wires (ta	ble 5):	
	fixed socket-outlets: rigid solid conductors / rigid stranded conductors:	1 x / 7 x	-
	plugs and portable socket-outlets: flexible conductors:		-
	- terminals intended for looping-in 2 or 3 conductors: permissible number of conductors:		-
	- torque (Nm) (2/3 table 6)		-
	After the test: no wire of the conductor escaped outside the clamping unit		N/A
12.2.8	Terminals not work loose from their fixing to accessories		N/A
	Torque test:		
	- rigid solid copper conductor of the largest cross- sectional area (mm²) (table 3)		-
	- torque (Nm) (table 6 or appropriate figures 34, 35, 36)		-
	Screws and nuts tightened and loosened 5 times.  During the test: terminals not work loose and show no damage		N/A
12.2.9	Clamping screws or nuts of earthing terminals: adequately locked against accidental loosening, not possible to loosen them without the aid of a tool		N/A
12.2.10	Earthing terminals: no risk of corrosion		N/A
	Body of brass or other metal no less resistant to corrosion		N/A



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Clause	Requirement – Test	Result - Remark	Verdict
	If the body is a part of a frame or enclosure of aluminium alloy, precautions shall be taken to avoid the risk of corrosion		N/A
12.2.11	Pillar terminals: distance <i>g</i> no less than the value specified in figure 34: required (mm); measured (mm)		N/A
	Mantle terminals: distance <i>g</i> no less than the value specified in figure 37: required (mm); measured (mm)		N/A
12.3	Screwless terminals for external copper conductors		
12.3.1	Screwless terminals of the type suitable for:		
	- for rigid copper conductors only, or		N/A
	- for both rigid and flexible copper conductors (tests carried out with rigid and then repeated with flexible conductors)		N/A
12.3.2	Screwless terminals provided with two clamping units each allowing the proper connection of rigid or of rigid and flexible conductors having nominal cross-sectional areas from 1,5 up to 2,5 mm <sup>2</sup> (table 7)		N/A
	Two conductors to be connected: each conductor introduced in a separate clamping unit		N/A
12.3.3	Screwless terminals allow the conductor to be connected without special preparation		N/A
12.3.4	Parts of screwless terminals intended for carrying current of materials as specified in 26.5		N/A
12.3.5	Screwless terminals clamp specified conductors with sufficient contact pressure without undue damage to the conductor		N/A
	Conductor clamped between metal surfaces		N/A
12.3.6	It shall be clear how the connection and disconnection of the conductors is to be made		N/A
	Disconnection of a conductor require an operation, other than a pull, so that can be made manually with or without a general-purpose tool		N/A
	It shall not be possible to confuse the opening for the use of a tool with the opening intended for the conductor		N/A
12.3.7	Screwless terminals intended for the interconnection	n of two or more conductors:	
	- during insertion, operation of clamping means of one of the conductors is independent of operation of that for the other conductor(s);		N/A



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Clause	Requirement – Test	Result - Remark	Verdict
	- during disconnection, conductors can be disconnected either at the same time or separately;		N/A
	- each conductor introduced in a separate clamping unit.		N/A
	It shall be possible clamp securely any number of conductors up to the maximum as designed.  Number of conductors; Nominal cross-sectional area (mm²)		N/A
12.3.8	Screwless terminals of fixed socket-outlets: adequate insertion obvious and over-insertion prevented		N/A
12.3.9	Screwless terminals properly fixed to the socket- outlets		N/A
	Not work loose when conductors are connected or disconnected		N/A
	Self-hardening resins used to fix terminals not subject to mechanical stress		N/A
12.3.10	Screwless terminals withstand mechanical stresses occurring in normal use		N/A
	Test:		
	Connection / disconnection 5 times: rigid solid conductor 2,5 mm <sup>2</sup>		N/A
	Connection / disconnection 5 times: rigid solid conductor 1,5 mm <sup>2</sup>		N/A
	Conductor subjected to a pull of 30 N for 1 min after each connection. During application of the pull conductor not come out of the terminal		N/A
	Connection / disconnection 1 time: rigid stranded conductor 2,5 mm <sup>2</sup>		N/A
	Connection / disconnection 1 time: rigid stranded conductor 1,5 mm <sup>2</sup>		N/A
	Conductor subjected to a pull of 30 N for 1 min after connection. During application of the pull conductor not come out of the terminal		N/A
	Additional test on terminals intended for both rigid a	nd flexible conductors:	
	Connection / disconnection 5 times: flexible conductor 2,5 mm <sup>2</sup>		N/A
	Connection / disconnection 5 times: flexible conductor 1,5 mm <sup>2</sup>		N/A



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Clause	Requirement – Test	Resu	t - Ren	nark			Verdict
	Conductor subjected to a pull of 30 N for 1 min after each connection. During application of the pull conductor not come out of the terminal						N/A
	Additional test with apparatus shown in figure 32:						
	- type of conductors:	rigid s	solid / ri e	igid str	anded	/	-
	- number of conductors:						-
	- 1,5 mm²; diameter of bushing hole 6,5 mm; height H 260 mm; mass 0,4 kg						N/A
	- 2,5 mm²; diameter of bushing hole 9,5 mm; height H 280 mm; mass 0,7 kg						N/A
	During the test: conductors not move noticeably in the clamping unit						N/A
	After these tests: neither terminals nor clamping means have worked loose and conductors show no deterioration						N/A
12.3.11	Screwless terminals withstand electrical and thermal stresses occurring in normal use						N/A
	Test a) carried out for 1 h connecting rigid solid con-	ductor	S:				
	- test current (A) (table 10)						-
	- nominal cross-sectional area (mm²):						-
	- screwless terminal number:	1	2	3	4	5	-
	- voltage drop measured (mV) (requirement: ≤ 15 mV)						N/A
	Test b) (temperature cycles test) carried out on term	ninals s	subject	ed to T	est a):		
	- test current (A) (table 10)						-
	- cross-sectional area (mm²)						-
	- screwless terminal number	1	2	3	4	5	-
	- voltage drop measured after the 24 cycle (requirement: ≤ 22,5 mV):						N/A
	- voltage drop measured (mV) after 48 <sup>th</sup> cycle:						N/A
	- voltage drop measured (mV) after 72 <sup>th</sup> cycle:						N/A
	- voltage drop measured (mV) after 96 <sup>th</sup> cycle:						N/A
	- voltage drop measured (mV) after 120 <sup>th</sup> cycle:						N/A
	- voltage drop measured (mV) after 144 <sup>th</sup> cycle:						N/A
	- voltage drop measured (mV) after 168 <sup>th</sup> cycle:						N/A
	- voltage drop measured (mV) after 192 <sup>th</sup> cycle:						N/A



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Clause	Requirement – Test	Result - Remark	
	- requirement: ≤ 22,5 mV or 2 times 24 <sup>th</sup> cycle value (mV)		N/A
	After this test: inspection show no changes		N/A
	Mechanical strength test according 12.3.10:		
	Connection / disconnection 5 times: rigid solid conductor 2,5 mm <sup>2</sup>		N/A
	Connection / disconnection 5 times: rigid solid conductor 1,5 mm <sup>2</sup>		N/A
	Conductor subjected to a pull of 30 N for 1 min after each connection. During application of the pull conductor not come out of the terminal		N/A
	Connection / disconnection 1 time: rigid stranded conductor 2,5 mm <sup>2</sup>		N/A
	Connection / disconnection 1 time: rigid stranded conductor 1,5 mm <sup>2</sup>		N/A
	Conductor subjected to a pull of 30 N for 1 min after connection. During application of the pull conductor not come out of the terminal		N/A
	Additional test on terminals intended for both rigid a	nd flexible conductor	s:
	Connection / disconnection 5 times: flexible conductor 2,5 mm <sup>2</sup>		N/A
	Connection / disconnection 5 times: flexible conductor 1,5 mm <sup>2</sup>		N/A
	Conductor subjected to a pull of 30 N for 1 min after each connection. During application of the pull conductor not come out of the terminal		N/A
	Additional test with apparatus shown in figure 32:		
	- type of conductors:	rigid solid / rigid stra flexible	inded / -
	- number of conductors:		-
	- 1,5 mm²; diameter of bushing hole 6,5 mm; height H 260 mm; mass 0,4 kg		N/A
	- 2,5 mm²; diameter of bushing hole 9,5 mm; height H 280 mm; mass 0,7 kg		N/A
	During the test: conductors not move noticeably in the clamping unit		N/A
	After these tests: neither terminals nor clamping means have worked loose and conductors show no deterioration		N/A



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Clause	Requirement – Test	Result - I	Remark		Verdict
	, to quite in the same in the	1.1000			
12.3.12	Screwless terminals: connected rigid solid conductor remains clamped, even when deflected during normal installation				N/A
	Deflection test (principle of test apparatus shown in	figure 33 a	a)):		
	- test current (A) (equal rated current)				-
	Smallest cross-sectional area (mm²) (table 11):				-
	Force (N) (table 12)				-
	- screwless terminal number	1	2	3	-
	- starting point (X = deflection original point):	Х	X+10°	X+20°	-
	- voltage drop measured (mV) (1 <sup>st</sup> deflection):				N/A
	- voltage drop measured (mV) (2 <sup>nd</sup> deflection):				N/A
	- voltage drop measured (mV) (3 <sup>rd</sup> deflection):				N/A
	- voltage drop measured (mV) (4 <sup>th</sup> deflection):				N/A
	- voltage drop measured (mV) (5 <sup>th</sup> deflection):				N/A
	- voltage drop measured (mV) (6 <sup>th</sup> deflection):				N/A
	- voltage drop measured (mV) (7 <sup>th</sup> deflection):				N/A
	- voltage drop measured (mV) (8 <sup>th</sup> deflection):				N/A
	- voltage drop measured (mV) (9 <sup>th</sup> deflection):				N/A
	- voltage drop measured (mV) (10 <sup>th</sup> deflection):				N/A
	- voltage drop measured (mV) (11 <sup>th</sup> deflection):				N/A
	- voltage drop measured (mV) (12 <sup>th</sup> deflection):				N/A
	- requirement: ≤ 25 mV		•		
	Largest cross-sectional area (mm²) (table 11):				-
	Force (N) (table 12):				-
	- screwless terminal number:	1	2	3	-
	- starting point (X = deflection original point):	Х	X+10°	X+20°	-
	- voltage drop measured (mV) (1 <sup>st</sup> deflection):				N/A
	- voltage drop measured (mV) (2 <sup>nd</sup> deflection):				N/A
	- voltage drop measured (mV) (3 <sup>rd</sup> deflection):				N/A
	- voltage drop measured (mV) (4 <sup>th</sup> deflection):				N/A
	- voltage drop measured (mV) (5 <sup>th</sup> deflection):				N/A
	- voltage drop measured (mV) (6 <sup>th</sup> deflection):				N/A
	- voltage drop measured (mV) (7 <sup>th</sup> deflection):				N/A
	- voltage drop measured (mV) (8 <sup>th</sup> deflection):				N/A
	- voltage drop measured (mV) (9 <sup>th</sup> deflection):				N/A

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Clause	Requirement – Test	Result - Remark	Verdict
	- voltage drop measured (mV) (10 <sup>th</sup> deflection):		N/A
	- voltage drop measured (mV) (11 <sup>th</sup> deflection):		N/A
	- voltage drop measured (mV) (12 <sup>th</sup> deflection):		N/A
	- requirement: ≤ 25 mV		N/A
13	CONSTRUCTION OF FIXED SOCKET-OUTLETS		N/A
14	CONSTRUCTION OF PORTABLE ACCESSORIES	<b>S</b>	
14.1	Non-rewirable intermediate adaptors:		
	flexible cable cannot be separated from the adaptor without making it permanently useless		N/A
	adaptor cannot be opened by hand or by using a general purpose tool, for example a screwdriver used as such		N/A
14.2	Pins of adaptors: adequate mechanical strength		Р
	Test for pins not solid (made after clause 21): force 1 min by means of a steel rod Ø 4,8 mm	of 100 N exerted on the pin for	
	During the application of the force: reduction of the dimension of the pin not exceed 0,15 mm		N/A
	After removal of the rod: dimensions of the pin not changed by more than 0,06 mm		N/A
14.3	Pins of adaptors:		
	- locked against rotation, except where rotation is not likely to impair safety or function		Р
	- not removable without dismantling the adaptor		Р
	- adequately fixed in the body of the adaptor when the plug is wired and assembled as in normal use		Р
	Earthing or neutral pins or contacts of adaptors: not possible to replace in an incorrect position		Р
14.4	Earthing contacts and neutral contacts of adaptors	:	
	- locked against rotation		Р
	- removable only with the aid of a tool, after dismantling the adaptor		Р
14.5	Socket-contact assemblies: sufficient resiliency		Р
14.6	Pins and socket-contacts: resistant to corrosion and abrasion		Р
14.7	Enclosures of rewirable accessories: completely enclose terminals and ends of flexible cable.		N/A

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Clause	Requirement – Test	Result - Remark	Verdict
Siause	rtequirement – rest	Tresuit - Tremain	Verdict
	Construction of rewirable accessories:		
	- conductors can be properly connected		N/A
	- cores not pressed against each other		N/A
	- cores of live conductor not in contact with accessible metal parts		N/A
	- core of earthing conductor not in contact with live parts		N/A
14.8	Rewirable accessories: terminal screws or nuts cannot become loose and fall out of position and establish an electrical connection between live parts and earthing terminal or metal parts		N/A
4.9	Rewirable accessories with earthing contact: ample space for slack of earthing (test)		N/A
	Non-rewirable non-moulded-on accessories with earthing contact: current-carrying conductors stressed before the earthing conductor if the flexible cable slips in its anchorage		Р
14.10	Terminals of rewirable accessories and terminations of non-rewirable accessories: located and shielded that loose wires not present a risk of electric shock		Р
4.10.1	Rewirable accessories: test with 6 mm free wire		
	free wire of a conductor connected to a live terminal not touch any accessible metal part or able to emerge from the enclosure		N/A
	free wire of a conductor connected to an earthing terminal not touch a live part		N/A
14.10.2	Non-rewirable, non-moulded-on accessories: test very equivalent to the maximum designed stripping length manufacturer plus 2 mm	_	
	free wire of a conductor connected to a live termination not touch any accessible metal part or reduce creepage and clearance below 1,5 mm to the external surface		Р
	free wire of a conductor connected to an earth termination not touch any live part		Р
4.10.3	Non-rewirable, moulded-on accessories:		
	Verification of means to prevent stray wires reducing the minimum distance through insulation to external accessible surface below 1,5 mm		N/A
4.11	Rewirable intermediate adaptors:	•	
	- clear how relief from strain and prevention of twisting is intended to be effected		N/A



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01-	IEC 60884-2-5	Decello Decel	17 " :
Clause	Requirement – Test	Result - Remark	Verdict
	- cord anchorage, or at least part of it, integral with or permanently fixed to one of the component parts of the plug or portable socketoutlet		N/A
	- makeshift methods not used		N/A
	- cord anchorage suitable for the different types of flexible cable which may be connected; screws, if any: not serve to fix any other component		N/A
	- cord anchorages: of insulating material or provided with an insulating lining fixed to the metal parts		N/A
	- metal parts of cord anchorages, including clamping screws: insulated from the earthing circuit		N/A
14.12	Insulating parts which keep live parts in position: reliably fixed together; not possible to dismantle the accessory without the aid of a tool		Р
14.13	Covers of adaptors: bushes for entry holes for the pins not become detached inadvertently from the inside when the cover is removed		N/A
14.14	Screws intended to allow access to interior of the accessory: captive		N/A
14.15	Engagement face of adaptors: no projections other than pins		Р
14.16	Engagement of associated plugs not prevented by any projection from the engagement face of adaptors		Р
14.17	Accessories other than ordinary: provided with gland(s) or the like		N/A
	Plugs other than ordinary: adequately enclosed		N/A
	Portable socket-outlets other than ordinary: adequately enclosed without a plug in engagement		N/A
	Lid springs (if any): of corrosion resistant material (bronze or stainless steel)		N/A
14.18	Portable socket-outlets: means for suspension from a wall or other mounting surfaces not allow access to live parts		N/A
	No free openings between space intended for suspension means fixed to the wall and live parts		N/A
14.19	Combinations of plugs and socket-outlets with circuit-breakers or other protective devices comply with relevant standards, if any:	USB charger; IEC/EN 60950-1	Р



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Clause	Requirement – Test	Result - Remark	Verdict	
14.20	Portable accessories: not integral part of lampholders		Р	
14.21	Plugs for equipment of class II:			
	- non-rewirable		N/A	
	- if incorporated in a cord set: provided with a connector for equipment of class II		N/A	
	- if incorporated in a cord extension set: provided with a portable socket-outlet for equipment of class II		N/A	
14.22	Components (switches and fuses) incorporated in accessories: comply with the relevant IEC standard	USB charger; IEC/EN 60950-1	Р	
14.23	Plug-in equipment: not cause overheating of the pins or impose undue strain		Р	
	Plugs with rating above 16 A and 250 V: not integral part of other equipment		Р	
	Tests for two-pole plugs, with or without earthing c including 16 A and 250 V (plug of equipment insert complying with this standard):			
14.23.1	Socket-outlet connected to a supply voltage equal to 1,1 times the highest rated voltage of the equipment (V):		-	
	Temperature rise of the pins after 1 h not exceed 45 K (K)	< 40	Р	
14.23.2	Additional torque applied to the socket-outlet to maintain the engagement face in the vertical plane not exceed 0,25 Nm (Nm) (adaptor fitted with a relevant plug complete with 1 m of 0,75 mm² circular flexible cable to 227 IEC 53, to each socket-outlet portion of the adaptor):	plug specified designed which could not be inserted into fixed socket-outlet which complies with III of CEE7	N/A	
14.23.101	Adaptors withstand lateral strain imposed by equipment likely to be introduced into them		Р	
	Test made 4 times with the adaptor turned through 90°, 5 N for 1 min (device shown in fig. 6); test repeated for each socket-outlet portion of the adaptor		Р	
	During the test: device not come out		Р	
	After the test:			
	- no damage		Р	
	- adaptor complies with clause 22		Р	
14.24	Adaptors: can easily withdrawn by hand from the relevant socket-outlet		Р	



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Clause	Requirement – Test	Result - Remark	Verdict
	Gripping surfaces so designed that the adaptor can be withdrawn without having to pull on the flexible cable, if any		Р
14.25	-		N/A
14.101	Plug portion of adaptors provided with earthing pins or contacts if any one of the socket-outlet portions is provided with an earthing pin or contact		Р
14.102	Adaptors for use in polarized socket-outlets: internal connection ensure that plug pins, socket-contacts and terminals, if any, maintain the same polarity at the input and output portions of the adaptor		N/A
14.103	Multiway adaptors designed that it is not possible to plug two or more multiway adaptors into each other		Р
14.104	Cable considered as a bare conductor if the insulation is not equivalent to the IEC standard and it does not comply with the electric strength test according to 17.2		N/A
14.105	Provision made within the body of a fused adaptor for fuse-link complying with IEC 60269 as far as it reasonably applies		N/A
	Fuse-link mounted between contacts fitted between an adaptor plug pin and the corresponding socket-contact(s)		N/A
	Adaptors for use in polarized system: fuse mounted between the line plug pin and the corresponding line socket-contact(s)		N/A
	Fuse links not fitted in the earthing circuit		N/A
	Fuse-link cannot be left in inadequate contact when the adaptor is assembled		N/A
15	INTERLOCKED SOCKET-OUTLET PORTIONS O	F ADAPTORS	N/A
16	RESISTANCE TO AGEING, TO HARMFUL INGR HUMIDITY	ESS OF WATER AND TO	
16.1	Resistance to ageing		
	Accessories shall be resistant to ageing		Р
	Accessories subjected to a test in a heating cabinet at 70 °C $\pm$ 2 °C for seven days (168 h)	80 °C	Р
	After the tests, samples shall show:		



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Clause	Requirement – Test Result	- Remark Verdict
	- no crack visible with normal or corrected vision without additional magnification	Р
	- no sticky or greasy material	Р
	- no trace of cloth (forefinger pressed with 5 N)	Р
	- no damage	Р
16.2	Resistance to harmful ingress of water	
	Enclosure of accessories other than ordinary shall provide a degree of protection against harmful ingress of water in accordance with the classification	N/A
16.2.1	Flush-type and semi flush-type socket-outlets fixed:	
	- in a test wall using an appropriate box in accordance with the manufacturer's instructions	N/A
	- in a test wall according to figure 41	N/A
	Portable socket-outlets tested on a plain, horizontal surfaction normal use and fitted with flexible cables according to table and smallest cross-sectional area given in table 3:	
	- largest cross-sectional area (mm²); type of cable (table 27)	-
	- smallest cross-sectional area (mm²); type of cable (table 27)	-
	Mounting screws tightened with a torque equal to 2/3 of the torque given in table 6 (Nm)	-
	Glands tightened with a torque equal to 2/3 of the torque applied during the test of 24.6 (Nm):	-
	Fixed and portable socket-outlets tested without a plug in engagement	N/A
	Plugs tested with in full engagement with:	
	- a fixed socket-outlets	N/A
	- a portable socket-outlets	N/A
	of the same system and with the same degree of protection against water	-
16.2.2	Splash-proof accessories subjected to the test IP X4 according to IEC 529	N/A
16.2.3	Jet-proof accessories subjected to the test IP X5 according to IEC 529	N/A
16.2.4	Specimens withstand an electric strength test specified in 17.2 which is started within 5 min after the IP test	N/A
16.3	Resistance to humidity	



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Clause	Requirement – Test	Result - Remark	Verdic
	Accessories proof against humidity which may occur in normal use		Р
	Compliance checked by a humidity treatment carried out in a humidity cabinet containing air with relative humidity maintained between 91 % and 95 %		Р
	Specimens kept in the cabinet for:		
	- two days (48 h) for ordinary accessories		Р
	- seven days (168 h) for accessories other than ordinary		N/A
	After this treatment the specimens show no damage		Р
17	INSULATION RESISTANCE AND ELECTRIC STR	ENGTH	
17.1.1	For adaptors: insulation resistance (500 V d.c. for 1	min):	
	a) between all poles connected together and a metal foil in contact with the outer surface of accessible external parts of insulating material and including external assembly screws $\geq$ 5 M $\Omega$ :	5000 ΜΩ	Р
	b) between each pole in turn, and all others connected together $\geq 5~\text{M}\Omega$ :	5000 ΜΩ	Р
	c) between any metal part of any cable anchorage, including clamping screws, and the earthing pin or terminal, if any $\geq 5~\text{M}\Omega$		N/A
	e) for intermediate adaptors, between any metal part of the cable anchorage and a metal rod of the maximum diameter of the flexible cable inserted in its place $\geq 5~\text{M}\Omega.$	ΜΩ	N/A
17.1.2	-		N/A
17.2	Electric strength, test voltage (a.c., for 1 min):		
	a) test voltage (V):	2000 V	Р
	b) test voltage (V):		Р
	c) test voltage (V):	İ	N/A
	d) test voltage (V)		N/A

18	OPERATION OF EARTHING CONTACTS	
	Earthing contacts provide adequate contact	Р
	pressure and not deteriorate in normal use	

e) test voltage (V) .....:

During the test no flashover or breakdown

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N/A P



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Clause	Requirement – Test	Result - Remark	Verdict
		Γ	
	Compliance checked by the tests of clauses 19 and 21		P
	Force exerted measured in side earthing contacts not less than 5 N (CEE 7 clause 18)		Р

19	TEMPERATURE RISE	
	Non-rewirable accessories tested as delivered:	N/A
	- type of flexible cable; number of conductors and nominal cross-sectional area (mm²)	-
	Rewirable accessories fitted with polyvinyl chloride insulated conductors having a nominal cross-sectional area as show in table 15:	
	- rated current of accessory	-
	- nominal cross-sectional area (mm²)	-
	- type of conductors rigid solid / rigid stranded / flexible	-
	Terminal screws or nuts tightened with a torque equal to 2/3 of that specified in 12.2.8 (Nm)	-
	Socket-outlets tested using a test plug with brass pins having the minimum specified dimensions	Р
	Adaptors tested using a fixed socket-outlet complying with the standard and having as near to average characteristics, but with minimum size of the earthing pin, if any	Р
	Test current as specified in table 101 passed for 1 h (A)	-
	Temperature rise of terminals not exceed 45 K (K)	Р
	Separate tests made passing the current through:	
	- the neutral contact, if any, and the adjacent phase contact (K)	Р
	- the earthing contact, if any, and the nearest phase contact (K)	Р
	For adaptors test current applied:	
	- through each separate socket-outlet portion in turn; test current appropriate to the rating of the relevant socket-outlet portion (table 20) (A)	Р
	- through all socket-outlet portions simultaneously; test current appropriate to the rating of the adaptor and divided between the socket-outlet portions (A)	Р



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	IEC 60884-2-5	,	
Clause	Requirement – Test	Result - Remark	Verdict
	Temperature rise of external parts of insulating material not necessary to retain current-carrying parts and parts of the earthing circuit in position (K)	< 34	Р
20	BREAKING CAPACITY		
	Accessories shall have adequate breaking capacity		Р
	Compliance checked by testing:		
	- socket-outlet portions of adaptors;		Р
	- plug portions of adaptors with pins which are not solid		Р
	Test conditions:		
	- 100 strokes; rate of operation	30 strokes per minute	-
	- test voltage (1,1 Vn)	275	-
	- test current (1,25 ln) (power factor 0,6)	20	-
	Multiple socket-outlets: test carried out on one socket-outlet of each type and current rating		Р
	During the test: no sustained arcing occur		Р
	After the test:		
	- specimens show no damage impairing their further use;		Р
	- entry holes for the pins not show any damage which may impair the safety		Р
21	NORMAL OPERATION	T .	
	Accessories shall withstand without excessive wear or other harmful effect, the mechanical, electrical and thermal stresses occurring in normal use		Р
	Compliance checked by testing:		
	- socket-outlet portions of adaptors;		Р
	- plug portion of adaptors with resilient earthing socket-contacts;		Р
	- plug portion of adaptors with pins which are not solid		N/A
	Test performed on:		
	- complete shuttered socket-outlets		Р



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Clause	Requirement – Test	Result - Remark	Verdict
	- specimens prepared by the manufacturer without shutters (with current flowing). Number of strokes:		Р
	- specimens with shutters (without current flowing)		Р
	- complete shuttered socket-outlets with operations made by hand as in normal use		Р
	Test conditions for socket-outlet portion of adaptor		
	- 10000 strokes; rate of operation:	30 strokes per minute	-
	- test voltage Vn (V):	250	-
	- test current (as specified in table 20) (A) (power factor 0,8)	16	-
	Test conditions for plug portion of adaptor:		
	- 2000 strokes; rate of operation	30 strokes per minute	-
	- test voltage Vn (V):	-	-
	- test current (as specified in table 20) (A) (power factor 0,8)	-	-
	Test current passed:		
	- during each insertion and withdrawal of the plug (In $\leq$ 16A)		Р
	- during alternate insertion and withdrawal, the other insertion and withdrawal being made without current flowing (In > 16A)		N/A
	Multiple socket-outlets: test carried out on one socket-outlet of each type and current rating		Р
	During the test: no sustained arcing occur		Р
	After the test the specimens shall not show:		
	- wear impairing their further use;		Р
	- deterioration of enclosures, insulating lining or barriers;		Р
	- damage to the entry holes for the pins, that might impair proper working;		Р
	- loosening of electrical or mechanical connections;		Р
	- seepage of sealing compound		N/A
	Shuttered socket-outlets: the following gauges not remain under the relevant forces:	touch live parts when they	
	- gauges of figure 3 applied with a force up to 20 N		Р



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Clause	Requirement – Test	Result - Remark	Verdict
	- steel gauge of figure 4 applied with a force up to 1 N		Р
	Temperature-rise test (requirements of clause 19):		
	Test current as specified in table 101 passed for 1 h (A)	16	-
	Temperature rise of terminals not exceed 45 K (K):	< 40	Р
	Separate tests made passing the current through:		
	- the neutral contact, if any, and the adjacent phase contact (K):	< 40	Р
	- the earthing contact, if any, and the nearest phase contact (K):	< 40	Р
	For adaptors test current applied:		
	- through each separate socket-outlet portion in turn; test current appropriate to the rating of the relevant socket-outlet portion (table 20) (A):	16	Р
	- through all socket-outlet portions simultaneously; test current appropriate to the rating of the adaptor and divided between the socket-outlet portions (A)	4	Р
	Electric strength (sub-clause 17.2), test voltage (a.c.	:., for 1 min):	
	a) test voltage (V)	1500 V	Р
	b) test voltage (V)	1500 V	Р
	c) test voltage (V):		N/A
	d) test voltage (V)	-	N/A
	e) test voltage (V)	-	N/A
	During the test: no flashover or breakdown		Р
	Pins of adaptors: test according to 14.2		N/A
	Force exerted measured in side earthing contacts not less than 60 % or 5 N (CEE 7 clause 18):		Р
22	FORCE NECESSARY TO WITHDRAW THE PLUC	G T	
	Construction of adaptors shall allow the easy insertion and withdrawal of the plug, and prevent the plug from working out of the socket-outlet portion of the adaptor in normal use		P
	Rated current (A):	16	Р
-	1	_	

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22.1

Verification of the maximum withdrawal force (multi-pin gauge)



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Clause	Requirement – Test	Result - Remark	Verdict
Clause	Requirement – Test	Result - Remark	Verdici
	- Maximum withdrawal force (N)	54 N	-
	The plug not remain in the socket-outlet portion of the adaptor		Р
22.2	Verification of the minimum withdrawal force (single	le-pin gauge)	
	- Minimum withdrawal force (N)	2 N	-
	The plug not fall from each individual contact-assembly within 30 s		Р
23	FLEXIBLE CABLES AND THEIR CONNECTION		N/A
24	MECHANICAL STRENGTH		
	Adaptors have adequate mechanical strength		Р
24.1	-		N/A
24.2	Adaptors: tumbling barrel test; number of falls:	50	Р
	After the test:	I	
	No part become detached or loosened;		Р
	Pins no become so deformed that the plug cannot be introduced into a socket-outlet and also fails to comply with the requirements of 9.1 and 10.3;		P
	Pins no turn when a torque of 0,4 Nm is applied for 1 min in each direction (test not carried out where rotation of the pins does not impair safety or function)		Р
24.3	-		N/A
24.4	Adaptors (elastomeric or thermoplastic material): impact test, weight 1000 g, height 100 mm (apparatus shown in fig. 21)		Р
	Specimens placed in a refrigerator at –15 °C ± 2 °C for at least 16 h		Р
	After the test: no damage		Р
24.5	Adaptors (elastomeric or thermoplastic material): compression test, 300 N for 1 min, position a) and b) (apparatus shown in fig. 22)		Р
	After the test: no damage		Р
24.6	-		N/A
24.7	Pins of plug portions of adaptors with insulating sleeves: 20000 movements, 4 N (apparatus shown in fig. 23)		N/A



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Clause	Requirement – Test	Result - Remark	Verdict
	After the test: no damage of pins, insulating sleeve not have punctured or rucked up		N/A
24.8	Shuttered socket-outlet portions of adaptors: mech specimens submitted to the normal operation test		
	Force applied for 1 min against the shutter of an entry hole by means of one pin:	40 N	-
	Pin not come in contact with live parts		Р
	After the test: no damage		Р
24.9	-		N/A
24.10	Plug portion of adaptors: pull test to verify the fixat adaptor (new specimens)	ion of pins in the body of the	
	Maximum withdrawal force (table 16) applied for 1 min on each pin in turn, after the specimen has been placed at 70 °C for 1 h	54	-
	After the test: displacement of pins in the body of the plug ≤ 1 mm		Р
24.11	-		N/A
24.12	-		N/A
24.13	-		N/A
24.14	-		N/A
24.15	-		N/A
24.16	-		N/A
24.17	-		
24.18	-		-
25	RESISTANCE TO HEAT		
25.1	Fixed and portable accessories: heating cabinet 10	0 °C for 1 h	
	During the test: no change impairing their further use and sealing compound, if any, not flow		Р
	After the test: markings still legible		Р
25.2	Parts of insulating material of fixed socket-outlets no carrying parts and parts of the earthing circuit in possurface zone of 2 mm width surrounding the phase pressure test (1 h, 125 °C)	sition, and parts of the front	
	After the test: diameter of impression ≤ 2 mm:	see test results in TRF 3190585.50v1.1	Р
25.3	For parts not necessary to retain current-carrying pacific circuit in position, even though in contact with them.		



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Clause	Requirement – Test	Result - Remark	Verdict
	Test temperature (°C):	see test results in TRF 3190585.50v1.1	Р
	After the test: diameter of impression ≤ 2 mm:	see test results in TRF 3190585.50v1.1	Р
25.4	Portable accessories: compression test (20 N, 1 h, apparatus shown in figure 28	80 °C) by means of the	
	After the test: no damage		Р

26	SCREWS, CURRENT-CARRYING PARTS AND CONNECTIONS	
26.1	Connections withstand mechanical stresses	Р
	Thread-forming or thread-cutting screws used only if supplied together with the piece in which they are intended to be inserted	N/A
	Thread-cutting screws intended to be used during installation: captive	N/A
	Screws and nuts which transmit contact pressure: in engagement with a metal thread	N/A
	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	N/A
	- terminals: screw diameter (mm); torque (Nm); times	-
	- earthing terminals: screw diameter (mm); torque (Nm); times	-
	- assembly screws: screw diameter (mm); torque (Nm); times	-
	- cord anchorage: screw diameter (mm); torque (Nm); times	-
	- other screws or nuts: diameter (mm); torque (Nm); times	-
	During the test: no damage impairing the further use of the screwed connectons	N/A
26.2	Screws in engagement with a thread of insulating material: correct introduction into the screw hole or nut ensured	N/A
26.3	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	Р



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	IEC 60884-2-5		
Clause	Requirement – Test	Result - Remark	Verdict
	Connections made by insulation piercing of tinsel cord reliable		N/A
26.4	Screws and rivets locked against loosening and/or turning		N/A
26.5	Current-carrying parts of metal having mechanical s and resistance to corrosion adequate:	trength, electrical conductivity	
	- copper;		N/A
	- alloy with at least 58 % copper for parts made from cold-rolled sheet or with at least 50 % copper for other parts;	> 58%	Р
	- stainless steel with at least 13 % chromium and not more than 0,09 % carbon		N/A
	- steel with electroplated coating of zinc (ISO 2081),	with thickness of at least:	
	5 μm, service condition ISO no. 1, for ordinary equipment		N/A
	12 μm, service condition ISO no. 2, for splash- proof equipment		N/A
	25 μm, service condition ISO no. 3, for jet-proof equipment		N/A
	- steel with electroplated coating of nickel and chron of at least:	nium (ISO 1456), with thickness	
	20 μm, service condition ISO no. 2, for ordinary equipment		N/A
	30 μm, service condition ISO no. 3, for splash- proof equipment		N/A
	40 μm, service condition ISO no. 4, for jet-proof equipment		N/A
	- steel with electroplated coating of tin (ISO 2093), v	vith thickness of at least:	
	12 μm, service condition ISO no. 2, for ordinary equipment		N/A
	20 μm, service condition ISO no. 3, for splash- proof equipment		N/A
	30 µm, service condition ISO no. 4, for jet-proof equipment		N/A
	Current-carrying parts subjected to mechanical wear: not of steel with electroplated coating		Р
	Metals having a great difference of electrochemical potential: not used in contact with each other		Р
26.6	Contacts subjected to a sliding action: of metal resistant to corrosion		Р



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	IEC 60884-2-5		
Clause	Requirement – Test	Result - Remark	Verdic
26.7	Thread-forming screws and thread-cutting screws not used for the connection of current-carrying parts		N/A
	Thread-forming screws and thread-cutting screws used to provide earthing connection: not necessary to disturb the connection and at least two screws are used for each connection		N/A
27	CREEPAGE DISTANCES, CLEARANCES AND DIS	STANCES THROUGH	
27.1	Creepage distances, clearances and distances through sealing compound no less than the values shown in table 23		Р
	Creepage distances (cr):		
	1) between live parts of different polarity ≥ 4(3) mm		Р
	2) between live parts and:		
	- accessible insulating and earthed metal parts ≥ 3 mm:		Р
	- parts of earthing circuit ≥ 3 mm		Р
	- metal frames supporting the base of flush-type socket-outlets ≥ 3 mm:		N/A
	- screws or devices for fixing bases, covers or cover-plates of fixed socket-outlets ≥ 3 mm:		N/A
	- external assembly screws, other than screws which are on the engagement face of adaptor and are isolated from the earthing circuit ≥ 3 mm:		N/A
	3) between pins of an adaptor and metal parts connected to them, when fully engaged, and a socket-outlet having accessible unearthed metal parts $\geq$ 6(4,5) mm		N/A
	4) between the accessible unearthed metal parts of a socket-outlet and a fully engaged adaptor having pins and metal parts connected to them ≥ 6(4,5) mm		N/A
	5) between live parts of a socket-outlet portion of		N/A

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an adaptor (without a plug) and its accessible unearthed metal parts ≥ 6(4,5) mm .....

6) between live parts of different polarity  $\geq$  3 mm ...:

Clearances (cl):

7) between live parts and:



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OI	IEC 60884-2-5				
Clause	Requirement – Test	Result - Remark	Verdict		
	- accessible insulating and earthed metal parts not mentioned under 8 and 9 $\geq$ 3 mm $$		Р		
	- parts of earthing circuit ≥ 3 mm		Р		
	- metal frames supporting the base of flush-type socket-outlets ≥ 3 mm:		N/A		
	- screws or devices for fixing bases, covers or cover-plates of fixed socket-outlets ≥ 3 mm:		N/A		
	- external assembly screws, other than screws which are on the engagement face of the adaptor and are isolated from the earthing circuit ≥ 3 mm:		N/A		
	8) between live parts and:				
	- exclusively earthed metal boxes ≥ 3 mm:		N/A		
	- unearthed metal boxes, without insulating lining ≥ 4,5 mm		N/A		
	9) between live parts and the surfaces on which the base of a socket-outlet for surface mounting is mounted ≥ 6 mm		N/A		
	10) between live parts and the bottom of any conductor recess, if any, in the base of a socket-outlet for surface mounting ≥ 3 mm		N/A		
	Distance through insulating sealing compound:				
	11) between live parts covered with at least 2 mm of sealing compound and the surfaces on which the base of a socket-outlet for surface mounting is mounted ≥ 4(3) mm		N/A		
	12) between live parts covered with at least 2 mm of sealing compound and the bottom of any conductor recess, if any, in the base of a socket-outlet for surface mounting $\geq$ 2,5 mm		N/A		
27.2	Insulating sealing compound: not protrude above the edge of the cavity in which it is contained		N/A		
27.3	Ordinary surface-type socket-outlets: no bare current-carrying strips at the back		N/A		
28	RESISTANCE OF INSULATING MATERIAL TO AE AND TO TRACKING	BNORMAL HEAT, TO FIRE			
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28	RESISTANCE OF INSULATING MATERIAL TO ABNORMAL HEAT, TO FIRE AND TO TRACKING		
28.1	Resistance to abnormal heat and to fire		
28.1.1	1.1 Glow-wire test  For parts of fixed accessories necessary to retain current-carrying parts and parts of the earthing circuit in position: test temperature 850 °C		
	No visible flame and no sustained glowing		N/A



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Clause	Requirement – Test	Result - Remark	Verdict		
	Flame and glowing extinguish within 30 s:		N/A		
	No ignition of the tissue paper		N/A		
	For parts of fixed accessories needed to retain the earth terminal in position in a box: test temperature 650 °C				
	No visible flame and no sustained glowing		N/A		
	Flame and glowing extinguish within 30 s:		N/A		
	No ignition of the tissue paper		N/A		
	For parts of portable accessories necessary to retain current-carrying parts are parts of the earthing circuit in position: test temperature 750 °C				
	No visible flame and no sustained glowing	see test results in TRF 3190585.50v1.1	Р		
	Flame and glowing extinguish within 30 s	see test results in TRF 3190585.50v1.1	Р		
	No ignition of the tissue paper		Р		
	For parts not necessary to retain current-carrying parts and parts of the earthing circuit in position, even though in contact with them: test temperature 650 °C				
	No visible flame and no sustained glowing	see test results in TRF 3190585.50v1.1	Р		
	Flame and glowing extinguish within 30 s:	see test results in TRF 3190585.50v1.1	Р		
	No ignition of the tissue paper	see test results in TRF 3190585.50v1.1	Р		
28.1.2	Plug portion of adaptors with pins provided with insulating sleeves:				
	Test temperature maintained for 3 h by means of the apparatus shown in figure 26	120 °C / 180 °C	-		
	Impact test according to sub-clause 30.4 (mass 100 g, height 100 mm, 4 impacts): no cracks of the insulating sleeves		N/A		
28.2	Resistance to tracking				
	Parts of insulating material retaining live parts in position of accessories other than ordinary: test voltage 175 V, 50 drops, solution A of IEC 112		N/A		
	No flashover or breakdown		N/A		
29	RESISTANCE TO RUSTING				
30	ADDITIONAL TESTS ON DING DROVIDED WITH INOUT ATIMO OF SEVEN		N/A		
30	ADDITIONAL TESTS ON PINS PROVIDED WITH INSULATING SLEEVESEnd of report				