

# TEST REPORT

## IEC 60884-1

### Plugs and socket-outlets for household and similar purposes

#### Part 1: General requirements

## IEC 60884-2-5

### Plugs and socket-outlets for household and similar purposes - Part 2-5: Particular requirements for adaptors

Report reference No.: AST2209303001B-2

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#### Testing laboratory

Name: Aerospace Testing Technology (Shenzhen) Co., Ltd.

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Testing location: Same as above

#### Applicant

Applicant name: NEUTRON DIGITAL TECHNOLOGY CO., LIMITED

 Address: 1008 FLAT, 10-FLOOR, WING TUCK COMMERCIAL CENTRE  
177-183 WING LOK STREET SHEUNG WAN/HONGKONG

Manufacturer name: Same as applicant

Address: Same as applicant

Factory name: Same as applicant

Address: Same as applicant

#### Test specification

 Standard: IEC 60884-1:2002(Third Edition)+A1:2006+A2:2013;  
IEC 60884-2-5:2017(Edition 2.0);

Test procedure: LVD

Procedure deviation: N/A

Non-standard test method: N/A

#### Test item

Product name: Wi-fi Smart Socket

Trademark: NEUTRON

Model and/or type reference: NTL-SWxx-yy

Rating(s): AC 230V, 16A, 50Hz, Max. 2300W

**Possible test case verdicts:**

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

**Testing**

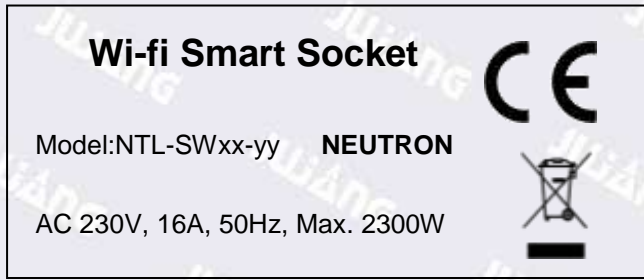
Date of receipt of test item .....: 2022-09-10  
 Date (s) of performance of tests .....: 2022-09-10 to 2022-09-24

**General remarks**

The test results presented in this report only to the object tested.  
 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 tested.  
 "(see remark #)" refers to a remark appended to the report.  
 "(see Annex #)" refers to an annex appended to the report.  
 "(See Enclosure #)" refers to additional information appended to the report.  
 "(See appended table)" refers to a table appended to the report.  
 Throughout this report a point is used as the decimal separator.  
 The equipment has a plastic enclosure that only can be opened by tools.  
 Before to use product, refer to the operating instruction from manufacturer.  
 Throughout this report a  comma /  point is used as the decimal separator.  
 Series Model Difference Description: (x are variables, x can be "0-9", "A-Z", "a-z" or blank, the differences of the basic function, y are variables, y can be "0-9", "A-Z", "a-z" or blank, the differences of the interface number and Interface properties, z are variables, z can be "0-9", "A-Z", "a-z" or blank, the differences of the Regional. The differences no impact safety related constructions and EMC.)

**Summary of Testing and Conclusions**

The sample(s) tested complies with the requirements of  
 IEC 60884-1:2002(Third Edition)+A1:2006+A2:2013;  
 IEC 60884-2-5:2017(Edition 2.0);

**Copy of marking plate:**

**Note:**

1. The height of graphical symbols shall not be less than 5 mm.
2. The height of letters and numerals either shown separately or with or as part of symbols shall not be less than 2 mm.
3. The height of WEEE symbols shall not be less than 7 mm.
4. According to the EU directives which have been aligned with EU NLF (new legislative framework), both of manufacturer and importer's name and address shall be affixed on the product or, where that is not possible, on its packaging or in a document accompanying the product before the product is placed on the EU market.

<b>Test item particulars.....:</b>	
Rated current (A) / Rated voltage (V) .....	16A / 230V~
Degree of protection against access to hazardous parts and against harmful ingress of solid foreign objects .....	IP 2X
Degree of protection against harmful ingress of water .....	IP X0
Provision for earthing .....	with earthing contact
Method of connecting the cable .....	N/A
Type of cable .....	N/A
Nominal cross-sectional areas (mm <sup>2</sup> ) .....	N/A
Type of terminals .....	N/A
Type of connections .....	N/A
<b>Socket-outlets:</b>	
Degree of protection against electric shock.....	normal protection
Existence of shutters .....	/
Method of application / mounting of the Socket-outlet .....	/
Method of installation .....	N/A
Intended for circuits where .....	a single earthing circuit provides protective earthing
<b>Plugs:</b>	
Class of equipment .....	N/A

IEC 60884-1&IEC 60884-2-5			
Clause	Requirement + Test	Result - Remark	Verdict

<b>4</b>	<b>General requirement</b>		P
	Accessories and surface-type mounting boxes shall be so designed and constructed so that in normal use their performance is reliable and without danger to the user or the surroundings within the meaning of this standard		P
	Compliance is checked by meeting all the relevant requirements and tests specified	All the relevant tests are carried out	P

<b>5</b>	<b>GENERAL NOTES ON TESTS</b>		P
5.1	Tests according to this standard are type tests or routine tests	Type tests	P
5.2	Unless otherwise specified, the specimens are tests as delivered and under normal conditions of use		P
5.3	The tests are carried out in the order of the clauses		P
	Tested at an ambient temperature between 15°C and 35°C	35°C	P
5.4	Three specimens are subjected to all the relevant tests		P
5.5	The specimens are submitted to all the relevant tests and the requirements are satisfied if all the tests are met	All samples and tests complied with relevant requirement	P
5.6	Routine tests are specified in annex A		N

<b>6</b>	<b>RATINGS</b>		P
6.1	Accessories should preferably be of a type and preferably have a voltage and current rating as shown in table 1	230VAC	P
6.2	In a cord extension set, the rated current of the portable socket-outlet shall not be higher and the rated voltage shall not be less than that of the plug	16A	P
6.3	Accessories should have a degree of protection IP20, IP40, IP44, IP54 or IP55	IP 20	P

<b>7</b>	<b>RATINGS</b>		P
7.1	Accessories classification		P
7.1.1	-According to the degree of protection due to the ingress of solid foreign objects	IP 20	P
7.1.2	-According to the degree of protection due to the ingress of water		P
7.1.3	-According to the provision for earthing	No such parts	P
7.1.4	-According to the method of connecting the cable	No such parts	P
7.1.5	-According to the type of terminals		P
7.2	Socket-outlets classification		P

## IEC 60884-1&amp;IEC 60884-2-5

Clause	Requirement + Test	Result - Remark	Verdict
7.2.1	-According to the degree of protection against electric shock	Normal protection	P
7.2.2	-According to the existence of shutters		P
7.2.3	-According to the method of application/mounting of the socket-outlet		P
7.2.4	-According to the method of installation		P
7.2.5	-According to the intended use		P
7.3	Plugs classification		P
	- Class 0, Class I, Class II	Class I	P

<b>8</b>	<b>MARKING</b>		P
8.1	Socketes marked with:		P
	- rated voltage (V) .....	230V	P
	- rated current (A) or rated load (VA or W) .....	16A	P
	- symbol for nature of supply .....	~	P
	- manufacturer's or responsible vendor's name, trade mark or identification mark .....		P
	- type reference .....		P
	- symbol for mini-gap construction (m) .....		N
	- symbol for micro-gap construction ( $\mu$ ) .....		N
	- symbol for semiconductor Socketing device (under consideration)		N
	- first IP characteristic numeral, if declared higher than 2, in which case the second characteristic numeral is also marked .....	IP 2X	P
	- second IP characteristic numeral, if declared higher than 0, in which case the first characteristic numeral is also marked .....	IP X0	P
8.2	When symbols are used, they shall comply with requirements		P
8.3	For fixed socket-outlets the complying marking shall be placed on the main part		P
8.4	For plugs and portable socket-outlets the marking shall be easily discernible when the accessory is wired and assembled		P
	Class II shall be not be marked with the symbol for class II construction		N
8.5	- marking of terminals for the neutral conductor (N)		P
	- marking of protect earthing terminals		P
	- marking not placed on removable parts		P
8.6	IP number for surface-type mounting boxes forming an integral part of socket-outlets		N
8.7	Special precautions, in instruction sheet		P

IEC 60884-1&IEC 60884-2-5			
Clause	Requirement + Test	Result - Remark	Verdict

8.8	Marking, durable and easily legible: 15 s water, 15 s hexane		P
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<b>9</b>	<b>CHECKING OF DIMENSIONS</b>		P
9.1	Accessories and boxes comply with Standard Sheet		P
9.2	No possible engage plug with different rated values or construction		P
9.3	Deviations from dimensions may be permitted		P

<b>10</b>	<b>PROTECTION AGAINST ELECTRIC SHOCK</b>		P
10.1	Socketes: live parts not accessible		P
10.2	Accessible parts, of insulating material		P
10.2.1	Covers or cover-plates protected by additional insulation by insulating linings or barriers adequately fixed and correctly designed		P
10.2.2	Earthing of metal covers or cover-plates, made while fixing covers or cover plates Connection shall be of low resistance $R < 0.05 \Omega$		N
10.3	Connection between pin and live socket contact no possible while any other pin is accessible		N
10.4	External parts of plugs or portable socket outlets made of insulating material		P
10.5	Live parts not accessible without plug, for shuttered socket-outlets shutter operate only with a plug		P
10.6	Earthing contacts: cannot deformed by insertion of a plug (test plug: 150 N for 1 min.)		P
10.7	Live parts not accessible for socket-outlet with increased protection (gauge fig. 4 - 1 N)		N

<b>11</b>	<b>PROVISION FOR EARTHING</b>		P
	Clause not applicable to SELV electronic Socketes		P
11.1	Accessible metal parts: provided with, or permanently and reliably connected to, an earthing terminal		P
11.2	Earthing terminals: with screw clamping or screwless terminals and comply with clause 12		P
	Capacity of earthing terminals of the same size as the corresponding terminals for the supply conductors		P

IEC 60884-1&IEC 60884-2-5			
Clause	Requirement + Test	Result - Remark	Verdict

11.3	Surface-type Socketes with an enclosure of insulating material, with IP > X0 and more than one cable inlet, are provided for the continuity of the earthing circuit with:		N
	- an internal fixed earthing terminal, or		N
	- adequate space for a floating terminal allowing the connection of an incoming and outgoing conductor		N
11.4	Connection between earthing terminal and accessible metal parts: of low resistance		N
	Test current equal to 1,5 In or 25 A (A) .....		—
	Resistance $\leq 0,05 \Omega$ ( $\Omega$ ) .....		N

<b>12</b>	<b>TERMINALS</b>		P
12.1	General		P
	Socketes provided with screw-type terminals or with screwless terminals .....		N
	Connecting capability of terminals of main circuit are in relation with the rated current of the HBES Socketes .....		N
	Connecting capability of terminals for circuits other than those of the main circuit .....		—
	Terminals for conductors < 0,5 mm <sup>2</sup> fulfil the requirements of EN 60998-1		N
	Clamping means of terminals: not serve to fix any other components		N
	All the test on terminals, with the exception of the test of 12.3 11, made after the test of 15.1		N
12.2	Terminals with screw clamping for external copper conductors		N
12.2.1	Socketes provided with terminals which allows the proper connection of copper conductors as shows in table 2		N
	Rated current (A) .....		—
	Type of conductor (rigid / flexible) .....		—
	Smallest / largest cross-sectional area (mm <sup>2</sup> ) .....		—
	Diameter of largest conductor (mm) .....		—
	Figure of terminal .....	1 / 2 / 3 / 4 / 5	—
	Minimum diameter D (minimum dimensions) of conductor space: required (mm); measured (mm) ..		N
12.2.2	Terminals allow the conductor to be connected without special preparation		N
12.2.3	Terminals have adequate mechanical strength		N
	Screws and nut for clamping the conductors have metric ISO thread or a comparable thread		N
	Screws not of soft metal such as zinc or aluminium		N

IEC 60884-1&IEC 60884-2-5			
Clause	Requirement + Test	Result - Remark	Verdict
12.2.4	Terminals resistant to corrosion		N
12.2.5	Screw-type terminals clamp the conductor(s) without undue damage	See appended table 12.2.5	N
	During the test: conductor not slip out, no break near clamping unit and no damage		N
12.2.6	Terminals clamp the conductor reliably between metal surfaces	See appended table 12.2.6	N
	During the test: conductor not move noticeably		N
12.2.7	Terminals designed or placed that the conductor cannot slip out while the clamping screws or nuts are tightened	See appended table 12.2.7	N
	After the test: no wire of the conductor escaped outside the clamping unit thus reducing creepage distances and clearances to values lower than those indicated in clause 23		N
12.2.8	Terminals not work loose from their fixing to the Socket		P
	Torque test:		N
	- rated current (A) .....	16A	—
	- solid rigid copper conductor of the largest cross-sectional area (mm <sup>2</sup> ) (table 2) .....		—
	- torque (Nm) (table 3 or appropriate figures 1, 2, 3, 4) .....		—
	Screws and nuts tightened and loosened 5 times. During the test: terminals not work loose and show no damage		N
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
12.2.10	Earthing terminals: no risk of corrosion		N
	Body of brass or other metal no less resistant to corrosion		N
	If the body is a part of a frame or enclosure of aluminium alloy, precautions are taken to avoid the risk of corrosion		N
12.2.11	Pillar terminals: distance g no less than the value specified in figure 1: required (mm); measured (mm) .....		N
	Mantle terminals: distance g no less than the value specified in figure 5: required (mm); measured (mm) .....		N
12.2.12	Lug terminals:		N
	- used only for Socketes having rated current $\geq 40$ A		N
	- fitted with spring washers or equally effective locking means		N



IEC 60884-1&IEC 60884-2-5			
Clause	Requirement + Test	Result - Remark	Verdict
12.3	Screwless terminals for external copper conductors		N
12.3.1	Screwless terminals of the type suitable for:		N
	- for rigid copper conductors only, or		N
	- for both rigid and flexible copper conductors (tests carried out with rigid and then repeated with flexible conductors)		N
12.3.2	Screwless terminals provided with clamping units which allow the proper connection of rigid or of rigid and flexible conductors having nominal cross-sectional areas as shown in table 7		N
	Rated current (A) .....		—
	Type of conductor (rigid / flexible) .....		—
	Smallest / largest cross-sectional area (mm <sup>2</sup> ) .....		—
	Diameter of largest rigid conductor (mm) .....		—
	Diameter of largest flexible conductor (mm) .....		—
12.3.3	Screwless terminals allow the conductor to be connected without special preparation		N
12.3.4	Parts of screwless terminals intended for carrying current of materials as specified in 22.5		N
12.3.5	Screwless terminals clamp specified conductors with sufficient contact pressure without undue damage to the conductor		N
	Conductor clamped between metal surfaces		N
12.3.6	It is clear how the connection and disconnection of the conductors is to be made		N
	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
	It is not possible to confuse the opening for the use of a tool with the opening intended for the conductor		N
12.3.7	Screwless terminals intended for the interconnection of two or more conductors:		N
	- during insertion, operation of clamping means of one of the conductors is independent of operation of that for the other conductor(s);		N
	- during disconnection, conductors can be disconnected either at the same time or separately;		N
	- each conductor introduced in a separate clamping unit.		N
	It is possible clamp securely any number of conductors up to the maximum as designed. Number of conductors; Nominal cross-sectional area (mm <sup>2</sup> ) .....		N
12.3.8	Screwless terminals: adequate insertion obvious and over-insertion prevented		N

IEC 60884-1&IEC 60884-2-5			
Clause	Requirement + Test	Result - Remark	Verdict

	Screwless terminals of Socketes: undue insertion of the conductor prevented by a stop if further insertion is liable to reduce creepage distances and/or clearances required in table 20 or to influence the mechanism		N
12.3.9	Screwless terminals properly fixed to the Socket		N
	Not work loose when conductors are connected or disconnected		N
	Self-hardening resins used to fix terminals not subject to mechanical stress		
12.3.10	Screwless terminals withstand mechanical stresses occurring in normal use	See appended table 12.3.10	N
	During application of the pull conductor not come out of the terminal		N
	Test with apparatus shown in figure 10	See appended table 12.3.10	N
	During the test conductors not move noticeably in the clamping unit		N
	After these tests: neither terminals nor clamping means have worked loose and conductors show no deterioration		N
12.3.11	Screwless terminals withstand electrical and thermal stresses occurring in normal use	See appended table 12.3.11	N
	After the test: inspection show no changes		N
	Repetition of test according to 12.3.10: screwless terminals withstand mechanical stresses occurring in normal use	See appended table 12.3.11	N
	During application of the pull conductor not come out of the terminal		N
	Test with apparatus shown in figure 10	See appended table 12.3.11	N
	During the test conductors not move noticeably in the clamping unit		N
	After these tests: neither terminals nor clamping means have worked loose and conductors show no deterioration		N
12.3.12	Screwless terminals: connected rigid solid conductor remains clamped, even when deflected during normal installation	See appended table 12.3.12	N

<b>13</b>	<b>Construction of fixed socket-outlets</b>		N
13.1	Insulating lining, barriers and like: adequate mechanical strength and secured in a reliable manner		N
13.2	Socketes constructed so as to permit:		N
	- easy introduction and connection of the conductors in the terminals;		N

IEC 60884-1&IEC 60884-2-5			
Clause	Requirement + Test	Result - Remark	Verdict
	- correct positioning of the conductors		N
	- easy fixing of the Socket to a wall or in a box		N
	- adequate space between underside of the base and the surface on which the base is mounted or between the sides of the base and the enclosure (cover or box)		N
	Surface-type Sockets: fixing means do not damage insulation of the cable		N
	Sockets classified as design A: permit easy positioning and removal of the cover or cover plate, without displacing the conductors		N
13.3	Covers, cover-plates and actuating members or parts of them intended to ensure protection against electric shock:		N
	- held in place at two or more points by effective fixings		N
	- fixed by means of a single fixing, for example by a screw, provided that they are located by another means (for example by a shoulder)		N
	Fixings of covers, cover-plates or actuating members of Sockets of design A serves to fix the base: there is means to maintain the base in position, even after removal of the covers, cover-plates or actuating members		N
13.3.1	Covers, cover plates or actuating members whose fixing is of the screw-type:		N
	Compliance checked by inspection only		N
13.3.2	Covers, cover plates or actuating members whose fixing is not dependent on screws and whose removal is obtained by applying a force in a direction approximately perpendicular to the mounting/supporting surface:		N
	Compliance checked, when their removal may give access, with the standard test finger:		N
	to live parts: by the test of 20.4 (verification of the non-removal and the removal)		N
	to non-earthed metal parts separated from live parts by creepage distances and clearances according to table 20: by the test of 20.5 (verification of the non-removal and the removal)		N
	only to insulating parts, or earthed metal parts, or metal parts separated from live parts by creepage distances and clearances twice those according to table 20, or live parts of SELV: by the test of 20.6 (verification of the non-removal and the removal)		N
13.3.3	Covers, cover-plates or actuating members whose fixing is not dependent on screws and whose removal is obtained by using a tool, in accordance with the manufacturer's information given in an instruction sheet or in a catalogue:		N
	Compliance checked, when their removal may give access, with the standard test finger:		N

IEC 60884-1&IEC 60884-2-5			
Clause	Requirement + Test	Result - Remark	Verdict
	to live parts: by the test of 20.4 (verification of the non-removal only)		N
	to non-earthed metal parts separated from live parts by creepage distances and clearances according to table 20: by the test of 20.5 (verification of the non-removal only)		N
	only to insulating parts, or earthed metal parts, or metal parts separated from live parts by creepage distances and clearances twice those according to table 20, or live parts of SELV: by the test of 20.6 (verification of the non-removal only)		N
13.4	Socketes: no free openings in their enclosures according to their IP classification		N
	Free openings according to 10.102 and 10.103 are accepted		N
13.5	Knobs of electronic Socketes are securely fixed in a reliable manner		N
	knobs used to indicate the position of Socketes: not possible to fix them in a wrong position, if this may result in a hazard		N
	Pull and push tests:		N
	- axial pull is likely to be applied: 30 N for 1 min		N
	- axial pull is unlikely to be applied: 15 N for 1 min		N
	- axial push: 30 N for 1 min		N
	During and after these tests:		N
	- the electronic Socket shows no damage		N
	- an actuating member have not moved so as to impair compliance with this standard		N
13.6	Screws or other means for mounting the Socket on a surface or in a box or enclosure: easily accessible from the front.		P
	Fixing means not serve any other fixing purpose		N
13.7	Combinations of Socketes, or of Socketes and socket-outlets, comprising separate bases: correct position of each base ensured		N
	Fixing of each base independent of the fixing of the combination to the mounting surface		N
13.8	Accessories combined with Socketes: comply with their standard		N
13.9	Surface-type Socketes with IP > 20 are in according to their classification when fitted with conduits or with sheathed cables		N
	Surface-type Socketes with IPX4 or IPX5 have provisions for opening a drain hole		N

IEC 60884-1&IEC 60884-2-5			
Clause	Requirement + Test	Result - Remark	Verdict
	Socketes provided with a drain hole: it is not less than 5 mm in diameter, or 20 mm <sup>2</sup> in area with a width and a length not less than 3 mm ..... : Ø mm / mm <sup>2</sup>		N
	Drain hole: effective		N
	Lid springs (if any): of corrosion resistant material (bronze or stainless steel)		N
13.10	Socketes to be installed in a box: conductor ends can be prepared after the box is mounted in position, but before the Socket is fitted in the box		N
	Base have adequate stability when mounted in the box		N
13.11	Surface-type Socketes with IP > X0, pattern numbers 1, 5 and 6, with more than one inlet opening, provided with:		N
	- fixed additional terminal complying with the requirements of clause 12, or		N
	- adequate space for a floating terminal		N
13.12	Inlet openings: allow the introduction of the conduit or the sheath of the cable		N
	Surface-type Socketes: intended conduit or protective covering can enter at least 1 mm into the enclosure		N
	Inlet openings for conduit entries of surface-type Socketes: capable of accepting conduit sizes of 16, 20, 25 or 32 or a combination of at least two of these sizes not excluding two of the same size ..... :		N
	Inlet openings for cable entries of surface-type Socketes: capable of accepting cables having the dimensions specified in table 12 or be as specified by the manufacturer: rated current (A); limits of external diameter of cables min/max (mm) ..... :		N
13.13	Surface-type Socketes: provision for back entry (if are intended)		N
13.14	Membranes or the like (if provided): replaceable		N
13.15	Requirements for membranes in inlet openings		N
13.15.1	Membranes, lenses and the like reliably fixed and not displaced by the mechanical and thermal stresses occurring in normal use		N
	Test on electronic Socketes fitted with membranes, lenses and the like subjected to the ageing treatment specified in 15.1:		N
	Electronic Socketes placed at 40 °C ± 2 °C for 2 h; force of 30 N applied for 5 s by means of the tip of test probe 11 of IEC 61032. During these tests: membranes, lenses and the like are not deformed, live parts not accessible		N

IEC 60884-1&IEC 60884-2-5			
Clause	Requirement + Test	Result - Remark	Verdict
	Membranes, lenses and the like likely to be subjected to an axial pull: axial pull of 30 N applied for 5 s. During this test: membranes, lenses and the like not come out		N
	Test repeated on membranes, lenses and the like not subjected to any treatment		N
13.15.2	Membranes in inlet openings: introduction of the cables into the accessory permitted when the ambient temperature is low		N
	Test on membranes not subjected to the ageing treatment specified in 15.1 and fitted with the Socketes		N
	Socketes kept at -5 °C for 2 h: possibility to introduce cables of the heaviest type through the membranes		N
	After the test: no harmful deformation, cracks or similar damage		N
13.16	Flexible cable outlet Socketes: flexible cable (60245 IEC 66 or 60227 IEC 52/53, or as specified by the manufacturer) may enter the Socket through a suitable hole, groove or gland .....		N
	Maximum dimension of flexible cable having conductors specified in table 12a accepted by the entry:		N
	- rated current (A) .....		—
	- cross-sectional area (mm <sup>2</sup> ) (min 1,5 mm <sup>2</sup> ) .....		—
	Entry shaped to prevent damage to the flexible cable		N
	Socketes intended to be connected via a flexible cable to an electronic extension unit having a rated current equal to the rated current of the electronic Socket: flexible cable complies with 60245 IEC 66 or 60227 IEC 53 with a minimum cross sectional area of 0,75 mm <sup>2</sup> .....		N
	Socketes intended to be connected via a flexible cable to an electronic extension unit having a rated current lower than the rated current of the electronic Socket: flexible cable complies with the requirements of 13.103 .....		N
	Socketes with flexible cable outlet: provided with cable anchorage		N
	Cable anchorage: contains the sheath, of insulating material or provided with an insulating lining fixed to the metal parts		N
	Cable anchorage: anchor the flexible cable securely to the Socket		N
	Cable anchorage cannot be released from the outside		N
	Use of a special purpose tool not required		N

IEC 60884-1&IEC 60884-2-5			
Clause	Requirement + Test	Result - Remark	Verdict
	Screws: not serve to fix any other component, unless		N
	- Socket is rendered manifestly incomplete if component omitted or replaced in an incorrect position, or		N
	- component cannot be removed without further use of a tool		N
	Pull test (30 N, 25 times): cable 60227 IEC 53, cross-sectional area 1,5 mm <sup>2</sup> ; torque (Nm) (2/3 table 3) .....		N
	Torque test: torque 0,15 Nm for 1 min, cable not displaced > 2 mm .....		N
	Pull test (60 N, 25 times): cable 60245 IEC 66, diameter (mm) of cable; torque (Nm) (2/3 table 3) :		N
	Torque test: torque 0,35 Nm for 1 min, cable not displaced > 2 mm .....		N
	Test voltage of 2000 V a.c. applied for 1 min between the conductors and the cord anchorage:		N
	During the test: insulation of flexible cable not damaged (no breakdown or flashover)		N
	Flexible cable outlet Socketes:		N
	- clear how relief from strain and prevention of twisting is intended to be effected		N
	- cord anchorage, or at least part of it, integral with or permanently fixed to one of the component parts of the Socket		N
	- makeshift methods not used		N
	- cord anchorages suitable for different type of flexible cables		N
	Rewirable Socketes with earthing connection: designed with ample space for slack of the earthing conductor		N
13.101	Automatic protective devices incorporated in electronic Socketes for lamp circuits have at least micro-disconnection		N
	Cut-outs in electronic Socketes for motor speed control circuits: non-self-resetting		N
13.102	Electronic Socketes for the control of the voltage of iron core transformers for extra low-voltage incandescent lamps (for example, halogen): maximum tolerance of the phase-control angle between the positive and negative half-wave of $\pm 2^\circ$ .....		N

IEC 60884-1&IEC 60884-2-5			
Clause	Requirement + Test	Result - Remark	Verdict

13.103	A cable is considered as a bare conductor if the insulation is not at least electrically equivalent to that of flexible cable according IEC standard or the insulation does not comply with the electric strength test carried out between the conductor and a metallic foil wrapped around the cable under the conditions specified in 16.2	These requirements are not applicable to flexible cables connected to electronic extension units supplied at SELV	N
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14	<b>CONSTRUCTION OF PLUGS AND PORTABLE SOCKET-OUTLETS</b>		P
14.1	Non rewirable plugs or socket-outlets: - not possible separated flexible cable - not possible opened by hand or by tool		P
14.2	Pins: adequate mechanical strength (Pins not solid: 100 N for 1 min. During the test: reduction of dimension < 0,15 mm after the test: dimension of pin < 0,06 mm Test as specified in clause 21		P
14.3	Pins: locked against rotation; not removable without dismantling the plug; adequately fixed in the body Not possible replace earthing or neutral pins or contacts in an incorrect position		P
14.4	Earthing and neutral contacts: locked against rotation and removable only by tool		P
14.5	Socket contacts: sufficient resiliency		P
14.6	Pins and socket contacts: resistant to corrosion and abrasion		N
14.7	Enclosures of rewirable accessories: completely enclose terminals and ends of flexible cable Construction, no risk that: - damage to conductors insulation; - core pressed against accessible metal parts; - core of earthing conductor pressed against live parts		N
14.8	Screws or nuts: no connection between live parts and earthing terminal when fall out of position		P
14.9	Earthing contact: ample space for slack of the earthing conductor		P
14.10	Terminals located or shielded: free wire 6 mm not touch accessible metal part or emerge from to enclosure		N
14.11	Cord anchorage: - clear how to use; - at least one part fixed; - makeshift methods not used; - suitable for different type of flexible cables; - of insulating material; - metal parts, insulated from earthing circuit		N
14.12	Insulating parts: reliably fixed, not possible dismantle without a tool		P
14.13	Bushings: not removable from the outside		N
14.14	Screws: captive		P
14.15	Engagement face of plugs: no projection		P



IEC 60884-1&IEC 60884-2-5			
Clause	Requirement + Test	Result - Remark	Verdict
14.16	Portable socket-outlets: engagement not prevented		P
14.17	IPX4 or IPX5 accessories: - provided with gland; - pins: adequately enclosed when fitted; - socket-outlets: enclosed without a plug - lid springs: resistant material to corrosion		N
14.18	Suspension means not allow access to live parts; No free openings		N
14.19	Circuit breakers or other protective devices: comply with the relevant standard (if any)		N
14.20	Lampholders not allowed with portable accessories		N
14.21	Plugs for class II: - non rewirable; - cord set with a connector for class II - cord extension set with portable socket-outlet for class II		N
14.22	Switches and fuses: comply with the relevant IEC Standard		N
14.23	Plug integral part of equipment: not cause overheating or undue strain Plugs > 16 A 250 V not integral part of equipment		N
14.24	Easy withdrawn by hand from socket-outlet plug withdrawn without pull on the flexible cable		N
14.25	Membranes in inlet opening: clause 13.23 and 13.24	Not applicable	N

<b>15</b>	<b>INTERLOCKED SOCKET-OUTLETS</b>		N
	Insertion and withdrawal of plug not allowed while socket contacts are live		N

<b>16</b>	<b>RESISTANCE TO AGEING, PROTECTION PROVIDED BY ENCLOSURES OF SocketES, AND RESISTANCE TO HUMIDITY</b>		<b>P</b>
16.1	Resistance to ageing		P
	Socketes and boxes placed for 7 days (168 h) in a heating cabinet at 70 °C ± 2 °C	168h, 70°C	P
	- no crack visible after test with normal or corrected vision without additional magnification	no	P
	- no sticky or greasy material as a result of heat	no	P
	- no trace of cloth (forefinger pressed with 5 N)	no	P
	- no other damage as a result of heat	no	P
16.2	Protection provided by enclosures of Socketes		P
16.2.1	Protection against access to hazardous parts and against harmful effects due to ingress of solid foreign objects		P

IEC 60884-1&IEC 60884-2-5			
Clause	Requirement + Test	Result - Remark	Verdict
	Enclosure of the Socket provides a degree of protection against access to hazardous parts and against harmful effects due to ingress of solid foreign objects in accordance with the IP classification of the Socket		P
	Glands: torque (Nm) (2/3 of torque applied in 20.3) .....		—
	Screws of the enclosure: torque (Nm) (2/3 table 3) .....		—
16.2.1.1	Protection against access to hazardous parts		P
	Appropriate test according to IEC 60529 .....	IP 20	P
16.2.1.2	Protection against harmful effects due to ingress of solid foreign objects		P
	Appropriate test according to IEC 60529 .....	IP 20	P
	Dust not penetrate in quantity to interfere with satisfactory operation or to impair safety		P
16.2.2	Protection against harmful effects due to ingress of water		P
	Enclosure of Socketes provide a degree of protection against harmful effects due to ingress of water in accordance with their IP classification		P
	Appropriate test according to IEC 60529 .....	IP X0	P
	Flush-type and semi-flush-type Socketes fixed:		N
	- in a test wall using an appropriate box in accordance with the manufacturer's instructions		N
	- in a test wall according to figure 27		N
	Screws of the enclosure: torque (Nm) (2/3 table 3) .....		—
	Glands: torque (Nm) (2/3 of torque applied in table 19) .....		—
	Specimens withstand an electric strength test specified in 16.2 which is started within 5 min of completion of the test		N
16.3	Resistance to humidity		P
	Socketes proof against humidity which may occur in normal use		P
	Compliance checked by a humidity treatment carried out in a humidity cabinet containing air with relative humidity maintained between 91 % and 95 %. Specimens kept in the cabinet for:		P
	- 2 days (48 h) for Socketes with IPX0		N
	- 7 days (168 h) for Socketes with IP>X0	168h, 95%	P
	After this treatment: specimens show no damage		P

IEC 60884-1&IEC 60884-2-5			
Clause	Requirement + Test	Result - Remark	Verdict

<b>17</b>	<b>INSULATION RESISTANCE AND ELECTRIC STRENGTH</b>		P
17.1	The insulation resistance measured 1 min after application of 500 V d.c.	See appended table 17.1	P
17.2	Electric strength: a.c. test voltage applied for 1 min	See appended table 17.2	P

<b>18</b>	<b>OPERATION OF EARTHING CONTACTS</b>		P
	Earthing contacts: adequate contact pressure tests clause 19 and 21		P

<b>19</b>	<b>TEMPERATURE RISE</b>		P
19.1	Socketes so constructed that the temperature rise in normal use is not excessive	See appended table 19	P
	No oxidation or any other deterioration of contacts, if any		P
	Material and components of electronic Socket are not adversely effected by the temperature rise in normal use		P
	During the test:		P
	- electronic Socket state not change		N
	- fuses and other protective devices not operate		N
	- permissible temperature rises determined in table 102, column concerning clause 17, not exceeded	See appended table 19	P
	After the test, electronic Socket is in operating condition		P
	Sealing compounds, if any, have not flowed	No such compounds.	N

<b>20</b>	<b>MAKING AND BREAKING CAPACITY</b>		P
	Electronic Socketes have adequate making and breaking capacity		P
	Test carried out only on electronic Socketes provided with mechanically or electromechanically operated contact mechanisms		P
	Contact mechanisms have adequate making and breaking capacity		P
	Test made on three new specimens of the complete contact mechanism		P
	Model/type reference .....	:	—
	Pattern number .....	:	—
	Rated current (A) / Rated load (W or VA) .....	16A	—
	Rated voltage (V) .....	230V~	—
	Test for electronics Socketes for the control of:		N

IEC 60884-1&IEC 60884-2-5			
Clause	Requirement + Test	Result - Remark	Verdict
	- fluorescent lamp loads, as specified in 18.1 of part 1;		N
	- motor speed control circuits, as specified in 18.1 of part 1 and, additionally, in 18.101;		N
	- voltage of iron core transformers for extra low-voltage incandescent lamps, as specified in 18.1, 18.2 of part 1 and, additionally, in 18.102;		N
	- voltage of electronic step-down converters for extra low-voltage incandescent lamps, as specified in 18.2 of part 1;		N
	- other types of load, as specified in 18.1 and 18.2 of part 1.		N
	Rate of operation (operation per minute) .....		—
	Electronic Socketes whose cycle of operation limited by their application: rate of operation specified by the manufacturer (operation per minute) .....		—
	Electronic Socketes fitted with conductors having nominal cross-sectional area as for the test of clause 17 (mm <sup>2</sup> ) .....		—
20.1	Test with $\cos \varphi$ 0,3 alternating current		N
	- test voltage (1,1 V <sub>n</sub> ) (V) .....		—
	- test current (1,25 I <sub>n</sub> ) ( $\cos \varphi$ 0,3) (A) .....		—
	- 200 operations; rate (operations per minute) .....		—
	- electronic Socketes whose rate of operation is limited by their application (for example, heat and light sensors): electronic Socket is set to the shortest cycle time possible and re-activated at the end of each cycle within a time of (2 ± 0,5) s .....		—
	- samples number .....		—
	During the test: no sustained arcing		N
	After the test: specimens show no damage		N
20.2	Test with tungsten filament lamps load (Socketes with I <sub>n</sub> ≤ 16 A / V <sub>n</sub> ≤ 250 V and Socketes of pattern numbers 3 and 03 with V <sub>n</sub> > 250 V)		N
	- test voltage (V <sub>n</sub> ) (V) .....		—
	- test current (≥ 1,2 I <sub>n</sub> ) (A) .....		—
	- number of 200 W tungsten filament lamps .....		—
	- 200 operations; rate (operations per minute) .....		—
	- samples number .....		—
	During the test: no sustained arcing nor welding of the contacts		N
	After the test: specimens show no damage		N

IEC 60884-1&IEC 60884-2-5			
Clause	Requirement + Test	Result - Remark	Verdict
20.101	Additional test for electronic Socketes for the control of motor speed control circuits:		N
	Rated current $I_n$ (A) of electronic Socket ( $\cos\phi$ 0.6) .....		—
	Making: 50 cycles with: test current: $9 I_n$ (A); test voltage: $V_n$ (V); $\cos\phi$ $0.8 \pm 0.05$ .....		N
	Breaking: 50 cycles with: test current: $6 I_n$ (A); test voltage: $V_n$ (V); $\cos\phi$ $0.6 \pm 0.05$ .....		N
	During the test: no sustained arcing		N
	After the test: specimens show no damage		N
20.102	Additional test for electronic Socketes for the control of the voltage of iron core transformers for extra low-voltage incandescent lamps (for example, halogen):		N
	- test voltage ( $V_n$ ) (V) .....		—
	- 50 making operations in a test circuit adjusted to a test current 10 times $I_n$ (A) for one half-cycle of the power supply frequency .....		—
	During the test: no sustained arcing		N
	After the test: specimens show no damage		N
<b>21</b>	<b>NORMAL OPERATION</b>		P
	Electronic Socketes withstand the mechanical, electrical and thermal stresses occurring in normal use		P
	Electronic Socketes whose cycle of operation is limited by their application: rate of operation specified by the manufacturer (operation per minute) .....		—
<b>22</b>	<b>FORCE NECESSARY TO WITHDRAW THE PLUG</b>		P
	Maximum withdrawal force: Force: _____ N Plug not remain	32.3N	P
	Minimum withdrawal force: Force (single pin): _____ N Gauge not fall from contact within 30 s	4.0N	P
<b>23</b>	<b>FLEXIBLE CABLES AND THEIR CONNECTION</b>		N
<b>24</b>	<b>MECHANICAL STRENGTH</b>		P
	Socketes, boxes and screwed glands have adequate mechanical strength		P
24.1	All types of Socketes and their dedicated boxes, where applicable: impact test (9 blows)		P
	After the test: no damage, live parts no become accessible		P

IEC 60884-1&IEC 60884-2-5			
Clause	Requirement + Test	Result - Remark	Verdict
24.2	Bases of surface-type Socketes first fixed to a cylinder of rigid steel sheet of radius equal to 4,5 times the distance between fixing holes (mm) .....		N
	Bases then fixed to a flat steel sheet		N
	Torque applied to fixing screws (Nm) .....		—
	During and after the test: bases show no damage		N
24.3	Screwed glands of Socketes other than ordinary: torque test		N
	- diameter of cylindrical metal test rod (mm) .....		—
	- type of material .....		—
	- torque for 1 min (table 19) (Nm) .....		—
	After the test: no damage of glands and enclosure of the specimens		N
24.4	Force necessary for covers, cover-plates or actuating members to come off or not to come off (accessibility with the test finger to live parts)		N
24.4.1	Verification of the non-removal of covers, cover-plates or actuating member		N
	Force applied for 1 min in direction perpendicular to the mounting surface .....		—
	Covers, cover-plates or actuating members not come off		N
	Test repeated on new specimens with a sheet of hard material, 1 mm ± 0,1 mm thick, fitted around the supporting frame (fig. 19)		N
	Covers, cover-plates or actuating members not come off		N
	After the test: no damage		N
24.4.2	Verification of the removal of covers, cover-plates or actuating members		N
	Force not exceeding 120 N applied 10 times in direction perpendicular to the mounting / supporting surface: covers, cover-plates or actuating members come off		N
	Test repeated on new specimens with a sheet of hard material, 1 mm ± 0,1 mm thick, fitted around the supporting frame (fig. 19)		N
	Covers, cover-plates or actuating members come off		N
	After the test: no damage		N
24.5	Force necessary for covers, cover-plates or actuating members to come off or not to come off (accessibility with the test finger to non-earthed metal parts separated from live parts by creepage distances and clearances according to table 20)		N
24.4.1	Verification of the non-removal of covers, cover-plates or actuating members		P
	Force applied for 1 min in direction perpendicular to the mounting surface .....		—
	Covers or cover-plates not come off		P

IEC 60884-1&IEC 60884-2-5			
Clause	Requirement + Test	Result - Remark	Verdict
	Test repeated on new specimens with a sheet of hard material, 1 mm ± 0,1 mm thick, fitted around the supporting frame (fig. 19)		N
	Covers, cover-plates or actuating members not come off		N
	After the test: no damage		N
24.4.2	Verification of the removal of covers, cover-plates or actuating members		N
	Force not exceeding 120 N applied 10 times in direction perpendicular to the mounting / supporting surface: covers, cover-plates or actuating members come off		N
	Test repeated on new specimens with a sheet of hard material, 1 mm ± 0,1 mm thick, fitted around the supporting frame (fig. 19)		N
	Covers, cover-plates or actuating members come off		N
	After the test: no damage		N
24.6	Force necessary for covers, cover-plates or actuating members to come off or not to come off (accessibility to insulating parts, earthed metal parts, live parts of SELV ≤ 25 V a.c. or metal parts separated from live parts by creepage distances twice those according to table 20)		P
24.4.1	Verification of the non-removal of covers, cover-plates or actuating members		N
	Force 10 N applied for 1 min in direction perpendicular to the mounting surface: covers, cover-plates or actuating members not come off		N
	Test repeated on new specimens with a sheet of hard material, 1 mm ± 0,1 mm thick, fitted around the supporting frame (fig. 19)		N
	Covers, cover-plates or actuating members not come off		N
	After the test: no damage		N
24.4.2	Verification of the removal of covers, cover-plates or actuating members		N
	Force not exceeding 120 N applied 10 times in direction perpendicular to the mounting / supporting surface: covers, cover-plates or actuating members come off		N
	Test repeated on new specimens with a sheet of hard material, 1 mm ± 0,1 mm thick, fitted around the supporting frame (fig. 19)		N
	Covers, cover-plates or actuating members come off		N
	After the test: no damage		N
24.7	Test with gauge of figure 20 applied according to figure 21 for verification of the outline of covers, cover-plates or actuating members: distances between face C of gauge and outline of side under test, not decrease ..... : complying		—

IEC 60884-1&IEC 60884-2-5			
Clause	Requirement + Test	Result - Remark	Verdict

24.8	Test with gauge according to figure 23 applied as shown in figure 24 (1 N): gauge not enter more than 1mm .....	complying	—
24.9	Operating members of cord-operated Socket have adequate strength		N
	Pull test: pull 100 N for 1 min (normal use); pull of 50 N for 1 min (unfavourable direction). After the test:		N
	- Socket show no damage		N
	- operating member not broken and cord-operated Socket still operate		N

<b>25</b>	<b>RESISTANCE TO HEAT</b>		P
25.1	Socketes kept for 1 h in a heating cabinet at a temperature of 100 °C ± 2 °C		P
	During the test: no change impairing their further use and sealing compound, if any, not flow		P
	After the test: no access to live parts, markings still legible		P
25.2	Parts of insulating material necessary to retain current-carrying parts and parts of the earthing circuit in position: ball-pressure test (1 h, 125 °C)		P
25.3	Parts of insulating material not necessary to retain current-carrying parts and parts of the earthing circuit in position, even though in contact with them: ball-pressure test (1 h)		P

<b>26</b>	<b>SCREWS, CURRENT-CARRYING PARTS AND CONNECTIONS</b>		P
26.1	Connections withstand mechanical stresses		N
	Thread-forming or thread-cutting screws used only if supplied together with the piece in which they are intended to be inserted		N
	Screws and nuts which transmit contact pressure: in engagement with a metal thread		N
	Threaded part torque test	See appended table 22.1	N
26.2	Screws in engagement with a thread of insulating material: correct introduction into the screw hole or nut ensured		N
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		N
26.4	Screws and rivets locked against loosening or turning		N



IEC 60884-1&IEC 60884-2-5			
Clause	Requirement + Test	Result - Remark	Verdict

26.5	Current-carrying parts of metal having mechanical strength, electrical conductivity and resistance to corrosion adequate:		P
	- copper;		P
	- alloy with at least 58 % copper for parts made from cold-rolled sheet or with at least 50 % copper for other parts;	>58%	P
	- stainless steel with at least 13 % chromium and not more than 0,12 % carbon		N
	- steel with electroplated coating of zinc (ISO 2081): service condition ISO no. (1/2/3); IP (X0/X4/X5); thickness (µm) .....		P
	- steel with electroplated coating of nickel and chromium (ISO 1456): service condition ISO no. (2/3/4); IP (X0/X4/X5); thickness (µm) .....		N
	- steel with electroplated coating of tin (ISO 2093): service condition ISO no. (2/3/4); IP (X0/X4/X5); thickness (µm) .....		N
	Current-carrying parts subjected to mechanical wear: not of steel with electroplated coating		N
	Metals having a great difference of electrochemical potential: not used in contact with each other		N
26.6	Contacts subjected to sliding action: of metal resistant to corrosion		N
26.7	Thread-forming screws and thread-cutting screws not used for the connection of current-carrying parts		N
	Thread-forming screws and thread-cutting screws used to provide earthing continuity: not necessary to disturb the connection and at least two screws are used for each connection		N

<b>27</b>	<b>CREEPAGE DISTANCES, CLEARANCES AND DISTANCES THROUGH SEALING COMPOUND</b>		P
	Values of items 1, 2, 6 and 7 of table 20 applied to terminals for external wiring and not applied to other live parts which are protected by a directly associated fuse with adequate breaking capacity or other current-limiting means, under the provision that the requirements of 101 are fulfilled		P
	Electronic Sockets without directly associated fuse or other current-limiting means: comply with table 20		P
27.1	Creepage distances, clearances and distances through sealing compound no less than the values shown in table 20	See appended table 23.1	P
27.2	Insulating compound: not protrude above the edge of the cavity in which it is contained		N
27.3	Ordinary surface-type Sockets: not have bare current-carrying strips at the back		N

IEC 60884-1&IEC 60884-2-5			
Clause	Requirement + Test	Result - Remark	Verdict

	Protective separation of the supply for the SELV/PELV circuit is at least as good as for safety transformers in accordance with EN 61558-2-6 (HD 384.4.41 S2:1996)		N
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<b>28</b>	<b>RESISTANCE OF INSULATING MATERIAL TO ABNORMAL HEAT, TO FIRE AND TO TRACKING</b>		P
28.1	Parts of insulating material which might be exposed to thermal stresses due to electric effects and the deterioration of which might impair the safety are not unduly affected by abnormal heat and fire		P
28.1.1	Glow-wire test according to IEC 60695-2-1	See appended table	P
28.2	Parts of insulating material retaining live parts in position of Socketes with IP>X0: of material resistant to tracking		P
	Tracking test with solution A of IEC 60112		P

<b>29</b>	<b>RESISTANCE TO RUSTING</b>		P
	Ferrous parts protected against rusting		P
	Test: 10 min in carbontetrachloride, trichloroethane or equivalent degreasing agent, 10 min 10 % solution of ammonium chloride, 10 min in a box with air saturated with moisture and 10 min at 100 °C ± 5 °C:		P
	No signs of rust		P

<b>30</b>	<b>ADDITIONAL TESTS ON PINS PROVIDED WITH INSULATING SLEEVES</b>		N
30.1	Pressure test at high temperature: 200 °C for 2 h force: 2,5 N Thickness: _____ mm - After the test: ≥ 50% ____ mm		N
30.2	Static damp heat test (IEC 68-2-30): two cycles - After the test: - insulation resistance and electric strength clause 17; and - abrasion test clause 24.7		N
30.3	Test a low temperature: - 15 °C for 24 h After the test: - insulation resistance and electric strength clause 17; and - abrasion test clause 24.7		N
30.4	Impact test a low temperature: - 15 °C for 24 h 100 g - 100 mm 4 impacts - No cracks		N

IEC 60884-1&IEC 60884-2-5			
Clause	Requirement + Test	Result - Remark	Verdict

**Differences for IEC 60884-2-5:**

14	CONSTRUCTION OF PORTABLE ACCESSORIES		P
14.1	Non-rewirable intermediate adaptors:		P
	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		P
	Test for pins not solid (made after clause 21): force of 100 N exerted on the pin for 1 min by means of a steel rod $\varnothing$ 4,8 mm		
	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		P
	- not removable without dismantling the adaptor		P
	- adequately fixed in the body of the adaptor when the plug is wired and assembled as in normal use		P
	Earthing or neutral pins or contacts of adaptors: not possible to replace in an incorrect position		P
14.4	Earthing contacts and neutral contacts of adaptors:		
	- locked against rotation		P
	- removable only with the aid of a tool, after dismantling the adaptor		P
14.5	Socket-contact assemblies: sufficient resiliency		P
14.6	Pins and socket-contacts: resistant to corrosion and abrasion		P
14.7	Enclosures of rewirable accessories: completely enclose terminals and ends of flexible cable.		N/A
	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

IEC 60884-1&IEC 60884-2-5			
Clause	Requirement + Test	Result - Remark	Verdict
	- 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
14.9	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		P
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		P
14.10.1	<i>Rewirable accessories: test with 6 mm free wire</i>		
	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	<i>Non-rewirable, non-moulded-on accessories: test with a free wire of length equivalent to the maximum designed stripping length declared by the manufacturer plus 2 mm</i>		
	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		P
	free wire of a conductor connected to an earth termination not touch any live part		P
14.10.3	<i>Non-rewirable, moulded-on accessories:</i>		
	Verification of means to prevent stray wires reducing the minimum distance through insulation to external accessible surface below 1,5 mm		N/A
14.11	<i>Rewirable intermediate adaptors:</i>		
	- clear how relief from strain and prevention of twist is intended to be effected		N/A
	- cord anchorage, or at least part of it, integral with or permanently fixed to one of the component parts of the plug or portable socket-outlet		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

IEC 60884-1&IEC 60884-2-5			
Clause	Requirement + Test	Result - Remark	Verdict
	- 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		P
14.13	If 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		P
14.16	Engagement of associated plugs not prevented by any projection from the engagement face of adaptors		P
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 .....		P
14.20	Portable accessories: not integral part of lampholders		P
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

IEC 60884-1&IEC 60884-2-5			
Clause	Requirement + Test	Result - Remark	Verdict
14.22	Components (switches and fuses) incorporated in accessories: comply with the relevant IEC standard		P
14.23	Plug-in equipment: not cause overheating of the pins or impose undue strain		P
	Plugs with rating above 16 A and 250 V: not integral part of other equipment		P
	Tests for two-pole plugs, with or without earthing contact, with rating up to and including 16 A and 250 V (plug of equipment inserted into a fixed socket-outlet 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) ..... : 275		-
	Temperature rise of the pins after 1 h not exceed 45 K (K)..... : < 40		P
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 mm <sup>2</sup> 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		P
	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		P
	During the test: device not come out		P
	After the test:		
	- no damage		P
	- adaptor complies with clause 22		P
14.24	Adaptors: can easily withdrawn by hand from the relevant socket-outlet		P
	Gripping surfaces so designed that the adaptor can be withdrawn without having to pull on the flexible cable, if any		P
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		P

IEC 60884-1&IEC 60884-2-5			
Clause	Requirement + Test	Result - Remark	Verdict
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		P
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 OF ADAPTORS		N/A
16	RESISTANCE TO AGEING, TO HARMFUL INGRESS OF WATER AND TO HUMIDITY		P
16.1	Resistance to ageing		
	Accessories shall be resistant to ageing		P
	Accessories subjected to a test in a heating cabinet at 70 °C ± 2 °C for seven days (168 h)		P
	After the tests, samples shall show:		
	- no crack visible with normal or corrected vision without additional magnification		P
	- no sticky or greasy material		P
	- no trace of cloth (forefinger pressed with 5 N)		P
	- no damage		P
16.2	Resistance to harmful ingress of water		

IEC 60884-1&IEC 60884-2-5			
Clause	Requirement + Test	Result - Remark	Verdict
	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 surface in a position as in normal use and fitted with flexible cables according to table 17 having the largest and smallest cross-sectional area given in table 3:		
	- largest cross-sectional area (mm ); type of cable (table 27).....:		-
	- smallest cross-sectional area (mm ); 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		
	Accessories proof against humidity which may occur in normal use		P
	Compliance checked by a humidity treatment carried out in a humidity cabinet containing air with relative humidity maintained between 91 % and 95 %		P
	Specimens kept in the cabinet for:		
	- two days (48 h) for ordinary accessories		P



IEC 60884-1&IEC 60884-2-5			
Clause	Requirement + Test	Result - Remark	Verdict
	- seven days (168 h) for accessories other than ordinary		N/A
	After this treatment the specimens show no damage		P

19	TEMPERATURE RISE		P
	Non-rewirable accessories tested as delivered:		N/A
	- type of flexible cable; number of conductors and nominal cross-sectional area (mm <sup>2</sup> ).....:		-
	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 (mm <sup>2</sup> ) .....		-
	- 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		P
	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		P
	Test current as specified in table 101 passed for 1 h (A) .....	20	-
	Temperature rise of terminals not exceed 45 K (K) .....	< 40	P
	Separate tests made passing the current through:		
	- the neutral contact, if any, and the adjacent phase contact (K) .....	< 40	P
	- the earthing contact, if any, and the nearest phase contact (K) .....	< 40	P
	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	P
	- through all socket-outlet portions simultaneously; test current appropriate to the rating of the adaptor and divided between the socket-outlet portions (A) .....	4	P

IEC 60884-1&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	P
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21	NORMAL OPERATION		P
	Accessories shall withstand without excessive wear or other harmful effect, the mechanical, electrical and thermal stresses occurring in normal use		P
	Compliance checked by testing:		P
	- socket-outlet portions of adaptors;		P
	- plug portion of adaptors with resilient earthing socket-contacts;		P
	- plug portion of adaptors with pins which are not solid		N/A
	Test performed on:		P
	- complete shuttered socket-outlets		P
	- specimens prepared by the manufacturer without shutters (with current flowing). Number of strokes:		P
	- specimens with shutters (without current flowing)		P
	- complete shuttered socket-outlets with operations made by hand as in normal use		P
	Test conditions for socket-outlet portion of adaptor:		P
	- 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:		P
	- 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:		P
	- during each insertion and withdrawal of the plug (In 16A)		P
	- during alternate insertion and withdrawal, the other insertion and withdrawal being made without current flowing (In > 16A)		N/A

IEC 60884-1&IEC 60884-2-5			
Clause	Requirement + Test	Result - Remark	Verdict
	Multiple socket-outlets: test carried out on one socket-outlet of each type and current rating		P
	During the test: no sustained arcing occur		P
	After the test the specimens shall not show:		P
	- wear impairing their further use;		P
	- deterioration of enclosures, insulating lining or barriers;		P
	- damage to the entry holes for the pins, that might impair proper working;		P
	- loosening of electrical or mechanical connections;		P
	- seepage of sealing compound		N/A
	Shuttered socket-outlets: the following gauges not touch live parts when they remain under the relevant forces:		
	- gauges of figure 3 applied with a force up to 20 N		P
	- steel gauge of figure 4 applied with a force up to 1 N		P
	Temperature-rise test (requirements of clause 19):		P
	Test current as specified in table 101 passed for 1 h (A) .....	16	-
	Temperature rise of terminals not exceed 45 K (K) .....	< 40	P
	Separate tests made passing the current through:		
	- the neutral contact, if any, and the adjacent phase contact (K) .....	< 40	P
	- the earthing contact, if any, and the nearest phase contact (K) .....	< 40	P
	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	P
	- through all socket-outlet portions simultaneously; test current appropriate to the rating of the adaptor and divided between the socket-outlet portions (A) .....	4	P
	Electric strength (sub-clause 17.2), test voltage (a.c., for 1 min):		
	a) test voltage (V).....	1500 V	P
	b) test voltage (V).....	1500 V	P
	c) test voltage (V).....	-	N/A

## IEC 60884-1&amp;IEC 60884-2-5

Clause	Requirement + Test	Result - Remark	Verdict
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	d) test voltage (V).....:	-	N/A
	e) test voltage (V).....:	-	N/A
	During the test: no flashover or breakdown		P
	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) .....	5,8	P

22	FORCE NECESSARY TO WITHDRAW THE PLUG	--
23	FLEXIBLE CABLES AND THEIR CONNECTION	--
24	MECHANICAL STRENGTH	--
25	RESISTANCE TO HEAT	--
26	SCREWS, CURRENT-CARRYING PARTS AND CONNECTIONS	--
27	CREEPAGE DISTANCES, CLEARANCES AND DISTANCES THROUGH SEALING COMPOUND	--
28	RESISTANCE OF INSULATING MATERIAL TO ABNORMAL HEAT, TO FIRE AND TO TRACKING	--
29	RESISTANCE TO RUSTING	--
30	ADDITIONAL TESTS ON PINS PROVIDED WITH INSULATING SLEEVES	--

IEC 60884-1&IEC 60884-2-5			
Clause	Requirement + Test	Result - Remark	Verdict

12.2.5	<b>TABLE: test with apparatus shown in figure 11</b>			P
	rated current (A) .....	16		—
	type of conductors .....			—
	smallest/largest cross-sectional area per table 3 (mm <sup>2</sup> ) .....	1,5/2,5		—
	number of conductors .....	1		—
	nominal diameter of thread (mm); torque per table 6 (Nm) .....	3,4; 0,8		—
Cross-sectional area (mm <sup>2</sup> )	Diameter of bushing hole per table 9 (mm)	Height H per table 9 (mm)	Mass (kg)	Remarks
1,5	260	6,5	0,4	P
2,5	280	9,5	0,7	P
supplementary information:				

12.2.6	<b>TABLE: pull test (screw-type terminals)</b>			P
	rated current (A) .....	16		—
	smallest/largest cross-sectional area per table 3 (mm <sup>2</sup> ) .....	1,5/2,5		—
	nominal diameter of thread (mm); torque 2/3 per table 6 (Nm) .....	3,4; 0,53		—
Cross-sectional area (mm <sup>2</sup> )	Number of conductors	Type of conductors (rigid solid / rigid stranded / flexible)	Pull per table 4 applied for 1 min (N)	Remarks
1,5	1	flexible	40	P
supplementary information:				

12.2.7	<b>TABLE: tightening test (screw-type terminals)</b>			P
	rated current (A) .....	16		—
	nominal diameter of thread (mm); torque 2/3 per table 6 (Nm) .....	3,4; 0,53		—
Largest cross-sectional area per table 3 (mm <sup>2</sup> )	Permissible number of conductors <sup>(1)</sup>	Type of conductors (rigid solid / rigid stranded / flexible)	Number of wires and nominal diameter of wires per table 5	Remarks
2,5	1	flexible	50 x 0,25	P
supplementary information:				
<sup>(1)</sup> terminals intended for looping-in 2 or 3 conductors				

IEC 60884-1&IEC 60884-2-5			
Clause	Requirement + Test	Result - Remark	Verdict

12.3.10	<b>TABLE: mechanical strength test (screwless-type terminals)</b>				N	
	rated current (A) .....	:			—	
	largest/smallest cross-sectional area per table 7 (mm <sup>2</sup> ) .....	:			—	
	Number of connection (after that conductor subjected to a pull of 30 N for 1 min) / disconnection	Type of conductor (solid / rigid stranded / flexible)	Cross-sectional area (mm <sup>2</sup> )	Remarks		
	TABLE: test with apparatus shown in figure 11				N	
	Cross-sectional area (mm <sup>2</sup> )	Type of conductor (solid / rigid stranded / flexible)	Diameter of bushing hole per table 9 (mm)	Height H per table 9 (mm)	Mass (kg)	Remarks
	supplementary information:					

12.3.12	<b>TABLE: deflection test (principle of test apparatus shown in figure 12a)</b>				N			
	Test carried out connecting rigid solid copper conductors:				N			
	test current (A) (equal rated current) .....	:			—			
	required voltage drop (mV) .....	:			—			
	Type of conductor	Smallest			Largest		Remarks	
	cross-sectional area per table 11 (mm <sup>2</sup> )							
	force per table 12 (N)							
	screwless terminal number	1	2	3	1	2	3	-
	starting point (X = deflection original point)							
	voltage drop 1 <sup>st</sup> deflection (mV)							
	voltage drop 2 <sup>nd</sup> deflection (mV)							
	voltage drop 3 <sup>rd</sup> deflection (mV)							

IEC 60884-1&IEC 60884-2-5			
Clause	Requirement + Test	Result - Remark	Verdict

voltage drop 4 <sup>th</sup> deflection (mV)							
voltage drop 5 <sup>th</sup> deflection (mV)							
voltage drop 6 <sup>th</sup> deflection (mV)							
voltage drop 7 <sup>th</sup> deflection (mV)							
voltage drop 8 <sup>th</sup> deflection (mV)							
voltage drop 9 <sup>th</sup> deflection (mV)							
voltage drop 10 <sup>th</sup> deflection (mV)							
voltage drop 11 <sup>th</sup> deflection (mV)							
voltage drop 12 <sup>th</sup> deflection (mV)							
supplementary information:							

14.22	TABLE: Components					N
Object / part No.	Manufacturer/ trademark	Type / model	Technical data	Standard	Mark(s) of conformity <sup>1)</sup>	

17.1.1	TABLE: insulation resistance			P
item per table 20	test voltage applied between:	measured (MΩ)	required (MΩ)	
a	between all poles connected together and the body, the measurement being made with a plug in engagement;	>200	5	
b	between each pole in turn and all others, these being connected to the body with a plug in engagement;	>200	5	
supplementary information:				

17.2	TABLE: electric strength			P
	rated voltage (V) .....	250		—
item per table 20	test voltage applied between:	test voltage (V)	flashover / breakdown (Yes/No)	
a	between all poles connected together and the body, the measurement being made with a plug in engagement;	2000	No	
b	between each pole in turn and all others, these being connected to the body with a plug in engagement;	2000	No	
supplementary information:				

IEC 60884-1&IEC 60884-2-5			
Clause	Requirement + Test	Result - Remark	Verdict

19.1	<b>TABLE: temperature rise test for socket-outlets and plugs</b>							P
	rated current of accessory (A) .....			16			—	
	type of accessory (non-rewirable / rewirable) ....			rewirable			—	
	nominal cross-sectional area per table 15 (mm <sup>2</sup> ) :						—	
	type of conductors (rigid solid / rigid stranded / flexible) .....			Flexible			—	
	nominal diameter of thread (mm); torque 2/3 of that specified in 12.2.8 (Nm .....			3,4mm; 0,53Nm			—	
specimen	type of flexible cable <sup>(1)</sup>	number of conductors and nominal cross-sectional area (mm <sup>2</sup> ) <sup>(1)</sup>	test circuit (L-L/L-N/L-E)	test current (table 20) for 1 h (A)	measured ΔT (K)	allowed ΔT (K)	ΔT of external parts of insulating material (25.3) (K)	
-	-	-	L-N/L-E	16	Max.26,6	45	Max.19,5	

19.2	<b>TABLE: temperature rise test for fixed socket-outlets of a socket-outlet and fused plug system</b>							N/A	
	rated current of accessory (A) .....						—		
	type of accessory (non-rewirable / rewirable) ....						—		
	nominal cross-sectional area per table 15 (mm <sup>2</sup> ) :						—		
	type of conductors (rigid solid / rigid stranded / flexible) .....						—		
	nominal diameter of thread (mm); torque 2/3 of that specified in 12.2.8 (Nm .....						—		
	Test a) single socket-outlet							N/A	
specimen	type of flexible cable (1)	number of conductors and nominal cross-sectional area (mm <sup>2</sup> ) (1)	test circuit (L-L/L-N/L-E)	70% of test current (table 20) for 1 h (socket-outlet) (A)	30% of test current (table 20) for 1 h (looped) (A)	test current (table 20) for 1 h (supply cable) (A)	measured ΔT (K)	allowed ΔT (K)	ΔT of external parts of insulating material (25.3)(K)
supplementary information:									
<sup>(1)</sup> Non-rewirable accessories									
	Test b) multiple socket-outlet							N/A	





IEC 60884-1&IEC 60884-2-5			
Clause	Requirement + Test	Result - Remark	Verdict


20	<b>TABLE: breaking capacity</b>							P	
	rating of accessory (A/V) .....		:		16A/230V~		—		
	type of accessory (non-rewirable / rewirable) ....		:		rewirable		—		
	type of flexible cable (non-rewirable accessories) .....		:		N/A		—		
	number of conductors and nominal cross-sectional area (mm <sup>2</sup> ) (non-rewirable accessories) .....		:		N/A		—		
	nominal cross-sectional area per table 15 (mm <sup>2</sup> ) :				2,5mm <sup>2</sup>		—		
	type of conductors (rigid solid / rigid stranded / flexible) .....		:				—		
	nominal diameter of thread (mm); torque 2/3 of that specified in 12.2.8 (Nm) .....		:		3,4; 0,53		—		
	rate of operation (strokes per minute) .....		:		30 strokes per minute		—		
specimen	test plug (for each type and current rating of socket-outlet)		test voltage (1,1 Vn) (V)	test current (1,25 In) cos φ 0,6 (A)	number of strokes (plugs only)	number of strokes, with shutters – with current <sup>(1)</sup>	number of strokes, without shutters – with current <sup>(2)</sup>	remarks	
	pin dimensions (mm)	pin spacing (mm)							
	4,15	19,0	275	20	-	100	-	OK	P

22	<b>TABLE: force necessary to withdraw the plug</b>							P
	Rated current (A) .....		:		16A		—	
	Number of poles .....		:		2P+E		—	
22.1	<b>Verification of the maximum withdrawal force</b>							P
specimen	socket-outlets (multi-pin gauge)			plugs with resilient earthing contact assemblies (single-pin gauge)				
	maximum withdrawal force (N)	the test plug did not remain in the socket-outlet (Y/N)		maximum withdrawal force (N)	the test pin gauge did not remain in the contact assembly			
	52	N (did not remain)		-	-			P
22.2	<b>Verification of the minimum withdrawal force</b>							P
	socket-outlets (single-pin gauge)			plugs with resilient earthing contact assemblies (single-pin gauge)				

IEC 60884-1&IEC 60884-2-5			
Clause	Requirement + Test	Result - Remark	Verdict

specimen	minimum withdrawal force (N)	the test pin gauge did not fall from each individual contact-assembly within 30 s (Y/N)	minimum withdrawal force (N)	the test pin gauge did not fall from each individual earthing contact-assembly within 30 s (Y/N)	
	2	N (did not fall)	-	-	P
supplementary information:					

23.2	<b>TABLE: pull and torque test</b>					N
	rating of accessory (A) .....					—
	type of accessory (non-rewirable / rewirable) .....					—
	smallest/largest cross-sectional area per table 17 (mm <sup>2</sup> ) (rewirable accessories) .....					—
	nominal diameter of thread (mm); torque 2/3 per table 6 (Nm) (rewirable accessories) .....					—
specimen	type of flexible cable	number of conductors and nominal cross-sectional area (mm <sup>2</sup> )	pull (100 times) (N)	torque (1 min) as specified in table 18 (Nm)	displacement (mm)	
-						N
-						N
supplementary information:						

24.1	<b>TABLE: impact test</b>				P
	part of enclosure tested per table 21 (A, B, C, D)	blows per part	height of fall (mm)	comments	
	A	5	80	OK	
	D	4	160	OK	
supplementary information:					

25	<b>TABLE: ball pressure test of thermoplastic materials</b>				P	
	allowed impression diameter (mm) .....				<2mm	—
	part under test	material designation / manufacturer	test temperature (°C)	impression diameter (mm)		
	Enclosure	PC	125	0.33		
supplementary information:						

26.1	<b>TABLE: threaded part torque test</b>					P
	threaded part identification	diameter of thread (mm)	column number (1, 2 or 3)	applied torque (Nm)	times (5/10)	no damage
	Terminals	3,30	2	0,8	5	OK

IEC 60884-1&IEC 60884-2-5			
Clause	Requirement + Test	Result - Remark	Verdict

assembly screws	2,80	2	0,5	5	OK
supplementary information:					

27.1	<b>TABLE: creepage distances, clearances and distances through sealing compound</b>						P
	rated voltage (V) .....	230V					—
item per table 23	creepage distance dcr, clearance cl and distance through sealing compound dtsc at/of:	require d cl (mm)	cl (mm)	require d dcr (mm)	dcr (mm)	require d dtsc (mm)	dtsc (mm)
1); 6)	between live parts of different polarity	3	> 4 (test by gauge)	3	> 4 (test by gauge)		-
2); 7)	between live parts and accessible surface of parts of insulating material	3	> 4 (test by gauge)	3	> 4 (test by gauge)		-
	between live parts and earthed metal parts including parts of earthing circuit <sup>a)</sup>	3	3,3mm	3	3,3mm		-
	between live parts and metal frames supporting the base of flush-type socket-outlets	3	> 4 (test by gauge)	3	> 4 (test by gauge)		-
	between live parts and screws or devices for fixing bases, covers or cover-plates of fixed socket-outlets	3	> 4 (test by gauge)	3	> 4 (test by gauge)		-
9)	between live parts and the surfaces on which the base of a socket-outlet for surface mounting is mounted	6	> 6 (test by gauge)		-		-
supplementary information:							

28.1.1	<b>TABLE: glow-wire test</b>					P
part under test	material designation	test temperature ( C)	visible flame and sustained glowing (Y/N)	flame and glowing extinction time	ignition of the tissue paper (Y/N)	
Live part carrier	PBT	850	Y	2,1s	N	
Live part carrier, alternative	PBT	850	Y	1,4s	N	
Enclosure	PC	650	N	-	N	
Enclosure, alternative	PC	650	N	-	N	
Shutter box	PC	650	N	-	N	
Shutter body	PA66	650	N	-	N	
Membranes	PVC	650	N	-	N	

# Product Photo

Photo1



Photo2

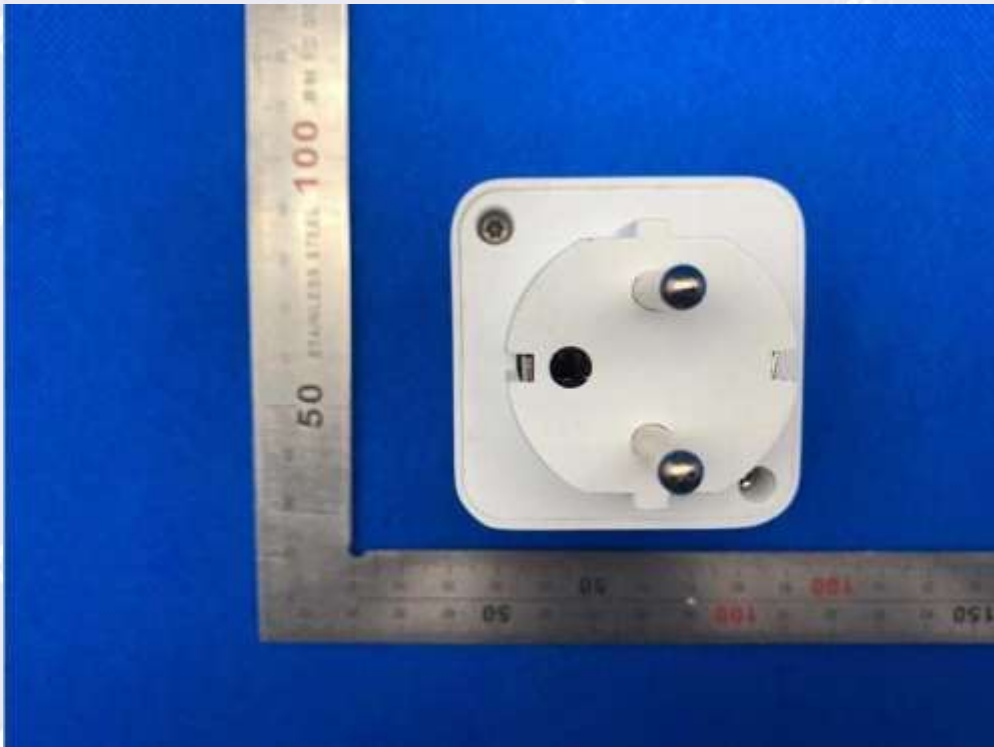


Photo3



Photo4



Photo5

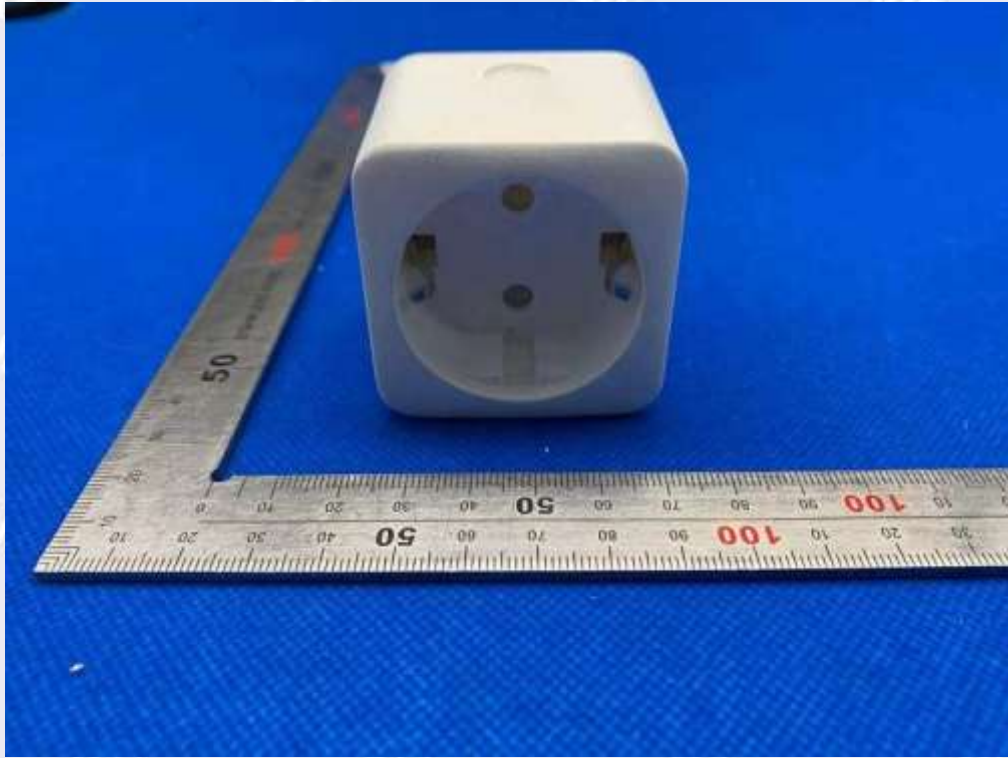


Photo6



Photo7



Photo8



\*\*\*\*\* END OF REPORT \*\*\*\*\*