TEST REPORT
EN 60884-1
Plugs and socket-outlets for household and similar purposes
Part 1: General requirements

Report Reference No. .....:	BSTDG190111158101SR
Tested by (name + signature).....:	Gerry Zheng
Approved by (name + signature) ..:	Tony Qian
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Testing Laboratory .....:	Dongguan BST Testing Co., Ltd.
Address.....:	A1201-1204Xinsanqi Of Dongbao Road, Dongcheng District, Dongguan, Guangdong, China.
Applicant's name .....:	Jiande Youlian Electrical Appliance Co., LTD
Address.....:	201 Jinfeng Road,Chengnan Industrial Park,Meicheng Town,Jiande City,Zhejiang,China
Test specification:	
Standard .....:	EN 60884-1:2002
Test procedure .....:	/
Non-standard test method……..:	N/A
Test item description .....:	ENROULEUR (cable reel)
Trade Mark .....:	YOULIAN
Manufacturer's name.....:	Jiande Youlian Electrical Appliance Co., LTD
Address.....:	201 Jinfeng Road,Chengnan Industrial Park,Meicheng Town,Jiande City,Zhejiang,China
Model/Type reference.....:	YL-205C
Ratings.....:	250V~, 16A (Provided with H05VV-F 3×1,5mm^2)

Summary of testing:	
Tests performed (name of test and test clause): Full items tests to YL-205C 16A 250V～(Provided with H05VV-F 3×1,5 mm^2).	**Testing location:** Dongguan BST Testing Co., Ltd. A1201-1204Xinsanqi Of Dongbao Road, Dongcheng District, Dongguan, Guangdong, China.
Copy of marking plate YL-205C YOULIAN 16A 250V～	

Test item particulars .....:	
Standard Sheet .....:	EN50075 standard sheet 1
	CEE 7 standard sheet XV Ⅰ(v Ⅱ)
Rated current (A) / Rated voltage (V) .....:	16A 250V～
Degree of protection against access to hazardous parts and against harmful ingress of solid foreign objects .....:	N/A
Degree of protection against harmful ingress of water .....:	IPX0
Provision for earthing .....:	With earthing contact
Method of connecting the cable .....:	non-rewirable
Type of cable .....:	H05VV-F;
Nominal cross-sectional areas (mm^2) .....:	3×1,5
Type of terminals .....:	N/A
Type of connections .....:	crimped
Socket-outlets:	N/A
Degree of protection against electric shock .....:	N/A
Existence of shutters .....:	N/A
Method of application / mounting of the socket-outlet .....:	N/A
Method of installation .....:	N/A
Intended for circuits where .....:	N/A
Plugs:	
Class of equipment .....:	Ⅰ
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 .....:	2019-01-03
Date (s) of performance of tests .....:	From 2019-01-03 to 2019-01-07

General remarks:

The test results presented in this report relate only to the object tested.
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"(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 comma is used as the decimal separator.

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Cl.	Requirement – Test	Result	Verdict
8	**MARKING**		P
8.1	Accessories marked as follows:		P
	- rated current (A) .....:	16	P
	- rated voltage (V) .....:	250	P
	- symbol for nature of supply .....:	~	P
	- manufacturer's or responsible vendor's name .....:	Jiande Youlian Electrical Appliance Co., LTD	P
	- type reference .....:	YL-205C	P
	- 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 the following:		N/A
	- the length of insulation to be removed .....:		N/A
	- an indication of the suitability to accept rigid conductors only (if any) .....:		N/A
8.2	Symbols used: as required in the standard		P
	Marking for the nature of supply placed next to the marking for rated current and rated voltage	16A 250V~	P
8.3	Marking of fixed socket-outlets placed on the main part:		N/A
	- 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
	- 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
	IP code, if applicable: marked so as to be easily discernible		N/A
	Fixed socket-outlets classified according to item b) of 7.2.5: identified by a triangle visible after installation unless they have an interface configuration different from that used in normal circuits .....:		N/A
8.4	Plugs and portable socket-outlets: marking specified in 8.1, other than the type reference, easily discernible		P
	Plugs and portable socket-outlets for equipment of class II not marked with the symbol for class II construction		P
8.5	Neutral terminals: N .....:		N/A
	Earthing terminals: [earth symbol] .....:		P

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Cl.	Requirement – Test	Result	Verdict
	Markings not placed on screws or other easily removable parts		N/A
	Terminals for conductors not forming part of the main function of the socket-outlet:		N/A
	- clearly identified unless their purpose is self evident, or		N/A
	- indicated in a wiring diagram fixed to the accessory		N/A
	Identification of such terminals may be achieved by:		N/A
	- their being marked with graphical symbols according to IEC 60417-2 or colours and/or alphanumeric system, or		N/A
	- their being marked with their physical dimensions or relative location		N/A
8.6	Surface-type mounting boxes forming an integral part of socket-outlets having IP>20: IP code marked on the outside of its associated enclosure so as to be easily discernible		N/A
8.7	Indication of which position or with which special provision the declared IP of flush-type and semi-flush-type fixed socket-outlets having IP>X0 is ensured		N/A
8.8	Marking durable and easily legible. Test: 15 s with water and 15 s with petroleum spirit	Moulding type	N/A
9	**CHECKING OF DIMENSIONS**		P
9.1	Accessories and surface-type mounting boxes comply with the appropriate standard sheets and corresponding gauges, if any	EN50075 standard sheet 1 CEE 7 standard sheet XV Ⅰ(v Ⅱ) See Annex2	P
	Insertion of plugs into fixed or portable socket-outlets ensured by their compliance with the relevant standard sheets	plug	P
	Compliance checked by measurement and by means of gauges with manufacturing tolerances as shown in table 2		P
9.2	It is not possible to engage a plug with:		P
	- a socket-outlet having a higher voltage rating or a lower current rating;		P
	- a socket-outlet with a different number of live poles (exception admitted provided that no dangerous situation can arise);		P
	- a socket-outlet with earthing contact (plug for class 0 equipment).		N/A

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Cl.	Requirement – Test	Result	Verdict
	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		N/A
	Impossibility of insertion checked by applying a gauge, for 1 min, with a force of:		N/A
	- 150 N (rated current ≤ 16A);		N/A
	- 250 N (rated current > 16A)		N/A
	Accessories with elastomeric or thermoplastic material: test carried out at (35 ± 2) °C		N/A
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	No deviations	N/A
10	**PROTECTION AGAINST ELECTRIC SHOCK**		P
10.1	Socket-outlets: live parts not accessible		N/A
	Live parts of plugs: not accessible when the plug is in partial or complete engagement with a socket-outlet		P
	Test with test probe B of IEC 61032		P
	Accessories with elastomeric or thermoplastic material: additional test carried out at (35 ± 2) °C with test probe 11 of IEC 61032 (75 N for 1 min)		P
	During the test: accessories not deform and no live parts accessible		P
	Plugs and portable socket-outlets pressed with a force of 150 N for 5 min as shown in figure 8: specimens not show deformation		P
10.2	Accessible parts (with exception of small screws and the like for fixing bases and covers or cover plates): made of insulating material		N/A
	Cover or cover plates of fixed socket-outlets and accessible parts of plugs and portable 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

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Cl.	Requirement – Test	Result	Verdict
	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	Contact between a pin of a plug and a live socket-contact of a socket-outlet not possible while any other pin is accessible	See Annex 1	P
	Compliance checked by manual test and by means of gauges with tolerances as specified in table 2		P
	Accessories with elastomeric or thermoplastic material: test carried out at (35 ± 2) °C		P
	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 plugs made of insulating material		P
	Overall dimensions of rings around pins not exceed 8 mm concentric with respect to the pin		N/A
10.5	Shuttered socket-outlets: live parts not accessible, without a plug in engagement, with the gauges shown in figure 9 and 10		N/A
	Live contacts automatically screened when the plug is withdrawn		N/A
	Means cannot easily be operated by anything other than a plug and not depend upon parts which are liable to be lost		N/A
	Gauge of figure 9, applied to the entry holes corresponding to live contacts with a force of 20 N, for approximately 5 s, successively in three directions, does not touch live parts		N/A

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Cl.	Requirement – Test	Result	Verdict
	Steel gauge of figure 10, applied to the entry holes corresponding to live contacts with a force of 1 N for approximately 5 s, in three directions, does not touch live parts		N/A
	Accessories with elastomeric or thermoplastic material: test carried out at (35 ± 2) °C		N/A
10.6	Earthing contacts of a socket-outlet designed that they cannot be deformed by the insertion of a plug		N/A
	Test plug inserted into the socket-outlet with a force of 150 N for 1 min		N/A
10.6	Earthing contacts of a socket-outlet designed that they cannot be deformed by the insertion of a plug		N/A
	After this test: socket-outlet still comply with the requirements of clause 9		N/A
10.7	Socket-outlet with increased protection: live parts not accessible		N/A
	Test wire of 1 mm diameter (figure 10) applied with a force of 1 N on all accessible surfaces does not touch live parts		N/A
	Accessories with elastomeric or thermoplastic material: test carried out at (35 ± 2) °C		N/A
11	**PROVISION FOR EARTHING**		P
12	**TERMINALS AND TERMINATIONS**		P
	All the test on terminals, with the exception of the tests of 12.3 11 and 12.3.12, made after the test of clause 16		P
12.1	General		P
12.1.1	Rewirable fixed socket-outlets provided with screw-type terminals or with screwless terminals ..... :		N/A
	Rewirable plugs and portable socket-outlets provided with terminals with screw clamping .. :		N/A
	Pre-soldered flexible conductors used: pre-soldered area outside the clamp area of screw-type terminals		N/A
	Clamping means of terminals: not serve to fix any other components		N/A
12.1.2	Non-rewirable accessories provided with soldered, welded, crimped or equally effective permanent connections (termination) ..... :	Crimped	P
	Screwed or snap-on connections not used		P

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Cl.	Requirement – Test	Result	Verdict
	Connections made by crimping a pre-soldered flexible conductor not permitted		P
12.2	Terminals with screw clamping for external copper conductors		N/A
12.3	Screwless terminals for external copper conductors		N/A
13	**CONSTRUCTION OF FIXED SOCKET-OUTLETS**		N/A
14	**CONSTRUCTION OF PLUGS AND PORTABLE SOCKET-OTLETS**		P
14.1	Non-rewirable portable accessories:		P
	flexible cable cannot be separated from the accessory without making it permanently useless		P
	Accessory cannot be opened by hand or by using a general purpose tool, for example a screwdriver used as such		P
14.2	Pins of portable accessories: adequate mechanical strength		P
	Test for pins not solid (made after clause 21): force of 100 N exerted on the pin, according to figure 14, for 1 min by means of a steel rod Ø 4,8 mm		N/A
	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 plugs:		P
	- locked against rotation		P
	- not removable without dismantling the plug		P
	- adequately fixed in the body of the plug when the plug is wired and assembled as in normal use		P
	Earthing or neutral pins or contacts of plugs: not possible to arrange in an incorrect position		P
14.4	Earthing contacts and neutral contacts of portable socket-outlets:		N/A
	- locked against rotation		N/A
	- removable only with the aid of a tool, after dismantling the socket-outlet		N/A
14.5	Socket-contact assemblies: sufficient resilience		N/A
	Parts of socket-contact assemblies:		N/A
	- are not of insulating material except ceramic, or other material with no less suitable characteristics		N/A

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Cl.	Requirement – Test	Result	Verdict
	- ensure metallic contacts at least on two opposing sides of each pin		N/A
	Contact pressure of the contact tube does not depend on soldered connection only		N/A
14.6	Pins and socket-contacts: resistant to corrosion and abrasion		P
14.7	Enclosures of rewirable portable accessories: completely enclose terminals and ends of flexible cable		N/A
	Construction of rewirable accessories:		N/A
	- conductors can be properly connected		N/A
	- cores not pressed against each other		N/A
	- cores of live conductor not pressed against accessible metal parts		N/A
	- core of earthing conductor not pressed against live parts		N/A
14.8	Rewirable portable 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 portable 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		N/A
14.10	Terminals of rewirable portable accessories and terminations of non-rewirable portable accessories: located and shielded that loose wires not present a risk of electric shock		P
	Non-rewirable moulded-on portable accessories: provided with means to prevent loose wires of a conductor from reducing the minimum isolation distance requirements		P
14.10.1	Rewirable accessories: test with 6 mm free wire		N/A
	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 with a free wire of length equivalent to the maximum designed stripping length declared by the manufacturer plus 2 mm		N/A

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Cl.	Requirement – Test	Result	Verdict
	free wire of a conductor connected to a live termination not touch any accessible metal part or reduce creepage distance and clearance below 1,5 mm to the external surface		N/A
	free wire of a conductor connected to an earth termination not touch any live part		N/A
14.10.3	Non-rewirable, moulded-on accessories:		P
	Verification of means to prevent stray wires reducing the minimum distance through insulation to external accessible surface below 1,5 mm		P
14.11	Rewirable portable accessories:		N/A
	- clear how relief from strain and prevention of twisting is intended to be effected		N/A
	- cord anchorage, or at least part of it, integral with or 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 to it; 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	Rewirable portable accessories and non-rewirable non-moulded on portable accessories: it is not possible to remove covers, cover-plates or parts of them intended to ensure protection against electric shock without the use of a tool		P
14.13	Covers of portable socket-outlets: bushings for entry holes for the pins not removable from the outside or detachable inadvertently from the inside		N/A
14.14	Screws intended to allow access to interior of the accessory: captive		N/A
14.15	Engagement face of plugs: no projections		P
14.16	Engagement face of portable socket-outlets: no projection		N/A
14.17	Portable accessories of IP>20: enclosed according to their IP classification		N/A
	Plugs having IP>20: adequately enclosed with the exception of the engagement face		N/A
	Portable socket-outlets having IP>20: adequately enclosed without a plug in engagement		N/A

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Cl.	Requirement – Test	Result	Verdict
	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 by which the socket-outlet is fixed to the wall, or other mounting surface and live parts		N/A
14.19	Combinations of portable accessories and switches, circuit-breakers or other devices comply with relevant individual IEC standards, if relevant combined product standard does not exist .....:		N/A
14.20	Portable accessories: not integral part of lampholders		P
14.21	Plugs for equipment of class II:		P
	- rewirable or non-rewirable	Non-rewirable	P
	- if part of a cord set: provided with a connector for equipment of class II		N/A
	- if part of 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		N/A
14.23	Plug-in equipment: not cause overheating of the pins or impose undue strain		N/A
	Plugs with rating above 16 A and 250 V: not integral part of other equipment		N/A
	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):		N/A
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) .....:		N/A
14.23.2	Additional torque applied to the socket-outlet in order to maintain the engagement face in the vertical plane not exceed 0,25 Nm (Nm) .....:		N/A
14.24	Plugs can easily withdrawn by hand from the relevant socket-outlets		P
	Gripping surfaces are so designed that the plug can be withdrawn without having to pull the flexible cable		P

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Cl.	Requirement – Test	Result	Verdict
14.25	Membranes in inlet openings of portable accessorie: meet the requirements of 13.22 and 13.23		N/A
15	**INTERLOCKED SOCKET-OUTLETS**		N/A
16	**RESISTANCE TO AGEING, PROTECTION PROVIDED BY ENCLOSURES, AND RESISTANCE TO HUMIDITY**		P
16.1	Resistance to ageing		P
	Accessories are resistant to ageing		P
	Portable socket-outlets: test plug as specified in Clause 20 inserted into the socket-outlets		N/A
	Accessories subjected to a test in a heating cabinet at (70 ± 2) °C for seven days (168 h)		P
	After the tests, the specimens show:		P
	- 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
	Portable socket-outlets: contact pressure of the contact assembly checked as specified in subclause 22.2 with the single-pin gauge		N/A
16.2	Protection provided by enclosures		N/A
	Enclosures provide a degree of protection in accordance with the IP designation of the accessory		N/A
16.2.1	Protection against access to hazardous parts and against harmful effects due to ingress of solid foreign objects		N/A
	Accessories and their enclosures provide a degree of protection against access to hazardous parts and against harmful effects due to ingress of solid foreign objects		N/A
	Fixed socket-outlets: mounted as in normal use on a vertical surface		N/A
	Flush-type and semi-flush type socket-outlets: mounted in an appropriate box according to the manufacturer's instructions		N/A
	Accessories with screwed glands or membranes fitted with flexible cables within the range specified in table 3:		N/A
	- largest cross-sectional area (mm^2); type of cable (table 17) .....:		—

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Cl.	Requirement – Test	Result	Verdict
	- smallest cross-sectional area (mm^2); type of cable (table 17) .....:		—
	Glands tightened with a torque equal to 2/3 of the torque applied during the test of 24.6 (Nm) .....:		—
	Screws of the enclosure tightened with a torque equal to 2/3 of the torque given in table 6 (Nm) ...:		—
16.2.1.1	Protection against access to hazardous parts		N/A
	Appropriate test performed as specified in IEC 60529 (see also clause 10)		N/A
16.2.1.2	Protection against harmful effects due to ingress of solid foreign objects		N/A
	Appropriate test performed as specified in IEC 60529		N/A
	Test on accessories with IP5X (considered to be of category 2): dust not penetrated in a quantity to interfere with satisfactory operation or to impair safety		N/A
16.2.2	Protection against harmful effects due to ingress of water		N/A
	Accessories and their enclosures provide a degree of protection against harmful effects due to ingress of water in accordance with their IP classification		N/A
	Appropriate test performed as specified in IEC 60529 under the following conditions:		N/A
	Flush-type and semi-flush type socket-outlets: fixed in a vertical test wall using an appropriate box according to the manufacturer's instructions		N/A
	Accessory suitable to be installed on a rough wall: test wall according to figure 15 is used		N/A
	Surface-type socket-outlets mounted as for normal use in a vertical position and fitted with cables (having conductors of the largest and smallest nominal cross-sectional area given in table 3) or conduits or both in accordance with the manufacturer's instructions:		N/A
	- largest cross-sectional area (mm^2); type of cable (table 17) .....:		—
	- smallest cross-sectional area (mm^2); type of cable (table 17) .....:		—
	Portable socket-outlets tested on a plain, horizontal surface in a position as in normal use and fitted with flexible cables (having conductors of the largest and smallest nominal cross-sectional area given in table 3) according to table 17:		N/A
	- largest cross-sectional area (mm^2); type of cable (table 17) .....:		—
	- smallest cross-sectional area (mm^2); type of cable (table 17) .....:		—
	Screws of enclosure tightened with a torque equal to 2/3 of the torque given in table 6 (Nm) .....:		—

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Cl.	Requirement – Test	Result	Verdict
	Glands tightened with a torque equal to 2/3 of the torque applied during the test of 24.6 (Nm) .....:		—
	Accessory with drain holes opened during the test: any accumulation of water proved by inspection		N/A
	Socket-outlets tested without a plug in engagement		N/A
	Plugs tested when in full engagement with:		N/A
	- a fixed socket-outlets		N/A
	- a portable socket-outlets		N/A
	of the same system and with the same degree of protection against harmful effects due to ingress of water		—
	Specimens withstand an electric strength test specified in 17.2 which is started within 5 min of completion of the IP test		N/A
16.3	Resistance to humidity		P
	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:		P
	- two days (48 h) for accessories having IPX0		P
	- seven days (168 h) for accessories having IP>X0		N/A
	After this treatment the specimens show no damage		P
17	**INSULATION RESISTANCE AND ELECTRIC STRENGTH**		P
17.1	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
18	**OPERATION OF EARTHING CONTACTS**		N/A
	Earthing contacts provide adequate contact pressure and not deteriorate in normal use		N/A
	Compliance checked by the tests of clauses 19 and 21		N/A
19	**TEMPERATURE RISE**		P
	Temperature rise test	See appended table 19	P
	Socket-outlets tested using a test plug with brass pins having the minimum specified dimensions		N/A

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Cl.	Requirement – Test	Result	Verdict
	Plugs tested with clamping units having dimensions specified in Figure 44 fitted on each live pin and earthing pin, if any		P
	Plugs having lateral earthing contacts and resilient earthing contacts tested using a fixed socket-outlet complying with the standard and having as near to-average characteristics as can be selected, but with minimum size of the earthing pin, if any		N/A
20	**BREAKING CAPACITY**		N/A
21	**NORMAL OPERATION**		N/A
22	**FORCE NECESSARY TO WITHDRAW THE PLUG**		N/A
23	**FLEXIBLE CABLES AND THEIR CONNECTIONS**		P
23.1	Rewirable plugs and rewirable portable socket-outlets are provided with a cord anchorage		N/A
	Sheath of flexible cable is clamped within the cord anchorage		N/A
	In non-rewirable plugs and non-rewirable portable socket-outlets the cable is maintained in position and the terminations are relieved from strain and twisting		P
	Sheath of flexible cable is maintained inside the accessory		P
23.2	Pull and torque test		P
	Non-rewirable accessories:		P
	After the test: displacement ≤ 2 mm	See appended table 23.2	P
	No break in the electrical connections		P
	Rewirable accessories:		N/A
	After the test: displacement ≤ 2 mm	See appended table 23.2	N/A
	End of conductors not have moved noticeably in the terminals		N/A
	Rewirable accessories having rated current up to and including 16 A:		N/A
	Suitable for fitting with the appropriate cable as shown in table 19		N/A
	Type of flexible cable; number of conductors and nominal cross-sectional area (mm^2) ..... :		—

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Cl.	Requirement – Test	Result	Verdict
23.3	Non-rewirable plugs and non-rewirable portable socket-outlets are provided with a flexible cable complying with IEC 60227 or IEC 60245		P
	Flexible cables have the same number of conductors as there are poles in the plug or socket-outlet		P
	Conductor connected to the earthing contact is identified by the colour combination green/yellow		P
23.4	Non-rewirable plugs and non-rewirable portable socket-outlets: designed that the flexible cable is protected against excessive bending		P
	Guards of insulating material and fixed in reliable manner		P
	Flexing test (10.000 flexings)		P
	During the test: no interruption of the test current and no short-circuit between conductors	See appended table 23.4	P
	After the test: guard no separated from the body, insulation shows no sign of abrasion or wear, broken strands become no accessible	See appended table 23.4	P
24	**MECHANICAL STRENGTH**		P
	Accessories, surface mounting boxes, screwed glands and shrouds have adequate mechanical strength		P
24.1	Fixed socket-outlets, portable multiple socket-outlets and surface-type mounting boxes: impact test (apparatus shown in fig. 22, 23, 24 and 25)	See appended table 24.1	N/A
	After the test: no damage, live parts no become accessible		N/A
24.2	Portable single socket-outlets and plugs: subjected to test Ed: Free fall, procedure 2 of IEC 60068-2-32 (tumbling barrel); number of falls ..... :	1 000	P
	After the test:		P
	- no part become detached or loosened;		P
	- 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		P
24.3	Bases of surface-type socket-outlets: first fixed to a cylinder of rigid steel sheet and then fixed to a flat steel sheet		N/A
	During and after the tests: no damage		N/A

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Cl.	Requirement – Test	Result	Verdict
24.4	Portable single socket-outlets, multiple socket-outlets and plugs (elastomeric or thermoplastic material): impact test, weight (1000 ± 2) g, height 100 mm (apparatus shown in fig. 27)		P
	Specimens placed in a freezer at (-15 °C ± 2) °C for at least 16 h. After the test: no damage		P
24.5	Portable single socket-outlets and plugs (elastomeric or thermoplastic material): compression test, 300 N for 1 min, position a) and b) (apparatus shown in fig. 8)		P
	After the test: no damage		P
24.6	Screwed glands of accessories having IP>20: torque test (1 min)		N/A
	- diameter of test rod (mm) ..... :		—
	- type of material (metal / moulded)..... :		—
	- torque (Nm) ..... :		—
	After the test: no damage of glands and enclosures of the specimens		N/A
24.7	Plug pins provided with insulating sleeves: 20000 movements, 4 N (apparatus shown in fig. 28)		P
	After the test: no damage of pins, insulating sleeve not have punctured or rucked up		P
24.8	Shuttered socket-outlets: mechanical test carried out on specimens submitted to the normal operation test according to clause 21		N/A
	Force (40 N / 75 N) applied for 1 min against the shutter of an entry hole by means of one pin (N) :		—
	Pin did not come in contact with live parts		N/A
	After the test: no damage		N/A
24.9	Mechanical test for multiple portable socket-outlet: 8 falls on concrete floor with the specimens arranged as shown in figure 29		N/A
	Rewirable multiple socket-outlets: flexible cable of the smallest cross-sectional area specified in table 3 .....:		—
	After the test: no damage, no part have become detached or loosened		N/A
	Accessories having IP>X0 submitted again to the tests as specified in 16.2		N/A
24.10	Plugs: pull test to verify the fixation of pins in the body of the plug (new specimens)		N/A
	Maximum withdrawal force (table 16) applied for 1 min on each pin in turn, after the specimen has been placed at (70 ± 2) °C for 1 h (N) ..... :		—
	After the test: displacement of pins in the body of the plug ≤ 1 mm (mm) ..... :		N/A
24.11	Barriers of portable socket-outlets having means for suspension on a mounting surface:		N/A

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Cl.	Requirement – Test	Result	Verdict
	Force applied for 10 s against the barrier by means of a cylindrical steel rod (1,5 times the maximum plug withdrawal force in 22.1, table 16) (N) ..... :		—
	Rod did not pierce the barrier		N/A
24.12	Portable socket-outlets having means for suspension on a mounting surface (pull test):		N/A
	Pull applied to the supply flexible cable for 10 s (force prescribed in 23.2 for checking the flexible cable anchorage) (N) ..... :		—
	During the test: no break of the means for suspension on a mounting surface		N/A
24.13	Portable socket-outlets having means for suspension on a mounting surface (pull test):		N/A
	Pull applied to the engagement face of the socket-outlet for 10 s (maximum withdrawal force specified, for the corresponding plug, in table 16) (N) ..... :		—
	During the test: no break of the means for suspension on a mounting surface		N/A
24.14	Forces necessary to retain or remove covers, cover-plates or parts of them (accessibility with the test finger to live parts)		N/A
24.14.1	Verification of the retention of covers or cover-plates (fixed socket-outlets)		N/A
	Force (40 N / 80 N) applied for 1 min perpendicular to the mounting surface (N) ..... :		—
	Covers or cover-plates did not come off		N/A
	Test repeated on new specimens with a sheet of hard material, (1 ± 0,1) mm thick, fitted around the supporting frame (fig. 31): covers or cover-plates did not come off		N/A
	After the test: no damage		N/A
24.14.2	Verification of the removal of covers or cover-plates (fixed socket-outlets)		N/A
	Force not exceeding 120 N applied 10 times perpendicular to the mounting / supporting surface: covers or cover-plates came off		N/A
	Test repeated on new specimens with a sheet of hard material, (1 ± 0,1) mm thick, fitted around the supporting frame (fig. 31): covers or cover-plates came off		N/A
	After the test: no damage		N/A
24.14.3	Verification of the retention of covers or cover-plates (plugs and portable socket-outlets)		N/A
	Force 80 N applied for 1 min perpendicular to the mounting surface: covers, cover-plates or parts of them did not come off		N/A

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Cl.	Requirement – Test	Result	Verdict
	Test repeated with a force of 120 N:		N/A
	Rewirable plugs and rewirable portable socket-outlets: covers, cover-plates or parts of them came off but the specimen showed no damage		N/A
	Non-rewirable, non moulded-on accessories: covers, cover-plates or parts of them came off but the accessories were permanently useless according to 14.1		N/A
24.15	Force necessary for covers or cover-plates 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 23)		N/A
24.14.1	Verification of the non-removal of covers or cover-plates		N/A
	Force (10 N / 20 N) applied for 1 min in direction perpendicular to the mounting surface (N) ..... :		—
	Covers or cover-plates did not come off		N/A
	Test repeated on new specimens with a sheet of hard material, 1 mm ± 0,1 mm thick, fitted around the supporting frame (fig. 31): covers or cover-plates did not come off		N/A
	After the test: no damage		N/A
24.14.2	Verification of the removal of covers or cover-plates		N/A
	Force not exceeding 120 N applied 10 times in direction perpendicular to the mounting / supporting surface: covers or cover-plates came off		N/A
	Test repeated on new specimens with a sheet of hard material, 1 mm ± 0,1 mm thick, fitted around the supporting frame (fig. 31): covers or cover-plates came off		N/A
	After the test: no damage		N/A
24.16	Force necessary for covers or cover-plates 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 23)		N/A
24.14.1	Verification of the non-removal of covers or cover-plates		N/A
	Force 10 N applied for 1 min in direction perpendicular to the mounting surface: covers or cover-plates did not come off		N/A
	Test repeated on new specimens with a sheet of hard material, 1 mm ± 0,1 mm thick, fitted around the supporting frame (fig. 31): covers or cover-plates did not come off		N/A
	After the test: no damage		N/A
24.14.2	Verification of the removal of covers or cover-plates		N/A

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Cl.	Requirement – Test	Result	Verdict
	Force not exceeding 120 N applied 10 times in direction perpendicular to the mounting / supporting surface: covers or cover-plates came off		N/A
	Test repeated on new specimens with a sheet of hard material, 1 mm ± 0,1 mm thick, fitted around the supporting frame (fig. 31): covers or cover-plates came off		N/A
	After the test: no damage		N/A
24.17	Test with gauge of figure 7 applied according to figure 9 for verification of the outline of covers or cover-plates: distances between face C of gauge and outline of side under test, not decrease ..... :	complying / not complying	—
24.18	Test with gauge according to figure 5 applied as shown in figure 11 (1 N): gauge not enter more than 1mm ..... :	complying / not complying	—
24.19	Shroud of portable socket-outlets: compression test (20 ± 2) N at (25 ± 5) °C by means of the apparatus shown in figure 38		N/A
	After 1 min and while the shrouds are still under pressure the dimensions did comply with the appropriate standard sheet		N/A
	Test repeated with the specimen rotated 90 °		N/A
25	**RESISTANCE TO HEAT**		P
25.1	Specimens kept for 1 h in a heating cabinet at (100 ± 2) °C for 1 h		P
	During the test: no change impairing their further use and sealing compound, if any, not flow		P
	After the test:		P
	- no access to live parts with probe B of IEC 61032 applied with a force not exceeding 5 N		P
	- markings still legible		P
25.2	Parts of insulating material necessary to retain current-carrying parts and parts of the earthing circuit in position, as well as parts of the front surface zone, 2 mm wide, surrounding the phase and neutral pin entry holes: ball-pressure test at (125 ± 2)°C for 1 h	See appended table 25.2	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)	See appended table 25.3	N/A
25.4	Portable accessories: compression test (20 N) at (80 ± 2)°C for 1 h by means of the apparatus shown in figure 38		P
	After the test: no damage		P
26	**SCREWS, CURRENT-CARRYING PARTS AND CONNECTIONS**		P

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Cl.	Requirement – Test	Result	Verdict
26.1	Connections withstand mechanical stresses		P
	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
	Threaded part torque test	See appended table 26.1	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		P
	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 (including earthing terminals) have mechanical strength, electrical conductivity and resistance to corrosion adequate:		P
	- 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;		P
	- stainless steel with at least 13 % chromium and not more than 0,09 % carbon		N/A
	- steel with electroplated coating of zinc (ISO 2081): service condition ISO no. (1/2/3); IP (X0/X4/X5); thickness (µm) ..... :		N/A
	- steel with electroplated coating of nickel and chromium (ISO 1456): service condition ISO no. (2/3/4); IP (X0/X4/X5); thickness (µm) ..... :		N/A
	- steel with electroplated coating of tin (ISO 2093): service condition ISO no. (2/3/4); IP (X0/X4/X5); thickness (µm) ..... :		N/A
	Current-carrying parts subjected to mechanical wear: not of steel with electroplated coating		N/A
	Metals having a great difference of electrochemical potential: not used in contact with each other		N/A
26.6	Contacts subjected to a sliding action are of metal resistant to corrosion		P

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Cl.	Requirement – Test	Result	Verdict
26.7	Thread-forming screws and thread-cutting screws are not used for the connection of current-carrying parts		N/A
	Thread-forming screws and thread-cutting screws used to provide earthing connection: it is not necessary to disturb the connection and at least two screws are used for each connection		N/A
27	**CREEPAGE DISTANCES, CLEARANCES AND DISTANCES THROUGH SEALING COMPOUND**		P
27.1	Creepage distances, clearances and distances through sealing compound are not less than the values shown in table 23	See appended table 27.1	P
27.2	Insulating sealing compound does not protrude above the edge of the cavity in which it is contained		N/A
27.3	Surface-type socket-outlets do not have bare current-carrying strips at the back		N/A
28	**RESISTANCE OF INSULATING MATERIAL TO ABNORMAL HEAT, TO FIRE AND TO TRACKING**		P
28.1	Resistance to abnormal heat and to fire		P
28.1.1	Glow-wire test according to IEC 60695-2-10 and IEC 60695-2-11	See appended table 28.1.1	P
28.1.2	Plugs with pins provided with insulating sleeves:		P
	Test temperature maintained for 3 h by means of the apparatus shown in figure 40 at (120 ± 5) °C / (180 ± 5) °C ..... :	120°C	—
	Impact test according to sub-clause 30.4 (mass 100 g, height 100 mm, 4 impacts): no cracks of the insulating sleeves		P
28.2	Resistance to tracking		N/A
	Parts of insulating material retaining live parts in position of accessories having IP>X0: of material resistant to tracking		N/A
	Tracking test at 175 V with solution A of IEC 60112	See appended table 28.2	N/A
29	**RESISTANCE TO RUSTING**		N/A
	Ferrous parts protected against rusting		N/A
	Test made after having removed all grease using a suitable degreasing agent: 10 min 10 % solution of ammonium chloride, 10 min in a box with air saturated with moisture and 10 min at (100 ± 5) °C:		N/A
	No signs of rust		N/A

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Cl.	Requirement – Test	Result	Verdict

30	**ADDITIONAL TESTS ON PINS PROVIDED WITH INSULATING SLEEVES**		P
30.1	**Pressure test at high temperature**		P
	Apparatus shown in figure 41, with the test specimen in position, maintained for 2 h at (200 ± 5) °C. Force applied through the blade: 2,5 N		P
	Thickness of the insulation measured: before the test (mm); after the test (mm) .....:	0.412; 0.388	—
	Thickness remaining at the point of impression is not reduced by more than 50 % of its original value measured at the start of the test: percentage value (%) .....:	5,8%	P
30.2	Static damp heat test		P
	Set of 3 specimens submitted to two damp heat cycles in accordance with IEC 60068-2-30		P
	After the test:		P
	- insulation resistance and electric strength test (clause 17)		P
	- abrasion test (sub-clause 24.7)		P
30.3	Test at low temperature		P
	Set of 3 specimens maintained at (-15 °C ± 2) °C for 24 h		P
	After the test:		P
	- insulation resistance and electric strength test (clause 17)		P
	- abrasion test (sub-clause 24.7)		P
30.4	Impact test at low temperature		P
	Specimens maintained at (-15 °C ± 2) °C for 24 h subjected to 4 impacts (mass 100 g, height 100 mm) by means of the apparatus shown in figure 42 rotating the specimen through 90 ° between impacts		P
	After the test: no crack of the insulating sleeves		P

17.1	**TABLE: insulation resistance**			P
Item per 17.1	test voltage applied between:	measured (MΩ)	required (MΩ)	
a)	between all poles connected together and the body	500	≥ 5	
b)	between each pole in turn and all others connected to the body	500	≥ 5	
supplementary information:				

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Cl.	Requirement – Test	Result	Verdict

17.2	**TABLE: electric strength**			P
	rated voltage (V) ..... :	250		—
item per 17.1	test voltage applied between:	test voltage (V)	flashover / breakdown (Yes/No)	
a)	between all poles connected together and the body	2 000	No	
b)	between each pole in turn and all others connected to the body	2 000	No	
supplementary information:				

19	**TABLE: temperature rise test**							P
	rated current of accessory (A) ..... :	16						—
	type of accessory (non-rewirable / rewirable) ..... :	non-rewirable						—
	nominal cross-sectional area per table 15 (mm^2) (rewirable accessories) / type of conductor ..... :							—
	type of conductors (rigid solid / rigid stranded / flexible) (rewirable accessories) ..... :							—
	nominal diameter of thread (mm); torque 2/3 of that specified in 12.2.8 (Nm) (rewirable accessories) ... :							—
specimen	type of flexible cable (1)	number of conductors and nominal cross-sectional area (mm^2) (1)	test circuit (L-L/L-N/L-E)	test current (table 20) for 1 h (A)	measured dT (K)	allowed dT (K)	temperature rise of external parts of insulating material (25.3)	
YL-205C	H05VV-F	3× 1,5	L-N	4	Max.8,3	45	Max.5,8	
supplementary information: (1) Non-rewirable accessories								

23.2	**TABLE: pull and torque test**		P
	rating of accessory (A) ..... :	16A 250V～	—
	type of accessory (non-rewirable / rewirable) ..... :	non-rewirable	—
	smallest/largest cross-sectional area per table 17 (mm^2) (rewirable accessories) ..... :		—
	nominal diameter of thread (mm); torque 2/3 per table 6 (Nm) (rewirable accessories) ..... :		—

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Cl.	Requirement – Test	Result	Verdict

specimen	type of flexible cable	number of conductors and nominal cross-sectional area (mm^2)	pull (100 times) (N)	torque (1 min) as specified in table 18 (Nm)	displacement (mm)	P
YL-205C	H05VV-F	3× 1,5	50	0.25	<1	P
supplementary information:						

23.4	**TABLE: flexing test**				P
	rated current (A) .....:	16A 250V～			—
specimen	type of flexible cable	number of conductors and nominal cross-sectional area (mm^2)	test current (A)	mass (N)	
YL-205C	H05VV-F	3× 1,5	16	20	P
supplementary information:					

25.2	**TABLE: ball pressure test of insulating materials**		P
	allowed impression diameter (mm) .....:	≤ 2 mm	—
part under test		test temperature (°C)	impression diameter (mm)
insert		125	0,9
supplementary information:			

25.3	**TABLE: ball pressure test of insulating materials**		N/A
	allowed impression diameter (mm) .....:	≤ 2 mm	—
part under test		test temperature (°C) (1)	impression diameter (mm)
supplementary information: (1) (70 ± 2) °C / (40 ± 2) °C + highest temperature rise determined during the test of clause 19			

27.1	**TABLE: creepage distances, clearances and distances through sealing compound**							P
	rated voltage (V) .....:	250						—
item per table 23	creepage distance dcr, clearance cl and distance through sealing compound dtsc at/of:	required cl (mm)	cl (mm)	required dcr (mm)	dcr (mm)	required dtsc (mm)	dtsc (mm)	
1) & 6)	between live parts of different polarity	≥ 3	>3,9	≥ 3	>3,9	/	/	

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Cl.	Requirement – Test	Result	Verdict

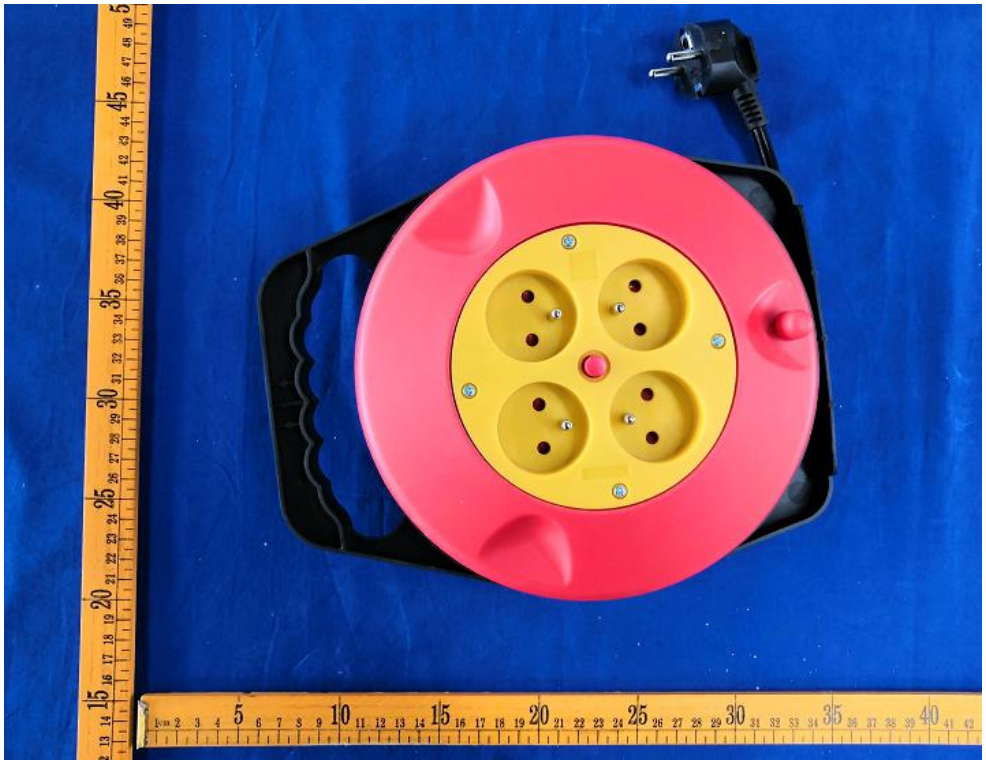
2) & 7)	between live parts and accessible surface of parts of insulating material	≥ 3	>3,9	≥ 3	>3,9	/	/
2) & 7)	between live parts and parts of earthing circuit	/	/	/	/	/	/
supplementary information:							

28.1.1	**TABLE: glow-wire test**				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)
insert	PBT	750	Y	0s	N
insulation material	PVC	650	N	N	N
supplementary information:					

28.2	**TABLE: resistance to tracking**		N/A
	number of drops ..... :	50	—

part under test	material designation	test voltage (V)	flashover / breakdown (Yes/No)
		175	
supplementary information:			

Photo document



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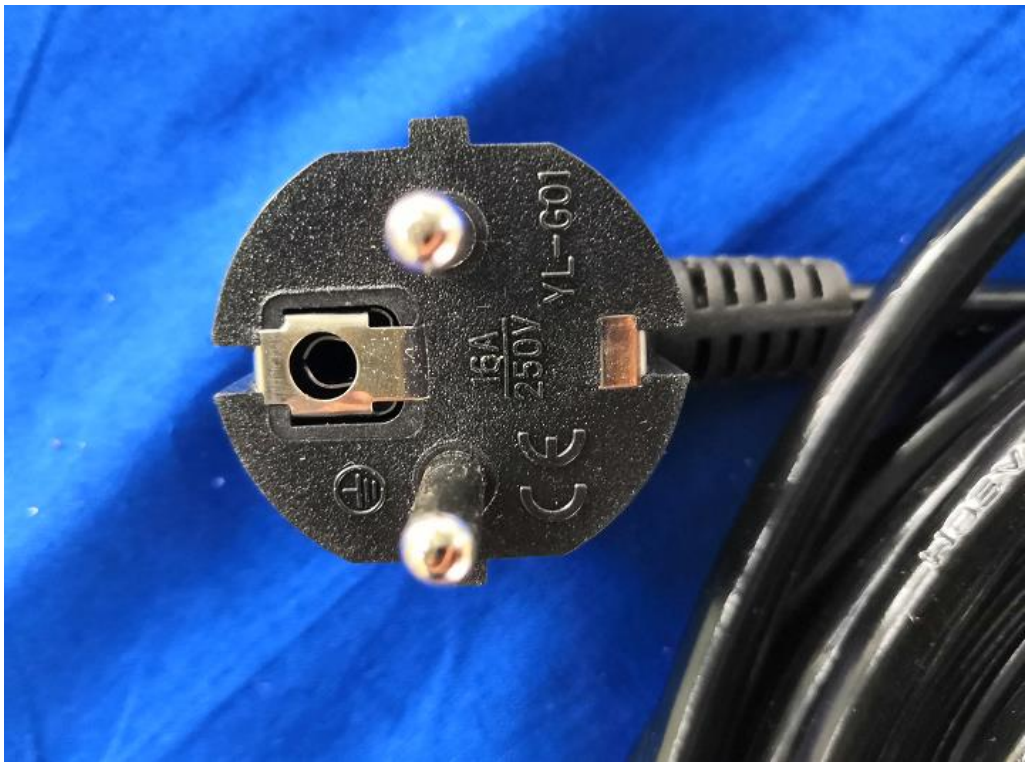

===END OF REPORT===