Test Report

Applicant : TrolMaster Agro Instruments Co., Ltd.

Product: TrolMaster

Trademark: TrolMaster

Model No: DST-1E, DSH-1E, DSC-1E, DSP-1E

Prepared by: Shenzhen Most Technology Service Co., Ltd.

The safety testing has been performed on the submitted samples and found in compliance with the IEC standards.

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LVD Report

IEC 60884-1: 2002+A1:2006+A2:2013 & IEC 60884-2-5: 2017

Plugs and socket-outlets for household and similar purposes

Part 1: General requirements

Part 2-5: Particular requirements for adaptors

Report

Reference No. ……:	MTSN19060476
Tested by (+signature) ……:	Ling Liu
Approved by (+signature) ……:	Jack Cheng
Date of issue ……:	2019-07-08

Testing laboratory

Name ……:	Shenzhen Most Technology Service Co., Ltd.
Address ……:	No. 5, 2nd Langshan Road, North District, Hi-tech Industrial Park, Nanshan, Shenzhen, Guangdong, China
Testing Location ……:	As above

Applicant

Name ……:	TrolMaster Agro Instruments Co., Ltd.
Address ……:	Room 806, Kar Wah Ind Bldg, 8 Leung Yip St, Yuen Long Ind Area, NT, HongKong, China

Test Specification

Standard ……:	IEC 60884-1:2002+A1:2006+A2:2013 & IEC 60884-2-5: 2017
Procedure deviation ……:	N/A
Non-standard test method ……:	N/A

Test item

Description ……:	TrolMaster
Trademark ……:	TrolMaster
Model/Type reference ……:	DST-1E, DSH-1E, DSC-1E, DSP-1E
Ratings ……:	AC250V, 16A, 50Hz
Manufacturer ……:	TrolMaster Agro Instruments Co., Ltd.
Address……:	Room 806, Kar Wah Ind Bldg, 8 Leung Yip St, Yuen Long Ind Area, NT, HongKong, China

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Test item particulars :	
Degree of protection against harmful ingress of water…….……..:	IP20
Provision for earthing ……:	earthing
Method of connecting the cable……:	No cable
Type of Cable……..……..…:	No cable
Plug classification ……..…:	For equipment of class I
Socket-outlets……..……..:	For equipment of class I
Degree of protection against electric shock……..…….:	Basic protection
Existence of shutters ……:	With shutters
Method of application/ Mounting of the socket-outlet ……..…:	Portable type
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)

General remarks

The test results presented in this report relate only to the object tested.

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"(see appended table)" refers to a table appended to the report.

“(see remark #)” refers to a remark appended to the report.

“(see Annex #) refers to an annex appended to the report.

Throughout this report a comma (point) is used as the decimal separator.

General Product information:

Remark :

All models are identical in electrical, mechanical, physical construction except model number.

Attached with:

A. 5 pages of photo documentation

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Summary of testing:

All the test and construction inspection were conducted in the model of DST-1E. It complied with requirement of the standard.

Copy of marking plate:

TrolMaster

Model: DST-1E

Ratings: AC250V, 16A, 50Hz

Manufacture: TrolMaster Agro Instruments Co., Ltd.

Address: Room 806, Kar Wah Ind Bldg, 8 Leung Yip St, Yuen Long Ind Area, NT, HongKong, China
Importer: XXX
Address: XXX

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IEC 60884-1 & IEC 60884-2-5			
Cl.	**Requirement – Test**	**Result - Remark**	**Verdict**
8.	**MARKING**		**P**
8.1	Accessories marked with:		**P**
	-rated current(A)……:	16A	**P**
	-rated voltage(V)……..……:	250V	**P**
	-symbol for nature of supply……:	~	**P**
	-manufacturer's or responsible vendor's name.....:		**P**
	-type reference……..……:	See the label	**P**
	-symbol for degree of protection(first digit)	2	**P**
	-symbol for degree of protection(second digit)	0	**N/A**
	Socket –outlets with screwless terminals marked with:		**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		**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**
	Symbol for the degree of protection(second digit):marked on the outside of its associated enclosure so as to be easily discernible		**N/A**

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IEC 60884-1 & IEC 60884-2-5			
Cl.	**Requirement – Test**	**Result - Remark**	**Verdict**
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……..……:		**P**
	Earthing terminals:[earth symbol]……..…:		**P**
	Markings not placed on screws or other easily removable parts		**P**
	Terminals for conductors not forming part of the main function of the socket-outlet:		**-**
	-Clearly identified unless their purpose is self evident, or		**P**
	-indicated in a wiring diagram fixed to the accessory		**N/A**
	Identification of accessory terminals may be achieved by:		**-**
	-their marking with graphical symbols according to IEC147 or colours and/or alphanumeric system, or		**N/A**
	-their physical dimension or relative location		**N/A**
8.6	Fixed socket-outlets other than ordinary: marked with the IP symbol visible when the accessory is installed	Be portable socket-outlets	**N/A**
8.7	Marking durable and easily legible. Test:15 s with water and 15 s with petroleum spirit		**P**
8.8	Indication of which position or with which special provision the declared IP of flush-type and semi-flush type fixed socket-outlets is ensured		**N/A**
	Additional indication for socket-outlets intended only for mounting on certain types of surface		**N/A**

9.	**CHECKING OF DIMENSIONS**	**P**

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IEC 60884-1 & IEC 60884-2-5			
Cl.	**Requirement – Test**	**Result - Remark**	**Verdict**
9.1	Accessories and surface-type mounting boxes comply with the appropriate standard sheets	Check of dimension for every model	**P**
	Insertion of plugs into fixed or portable socket-outlets ensured by their compliance with relevant standard sheets	Portable socket-outlets	**P**
	Compliance checked by measurement and by means of gauges with manufacturing tolerances as shown in table 2		**P**
9.2	It shall not be 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		**P**
	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		**P**
	Impossibility of insertion checked by applying a gauge, for 1 min, with a force of:		**P**
	-150N(rated current ≤16A);	No much distortion	**P**
	-250N(rated current >16A)		**N/A**
	Accessories with elastomeric or thermoplastic material: test carried out at 35℃ ±2℃		**P**
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	.	**N/A**
10.	**PROTECTION AGAINST ELECTRIC SHOCK**		**P**
10.1	Socket-outlets: live parts not accessible		**P**

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IEC 60884-1 & IEC 60884-2-5			
Cl.	**Requirement – Test**	**Result - Remark**	**Verdict**
	Live parts of plugs :not accessible when the plug is in partical or complete engagement with a socket-outlet		**P**
	Test with standard test finger shown in figure 2		**P**
	Accessories with elastomeric or thermoplastic material : additional test carried out at 35℃ ±2℃ with a straight unjointed test finger		**P**
	During the test: accessories not deform and no live parts accessible	75N for 1 minute	**P**
	Plugs and portable socket-outlets pressed with a force of 150 N for 5 min	No show deformation	**P**
10.2	Accessible parts (with exception of small screws and the like for fixing bases and cover plates): made of insulating material		**P**
	Cover or cover plates of fixed socket-outlets: made of metal if the requirement of 10.2.1 or 10.2.2 are fulfilled	Not fixed socket-outlets	**N/A**
10.2.1	Metal covers or cover plates protected by supplementary insulation made by insulating linings or insulating barriers		**N/A**
	Insulating linings or insulating barriers cannot be removed without being permanently damaged		**N/A**
	Insulating linings or insulating barriers cannot be Replaced in an incorrect position and ,if they are omitted, accessories are rendered inoperable or manifestly incomplete		**N/A**
	There is no risk of accidental contact between live parts and metal covers or cover plates		**N/A**
10.2.2	Metal covers or cover plates automatically connected, through a low-resistance connection, The earth during fixing		**N/A**
10.3	Connection between a pin of a plug and a live socket-contact of a socket-outlet not possible while any other pin is accessible		**P**

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IEC 60884-1 & IEC 60884-2-5			
Cl.	**Requirement – Test**	**Result - Remark**	**Verdict**
	Compliance checked by manual test and by means of gauges with tolerances as specified in 9.1		**P**
	Accessories with elastomeric or thermoplastic material: test carried out at 35℃ ±2℃		**P**
	Socket-outlets with enclosure or bodies of rubber or polyvingl chloride: test carried out with a force of 75 N for 1min		**P**
	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 cover or cover plates.....:		**N/A**
10.4	External parts of plugs and portable socket-outlets made of insulating material		**P**
	Overall dimensions of rings around pins not exceed 8mm concentric with respect to the pin		**P**
10.5	Shuttered socket-outlets: live parts not accessible, without a plug in engagement, with the gauge shown in figure 4		**P**
	Live contacts automatically screened when the plug is withdrawn		**P**
	Means cannot easily be operated by anything other than a plug and not depend upon parts which are liable to be lost		**P**
	Gauge applied to the entry holes corresponding to live contacts with a force up to 1 N shall not touch live parts		**P**
	Accessories with elastomeric or thermoplastic Material: test carried out at 35℃ ±2℃		**P**
10.6	Earthing contacts of a socket-outlet designed that they cannot be deformed by the insertion of a plug		**P**
	Test plug inserted into the socket-outlet with a force of 150 N for 1 min.		**P**

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Cl.	**Requirement – Test**	**Result - Remark**	**Verdict**
	After this test: socket-outlet still comply with the requirements of clause 9		**P**
10.7	socket-outlet with increased protection: live parts not accessible		**P**
	Gauge of figure 4 applied with a force of 1 N on all Accessories surfaces shall not touch live parts		**P**
	Accessories with elastomeric or thermoplastic material: test carried out at 35℃ ±2℃		**P**
11.	**PROVISION FOR EARTHING**		**P**
11.1	Earthing connection made before the current-carrying contacts of the plug become live		**P**
	Current-carrying pins shall separate before the Earthing connection is broken		**P**
11.2	Earthing terminals of rewirable accessories comply with clause 12		**N/A**
	Earthing terminals of the same size as the corresponding terminals for the supply conductors		**N/A**
	Any additional external earthing terminals of fixed socket-outlets of size suitable for conductors of at least 6 mm^2		**N/A**
	Earthing terminals of rewirable accessories: internal		**N/A**
	Earthing terminals of fixed socket-outlets: fixed to The base or to a part reliably fixed to the base		**N/A**
	Earthing contacts of fixed socket-outlets:		**N/A**
	-fixed to the base, or		**N/A**
	-fixed to the cover (reliably connected to the earthing terminals; contact pieces silver plated or with adequate protection)		**N/A**
	Parts of earthing circuit in one piece or reliably Connected by riveting, welding, or the like		**N/A**

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IEC 60884-1 & IEC 60884-2-5			
Cl.	**Requirement – Test**	**Result - Remark**	**Verdict**
11.3	Accessories metal parts of fixed socket-outlets: Permanently and reliably connected to the earthing terminal		**N/A**
11.4	socket-outlets, other than ordinary, with enclosure of insulating material and more than one cable inlet, provided with an internal earthing terminal for the continuity of the earthing circuit		**N/A**
	Earthing terminals allows the connection of an incoming and an outgoing earthing conductor together		**N/A**
11.5	Connection between earthing terminal and accessible metal parts: of low resistance		**N/A**
	Test:		**-**
	Test current equal to 1,5 times the rated current or 25(A)……:		**N/A**
	Resistance not exceed 0,05(Ω)……:		**N/A**
12.	**TERMINALS**		**P**
	All the test on terminals, with the exception of the test of 12.3 11, made after the test of clause16		**P**
12.1	General		**P**
12.1.1	Rewirable fixed socket-outlets provided with screw-type terminals or with screwless terminal..:		**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 squeezed area of screw-type terminals		**N/A**
	Clamping means of terminals: not serve to fix any other components		**N/A**

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Cl.	**Requirement – Test**	**Result - Remark**	**Verdict**
12.1.2	Non-rewirable accessories provided with soldered, welded, crimped or equally effective permanent connections……:		**P**
	Screwed or snap-on connections not used		**N/A**
	Connections made by crimping a pre-soldered Flexible conductor not permitted		**N/A**
12.2	Terminals with screw clamping for external copper conductors		**N/A**
12.2.1	Accessories provided with terminals which Allows the proper connection of copper conductors as shown in table 3		**N/A**
	Rated current(A);type of accessories.....:		**N/A**
	Type of conductor(rigid/flexible)……..……..:		**N/A**
	Smallest/largest cross-sectional area(mm^2)		**N/A**
	Diameter of the largest conductor(mm)		**N/A**
	Figure of terminal……....……:		**N/A**
	Minimum diameter D(minimum dimensions) of Conductor space: required (mm);measured(mm):		**N/A**
12.2.2	Terminals allow the conductor to be connected Without special preparation		**N/A**
12.2.3	Terminals have adequate mechanical strength		**N/A**
	Screws and nut for clamping the conductors Have metric ISO thread or a comparable thread		**N/A**
	Screws not of soft metal such as zinc or aluminium		**N/A**
12.2.4	Terminals resistant to corrosion		**N/A**
12.2.5	Screw-type terminals clamp the conductor(s) Without undue damage		**N/A**
	Test with apparatus shown in figure 32:		**N/A**
	-type of conductors……:		**N/A**
	-number of conductors……..……:		**N/A**
	-smallest cross-sectional area (mm^2)(table3); Diameter of bushing hole (mm); height H(mm); Mass(kg)……:		**N/A**
	-largest cross-sectional area (mm^2)(table3); Diameter of bushing hole (mm); height H(mm); Mass(kg)……:		**N/A**

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Cl.	**Requirement – Test**	**Result - Remark**	**Verdict**
	-nominal diameter of thread (mm); torque According to table 6(Nm)		**N/A**
	During the test: conductor not slip out, no break Near clamping unit and no damage		**N/A**
12.2.6	Terminals clamps the conductor reliably between Metal surfaces		**N/A**
	Pull test(1 min):		**N/A**
	-type of conductors……..……:		**N/A**
	-number of conductors…… ……..……..:		**N/A**
	-smallest cross-sectional area (mm^2) (table 3); pull(N)		**N/A**
	-largest cross-sectional area (mm^2) (table 3); pull(N)		**N/A**
	-torque (Nm) (2/3 table 6)…….:		**N/A**
	During the test: conductor not move noticeably		**N/A**
12.2.7	Terminals designed or placed that the conductor Cannot slip out while the clamping screws or nuts Are tightened		**N/A**
	-largest cross-sectional area (mm^2) (table3)		**N/A**
	-number of wires and nominal diameter of wires(table 5):		**N/A**
	Fixed socket-outlets: rigid solid conductors/rigid Stranded conductors…….:		**N/A**
	Plugs and portable socket-outlets: flexible Conductors…… ……..……:		**N/A**
	-terminals intended for looping-in 2or 3 Conductors: permissible number of conductors…:		**N/A**
	-torque (Nm)(2/3 table 6)…….……:		**N/A**
	After the test: no wire of the conductor escaped Outside the clamping unit		**N/A**
12.2.8	Terminals not work loose from their fixing to accessories		**N/A**
	Torque test:		**N/A**
	-rigid solid copper conductor of the largest cross-Sectional area (mm^2)(table 3)……..……:		**N/A**
	-torque (Nm) (table 6 appropriate figures 34,35,36)..:		**N/A**

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Cl.	**Requirement – Test**	**Result - Remark**	**Verdict**
	Screws and nuts tightened and loosed 5 times. During the test: terminals not work loose and show no damage		**N/A**
12.2.9	Clamping screws or nuts of earthing terminal: Adequately locked against accidental loosing, not Possible to loosen them without the aid of a tool		**N/A**
12.2.10	earthing terminals: no risk of corrosion		**N/A**
	Body of brass or other metal no less resistant to corrosion		**N/A**
	If the body is a part of a frame or enclosure of Aluminium alloy, precautions shall be taken to avoid the risk of corrosion		**N/A**
12.2.11	Pillar terminals: distance g no less than the value Specified in figure 37: required (mm); measured (mm)……:		**N/A**
	Mantle terminals: distance g no less than the value specified in figure 37: required (mm); measured(mm)……..……:		**N/A**
12.3	Screwless terminals for external copper conductors		**N/A**
12.3.1	Screwless terminals of the type suitable for:		**N/A**
	-for rigid copper conductors only, or	No external copper conductors	**N/A**
	-for both rigid and flexible copper conductors (tests carried out with rigid and then repeated with flexible conductors)		**N/A**
12.3.2	Screwless terminals provided with two clamping Units each allowing the proper connection of rigid or of rigid and flexible conductors having nominal Cross-sectional areas from 1,5 up to 2,5 mm^2 (table 7)		**N/A**
	Two conductors to be connected :each conductor Introduced in a separate clamping unit		**N/A**
12.3.3	Screwless terminals allow the conductors to be Connected without special preparation		**N/A**
12.3.4	Parts of screwless terminals intended for carrying Current of materials as specified in 26.5		**N/A**
12.3.5	screwless terminals clamp specified conductors with sufficient contact pressure without undue damage to the conductor		**N/A**
	Conductor clamped between metal surfaces		**N/A**

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Cl.	**Requirement – Test**	**Result - Remark**	**Verdict**
12.3.6	It shall be clear how the connection and Disconnection of the conductors is to be made		**N/A**
	Disconnection of a conductor require an operation, other than a pull, so that can be made manually with or without a general-purpose tool		**N/A**
	It shall not be possible to confuse the opening for The use of a tool with the opening intended for the conductor		**N/A**
12.3.7	Screwless terminals intended for the interconnection of two or more conductors:		**N/A**
	-during insertion, operation of clamping means of One of the conductors is independent of operation of that for the other conductor(s)；		**N/A**
	-during disconnection, conductors can be Disconnected either at the same time or separately;		**N/A**
	-each conductor introduced in a separate clamping unit.		**N/A**
	It shall be possible clamp securely any number of Conductors up to the maximum as designed. Number of conductors; nominal cross-sectional Area(mm^2)……..……:		**N/A**
12.3.8	screwless terminals of fixed socket-outlets: adequate insertion obvious and over-insertion prevented		**N/A**
12.3.9	screwless terminals properly fixed to the socket-outlets		**N/A**
	Not work loose when conductors are connected or disconnected		**N/A**
	Self-harding resins used to fix terminals not Subject to mechanical stress		**N/A**
12.3.10	screwless terminals withstand mechanical stresses occurring in normal use		**N/A**
	Test:		**N/A**
	Connection/disconnection 5 times: rigid solid Conductor 2,5mm^2		**N/A**
	Connection/disconnection 5 times: rigid solid Conductor 1,5mm^2		**N/A**
	Conductor subjected to a pull of 30N for 1 min After each connection. During application of the pull conductor not come out of the terminal		**N/A**
	Connection/disconnection 1 time: rigid stranded Conductor 2,5mm^2		**N/A**

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IEC 60884-1 & IEC 60884-2-5			
Cl.	**Requirement – Test**	**Result - Remark**	**Verdict**
	Connection/disconnection 1 time: rigid stranded Conductor 1,5mm^2		**N/A**
	Conductor subjected to a pull of 30N for 1 min After each connection. During application of the pull conductor not come out of the terminal		**N/A**
	Additional test on terminals intended for both rigid and flexible conductors:		**N/A**
	Connection/disconnection 5 times: flexible Conductor 2,5mm^2		**N/A**
	Connection/disconnection 5 times: flexible Conductor 1,5mm^2		**N/A**
	Conductor subjected to a pull of 30N for 1 min After each connection. During application of the pull conductor not come out of the terminal		**N/A**
	Additional test with apparatus shown in figure 32:		**N/A**
	-type of conductors……..……:		**N/A**
	-number of conductors……..……:		**N/A**
	-1,5mm^2; diameter of bushing hole 6,5 mm; height H 260 mm; mass 0,4 kg		**N/A**
	-2,5mm^2; diameter of bushing hole 9,5 mm; height H 280 mm; mass 0,7 kg		**N/A**
	During the test: conductors not move noticeably in The clamping unit		**N/A**
	After the test: neither terminals nor clamping Means have worked loose and conductors show No deterioration		**N/A**
12.3.11	Screwless terminals withstand electrical and thermal stress occurring in normal use		**N/A**
	Test a) carried out for 1 h connecting rigid solid conductors:		**N/A**
	-test current (A) (table 10)……..:		**N/A**
	-nominal cross-sectional area (mm^2)……..:		**N/A**
	-screwless terminal number ……..……..:	1 2 3 4 5	**N/A**
	-voltage drop measured(mV)(requirement: ≦ 15mV)		**N/A**
	Test b) (temperature cycles test) carried out on terminals subjected to test a):		**N/A**
	-test current (A) (table 10)……..……:		**N/A**
	-cross-sectional area (mm^2)……..:		**N/A**

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IEC 60884-1 & IEC 60884-2-5			
Cl.	**Requirement – Test**	**Result - Remark**	**Verdict**

	-screwless terminal number ……..……..:	1	2	3	4	5	**N/A**
	-voltage drop measured after the 24 cycle (requirement: ≦22,5mV						**N/A**
	-voltage drop measured (mV) after 48th cycle……:						**N/A**
	-voltage drop measured (mV) after 72th cycle……:						**N/A**
	-voltage drop measured (mV) after 96th cycle..…..:						**N/A**
	-voltage drop measured (mV) after 120th cycle….:						**N/A**
	-voltage drop measured (mV) after 144th cycle….:						**N/A**
	-voltage drop measured (mV) after 168th cycle….:						**N/A**
	-voltage drop measured (mV) after 192th cycle….:						**N/A**
	-requirement: ≦22,5mV or 2 times 24th cycle Value (mV)……..……..……..:						**N/A**
	After this test: inspection show no changes						**N/A**
	Mechanical strength test according 12.3.10:						**N/A**
	Connection/disconnection 5 times: rigid solid Conductor 2,5 mm^2						**N/A**
	Connection/disconnection 5 times: rigid solid Conductor 1,5 mm^2						**N/A**
	Conductor subjected to a pull of 30N for 1 min After each connection. During application of the pull conductor not come out of the terminal						**N/A**
	Connection/disconnection 1 time: rigid stranded Conductor 2,5 mm^2						**N/A**
	Connection/disconnection 1 time: rigid stranded Conductor 1,5 mm^2						**N/A**
	Conductor subjected to a pull of 30N for 1 min After each connection. During application of the pull conductor not come out of the terminal						**N/A**
	Additional test on terminals intended for both rigid and flexible conductors:						**N/A**
	Connection/disconnection 5 times: flexible Conductor 2,5 mm^2						**N/A**
	Connection/disconnection 5 times: flexible Conductor 1,5 mm^2						**N/A**
	Conductor subjected to a pull of 30N for 1 min After each connection. During application of the pull conductor not come out of the terminal						**N/A**
	Additional test with apparatus shown in figure 32:						**N/A**

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Cl.	**Requirement – Test**	**Result - Remark**	**Verdict**
	-type of conductors……..…….:		**N/A**
	-number of conductors……..……:		**N/A**
	-1,5 mm^2;diameter of bushing hole 6,5 mm; height H 260 mm; mass 0,4 kg		**N/A**
	-2,5 mm^2;diameter of bushing hole 9,5 mm; height H 280 mm; mass 0,7 kg		**N/A**
	During the test: conductors not move noticeably in The clamping unit		**N/A**
	After these tests: neither terminals nor clamping Means have worked loose and conductors show No deterioration		**N/A**
12.3.12	Screwless terminals: connected rigid solid Conductor remains clamped, even when deflected during normal installation		**N/A**
	Deflection test (principle of test apparatus shown in figure 33 a)):		**N/A**
	-test current (A) (equal rated current)…….……:		**N/A**
	Smallest cross-sectional area (mm^2) (table 11) …:		**N/A**
	Force (N) (table 12)……..…:		**N/A**
	-screwless terminal number……..…..:	1 / 2 / 3	**N/A**
	-screwless point (x=deflection original point)…….:	X / X+10° / X+20°	**N/A**
	-voltage drop measured (mV) (1st deflection).....:		**N/A**
	-voltage drop measured (mV) (2nd deflection)…....:		**N/A**
	-voltage drop measured (mV) (3rd deflection)…....:		**N/A**
	-voltage drop measured (mV) (4th deflection)…....:		**N/A**
	-voltage drop measured (mV) (5th deflection)…....:		**N/A**
	-voltage drop measured (mV) (6th deflection)…....:		**N/A**
	-voltage drop measured (mV) (7th deflection).....:		**N/A**
	-voltage drop measured (mV) (8th deflection)…..:		**N/A**
	-voltage drop measured (mV) (9th deflection)…....:		**N/A**
	-voltage drop measured (mV) (10th deflection)…..:		**N/A**
	-voltage drop measured (mV) (11tht deflection)…..:		**N/A**

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Cl.	**Requirement – Test**	**Result - Remark**	**Verdict**

	-voltage drop measured (mV) (12th deflection)…..:				**N/A**
	-requirement: ≦25mV				**N/A**
	Largest cross-sectional area(mm^2) (table 11)……:				**N/A**
	Force (N) (table 12)……..…..:				**N/A**
	-screwless terminal number……...…...:	1	2	3	**N/A**
	-strating point (x=deflection original point)…..…..:	X	X+10°	X+20°	**N/A**
	-voltage drop measured (mV) (1st deflection)…….:				**N/A**
	-voltage drop measured (mV) (2nd deflection)……:				**N/A**
	-voltage drop measured (mV) (3rd deflection)…….:				**N/A**
	-voltage drop measured (mV) (4th deflection)…....:				**N/A**
	-voltage drop measured (mV) (5th deflection)…....:				**N/A**
	-voltage drop measured (mV) (6th deflection)…....:				**N/A**
	-voltage drop measured (mV) (7th deflection)…….:				**N/A**
	-voltage drop measured (mV) (8th deflection)…....:				**N/A**
	-voltage drop measured (mV) (9th deflection)…....:				**N/A**
	-voltage drop measured (mV) (10th deflection)…..:				**N/A**
	-voltage drop measured (mV) (11th deflection)…..:				**N/A**
	-voltage drop measured (mV) (12th deflection)…..:				**N/A**
	-requirement: ≦25mV				**N/A**

13.	**CONSTRUCTION OF FIXED SOCKET-OUTLETS**		**N/A**
13.1	Socket-contact assembly: sufficient resiliency		**N/A**
13.2	Socket-contact and pins of socket-outlets: resistant to corrosion		**N/A**
13.3	Insulating linings, barriers and the like: adequate Mechanical strength		**N/A**

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Cl.	**Requirement – Test**	**Result - Remark**	**Verdict**
13.4	Socket-outlets constructed as to permit		**N/A**
	-easy fixing of the base to a wall or in a mounting box		**N/A**
	-easy introduction and connection of the conductor in the terminals		**N/A**
	-correct positioning of the conductors		**N/A**
	-adequate space between the underside of the Base and the surface on which the base is Mounted-surface mounted		**N/A**
	-adequate space between the underside of the Base and the sides of the base and the enclosure (cover or box)-flush mounted		**N/A**
	Socket-outlets classified as design A: permit easy Positioning and removal of the cover or cover Plate, without displacing the conductors		**N/A**
13.5	Socket-outlets designed that full engagement of Associated plugs is not prevented by any Projection from their engagement face		**N/A**
	Gap between the engagement face of the socket-Outlet and the plug :not exceed 1 mm		**N/A**
13.6	Covers provided with bushing for the entry holes For the pins: not possible to remove them from the Inadvertently from the inside when the cover is removed		**N/A**
13.7	Covers, cover-plates or parts of them intended to ensure protection against electric shock:		**N/A**
	-held in place at two or more points by effective fixing		**N/A**
	-Fixed by means of a single fixing, e.g. by a screw, provided that they are located by another means (e.g. by a shoulder)		**N/A**
	Fixings of covers or cover-plates of socket-outlets Of design A serve to fix the base : there shall be Means to maintain the base in position, even after Removal of the covers or cover-plates		**N/A**
13.7.1	covers or cover-plates whose fixing are of the screw-type:		**N/A**
	Compliance checked by inspection only		**N/A**
13.7.2	covers or cover-plates 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/A**

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Cl.	**Requirement – Test**	**Result - Remark**	**Verdict**
	Compliance checked, when their removal may give access, with the standard Test finger:		**N/A**
	To live parts: by the test of 24.14(verification of the non-removal and the removal)		**N/A**
	To non-earthed metal parts separated from live Parts in such a way that creepage distances and Clearances have the values shown in table 23:by The test of 24.15(verification of the non-removal and the removal)		**N/A**
	Only to insulating parts, or earthed metal parts, Or metal parts separated from live parts in such A way that creepage distances and clearances have twice the values shown in table 23, or live parts of SEL V circuits not greater than 25 V a .c.:by the test of 24.16(verification of the on-removal only)		**N/A**
13.8	Cover-plate intended for a socket-outlet with Earthing contact: not interchangeable with a Cover-plate intended for a socket-outlet without Earthing contact		**N/A**
13.9	Ordinary surface-type socket-outlets: no free Opening in the enclosure		**N/A**
13.10	Screws or other means for mounting the socket-Outlet on a surface in a box or enclosure: easily Accessible from the front.		**N/A**
	Fixing means not serve any other fixing purpose		**N/A**
13.11	Multiple socket-outlets with a common base: Provided with fixed links for the interconnection of The contacts in parallel		**N/A**
	Fixing of the links independent of the connection Of the supply wires		**N/A**
13.12	Multiple socket-outlets, comprising separate bases: correct position of each base ensured		**N/A**
	fixing of each base independent of the fixing of the combination to the mounting surface		**N/A**
13.13	mounting plate of surface-type socket-outlets: adequate mechanical strength		**N/A**
13.14	multiple socket-outlets: consist of a combination of socket-outlets which are either all provided with or all without earthing contacts		**N/A**
13.15	socket-outlets withstand the lateral strain imposed by equipment likely to be introduced into them		**N/A**

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Cl.	**Requirement – Test**	**Result - Remark**	**Verdict**
	socket-outlets 16A 250V:test made 4 times with the socket-outlet turned through 90°,5N for 1 min (device shown in fig.6)		**N/A**
	during the test:		**N/A**
	-no damage		**N/A**
	-socket-outlets comply with clause 22		**N/A**
13.16	socket-outlets shall not be an integral part of lampholdeds		**N/A**
13.17	socket-outlets other than ordinary :totally enclosed when fitted with screwed conduits or with polyvinyl chloride(p. v. c.)sheathed or similar type cables and without a plug in postion		**N/A**
	surface-type socket-outlets other than ordinary shall have provision for opening a drain hole of at least 5 mm in diameter, or 20 mm^2 in area with a width and a length of at least 3mm.....		**N/A**
	Drain hole: effective		**N/A**
	lid springs (if any): of corrosion resistant material (bronze or stainless steel)		**N/A**
13.18	earthing pins: adequate mechanical strength		**N/A**
	not solid pins: compliance checked by inspection and by the test of 14.2 made after the tests of clause 21		**N/A**
13.19	earthing contacts and neutral contacts: locked against rotation and removable only with the aid of a tool, after dismantling the socket-outlet		**N/A**
	metal strips of the earthing circuit: no burrs which might damage the insulation of the supply conductors		**N/A**
13.21	socket-outlets to be installed in a box: designed that the conductor ends can be prepared after the box is mounted in position, but before the socket-outlet is fitted in the box		**N/A**
13.22	inlet openings: allow the introduction of the conduit or the sheath of the cable		**N/A**
	surface-type socket-outlets:		**N/A**
	the conduit or sheath of the cable can enter at least 1mminto the enclosure		**N/A**

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Cl.	**Requirement – Test**	**Result - Remark**	**Verdict**
	inlet opening for conduit entries, or at least two of them if there are more than one, capable of accepting conduit sizes of 16,20,25 or 32 or a combination of at least two of any of these sizes		**N/A**
	inlet opening for cable entries capable of accepting cables having the dimensions specified in table 14 or be as specified by the manufacturer: rated current (A); Limits of external dimensions of cable min/max(mm)……..:		**N/A**
13.23	membranes(grommets) in inlet openings: reliably fixed and not displaced by the mechanical and thermal stresses occurring in normal use		**N/A**
	test on membranes subjected to the ageing treatment specified in 16.1 and assembled in the accessories		**N/A**
	accessories placed at 40℃for 2 h. force of 30 N applied for 5 s by test finger. During the test: no deformation		**N/A**
	membranes likely to be subjected to an axial pull: axial pull of 30 N applied for 5 s. during the test: membranes not come out		**N/A**
	after the test: no harmful deformation, cracks or similar damage		**N/A**
	test repeated with membranes not subjected to any treatment		**N/A**
13.24	membranes in inlet openings: introduction of the cables into the accessory permitted when the ambient temperature is low		**N/A**
	test on membranes not subjected to the ageing treatment specified in 16.1 and assembled in the accessories		**N/A**
	accessories kept at -15℃ for 2 h: possibility to introduce cables of the largest diameter through membranes		**N/A**
	after the test: no harmful deformation, cracks or similar damage		**N/A**

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IEC 60884-1 & IEC 60884-2-5			
Cl.	**Requirement – Test**	**Result - Remark**	**Verdict**
14.	**CONSTRUCTION OF PLUGS AND PORTABLE SOCKET-OUTLETS**		**P**
14.1	non-rewirable plug or non-rewirable portable socket-outlet:		**N/A**
	flexible cable cannot be separated from the accessory without making it permanently useless		**N/A**
	accessory 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 plugs and portable socket-outlets: adequate mechanical strength		**P**
	test for pins not solid (made after clause 21):force of 100N exerted on the pin for 1 min by means of a steel rod Φ4,8 mm		**P**
	during the application of the force: reduction of the dimension of the pin not exceed 0,15mm		**P**
	after removal of the rod: dimensions of the pin not changed by more than 0,06 mm		**P**
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 replace in an incorrect position		**P**
14.4	earthing contacts and neutral contacts of portable socket-outlets:		**P**
	-locked against rotation		**P**
	-removable only with the aid of a tool, after dismantling the socket-outlet		**P**
14.5	socket-contact assemblies: sufficient resiliency		**P**

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Cl.	**Requirement – Test**	**Result - Remark**	**Verdict**
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:		**N/A**
	-conductors can be properly connected		**N/A**
	-cores not pressed against each other		**N/A**
	-cores of live conductor not in contact with accessible metal parts		**N/A**
	-core of earthing conductor not in contact with live parts		**N/A**
14.8	Rewirable accessories: terminal screws or nuts cannot become loose and fall out of position and establish an electrical connection between live parts and earthing terminal or metal parts		**N/A**
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		**N/A**
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		**N/A**
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**

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IEC 60884-1 & IEC 60884-2-5			
Cl.	**Requirement – Test**	**Result - Remark**	**Verdict**
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**
	free wire of a conductor connected to a live terminal not touch any accessible metal part or reduce creepage 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:		**N/A**
	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	Rewirable plugs and rewirable portable socket-outlets:		**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 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**
	-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**

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Cl.	**Requirement – Test**	**Result - Remark**	**Verdict**
14.13	covers of portable socket-outlets: bushing for entry holes for the pins not removable from the outside or detachable inadvertently from the inside	No such bushing	**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 projections		**P**
14.17	accessories other than ordinary: provided with grand(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		**P**
	no free openings between space intended for suspension means fixed to the wall and live parts		**P**
14.19	combinations of plugs and socket-outlets with circuit-breakers or other protective devices comply with relevant standards, if any.....:		**N/A**
14.20	portable accessories: not integral part of lampholders		**P**
14.21	plugs for equipment of class II:		**N/A**
	-non-rewirable		**N/A**
	-if incorporated in a cord set: provided with a connector for equipment of class 11		**N/A**

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Cl.	**Requirement – Test**	**Result - Remark**	**Verdict**
	-if incorporated in a cord extension set: provided with a portable socket-outlet for equipment of class 11		**N/A**
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):		**P**
14.23.1	socket-outlet connected to a supply voltage equal to 1,1 times the highest rated voltage of the equipment(V)……..……:	275V	**P**
	temperature rise of the pins after 1 h not exceed 45 K(k)……..:		**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)……..……..:		**P**
14.24	plugs: can easily withdrawn by hand from the relevant socket-outlet		**P**
	gripping surfaces: so designed that the plug can be withdrawn without pull on the flexible cable		**P**
14.25	membranes in inlet openings: meet the requirements of 13.23 and 13.24		**N/A**

15.	**INTERLOCKED SOCKET-OUTLETS**		**N/A**
	socket-outlet interlocked with a switch:		**N/A**
	plug cannot be inserted into or completely withdrawn from the socket-outlet while the socket-contacts are live		**N/A**

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Cl.	**Requirement – Test**	**Result - Remark**	**Verdict**
	socket-contacts cannot be made live until a plug is almost completely in engagement		**N/A**
16.	**RESISTANCE TO AGEING, TO HARMFUL INGRESS OF WATER AND TO HUMIDITY**		**P**
16.1	resistance to aging		**P**
	Accessories shall be resistant to ageing		**P**
	accessories subjected to a test in a heating cabinet at 70℃±2℃ for seven days (168 h)		**P**
	after the tests, samples shall 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**
16.2	resistance to harmful ingress of water		**N/A**
	enclosure of accessories other than ordinary shall provided 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:		**N/A**
	-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:		**N/A**
	-largest cross-sectional area (mm^2); type of cable (table 27)……..:		**N/A**

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Cl.	**Requirement – Test**	**Result - Remark**	**Verdict**
	-smallest cross-sectional area (mm^2); type of cable (table 27)……..:		**N/A**
	mounting screws tightened with a torque equal to 2/3 of the torque given in table 6 (Nm)……..…..:		**N/A**
	glands tightened with a torque equal to 2/3 of the torque applied during the test of 24.6(Nm)…….:		**N/A**
	Fixed and portable socket-outlets tested without a plug in engagement		**N/A**
	plugs tested with 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 water		**N/A**
16.2.2	splash-proof accessories subjected to the test IPX4 according to IEC 529		**N/A**
16.2.3	jet-proof accessories subjected to the test IPX5 according to IEC 529		**N/A**
16.2.4	specimens withstand an electric strength test specified in17.2 which is started within 5 min after 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 ordinary accessories		**P**
	-seven days(168 h) for accessories other than ordinary		**N/A**

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Cl.	**Requirement – Test**	**Result - Remark**	**Verdict**
	After this treatment the specimens show no damage		**P**
17.	**INSULATION RESISTANCE AND ELECTRIC STRENGTH**		**P**
17.1.1	for socket-outlets: insulation resistance (500 V d. c .for 1 min):		**P**
	a)between all poles connected together and the body, with a plug in engagement ≧5MΩ…….…. :	>9999MΩ	**P**
	b)between each pole in turn and all others connected to the body ,with a plug in engagement ≧5MΩ	>9999MΩ	**P**
	c)between any metal encloses and metal foil in contact with the inner surface of its insulating linings, if any ≧5MΩ		**N/A**
	d)between any metal part of the cord anchorage, including clamping screws, and earthing terminal or earthing contact, if any, of portable socket-outlets≧5MΩ		**N/A**
	e)between any metal part of the cord anchorage of portable socket-outlets and a metal rod of the maximum diameter of the flexible cable inserted in its place ≧5MΩ		**N/A**
17.1.2	for plugs: insulation resistance (500 V d. c. for 1 min):		**P**
	a)between all poles connected together and the body ≧5MΩ…		**P**
	b) between each pole in turn and all others connected to the body ≧5MΩ		**P**
	c)between any metal part of the cord anchorage, including clamping screws, and earthing terminal or earthing contact, if any ≧5MΩ		**N/A**
	d) between any metal part of the cord anchorage and a metal rod of the maximum diameter of the flexible cable inserted in its place ≧5MΩ		**N/A**

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Cl.	**Requirement – Test**	**Result - Remark**	**Verdict**
17.2	socket-outlets: electric strength, test voltage(a. c. , for 1 min):		**P**
	a) test voltage(V)		**P**
	b) test voltage(V)		**N/A**
	c) test voltage(V) ……..……..:		**N/A**
	d) test voltage(V) ……..……..:		**N/A**
	plugs: electric strength, test voltage (a.c., for 1 min):		**P**
	a) test voltage(V)		**P**
	b) test voltage(V):		**N/A**
	c) test voltage(V) ……..…..…..:		**N/A**
	d) test voltage(V) ……..……..:		**N/A**
	during the test no flashover or breakdown		**P**
18.	**OPERATION OF EARTHING CONTACTS**		**P**
	Earthing contacts provide adequate contact pressure and not deteriorate in normal use		**P**
	Compliance checked by the tests of clauses 19 and 21		**P**
	force exerted measured in side earthing contacts not less than 5 N(CEE 7 clause 18)……..:		**P**
19.	**TEMPERATURE RISE**		**P**
	Non-rewirable accessories tested as delivered:		**P**
	Rewirable accessories fitted with polyvinyl chloride insulated conductors having a nominal cross-sectional area as shown in table 15:		**N/A**
	-rated current of accessory……...:		**N/A**
	-nominal cross-sectional area (mm^2)		**N/A**
	-type of conductors……..……..:		**N/A**

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Cl.	**Requirement – Test**	**Result - Remark**	**Verdict**
	Terminal screws or nuts tightened with a torque equal to 2/3 of that specified in 12.2.8 (Nm)……..:		**N/A**
	socket-outlets tested using a test plug with brass pins having the minimum specified dimensions		**P**
	plugs 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		**N/A**
	Test current as specified in table 20 passed for 1 h (A)……..:		**P**
	Temperature rise of terminals not exceed 45 K (K)……..:	See table 19	**P**
	separate tests made passing the current through:		**P**
	-the neutral contact, if any, and the adjacent phase contact(K)……..……..:		**P**
	-the earthing contact, if any, and the nearest phase contact(K)……..:		**P**
	Temperature rise of external parts of insulating material not necessary to retain current-carrying parts and parts of the earthing circuit in position (K)……..:		**P**
20.	**BREAKING CAPACITY**		**P**
	Accessories shall have adequate breaking capacity		**P**
	compliance checked by testing:		**P**
	-socket-outlets;		**P**
	-plugs with pins which are not solid		**P**
	test conditions:		**P**
	-100 strokes; rate of operation……..……...:	30 strokes per minute	**P**

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Cl.	**Requirement – Test**	**Result - Remark**	**Verdict**
	-test voltage(1,1 V n)……..:	275V	**P**
	-test current (1,25 In)(power factor 0,6)……..:	20A	**P**
	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:		**P**
	-specimens show no damage impairing their further use;		**P**
	-entry holes for the pins not show any damage which may impair the safety		**P**
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-outlets;		**P**
	-plugs with resilient earthing socket-contacts;		**P**
	-plugs 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:		**N/A**
	-specimens with shutters(without current flowing)		**P**
	-complete shuttered socket-outlets with operations made by hand as in normal use		**N/A**
	Test conditions:		**P**
	-10000 strokes; rate of operation……..:	30 strokes per minute	**P**

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Cl.	**Requirement – Test**	**Result - Remark**	**Verdict**
	-test voltage V n(V)……:	250V	**P**
	-test current (as specified in table 20)(A) (power factor 0,8)……:		**P**
	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**
	Multiple socket-outlets: test carried out on one socket-outlet of each type and current rating		**N/A**
	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 enclosure, 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		**P**
	shuttered socket-outlets: the following gauges not touch live parts when they remain under the relevant forces:		**P**
	-gauges of figure 3 applied with a force up to 20 N		**P**
	-steel gauge of figure 4 applied with a force up to 1N		**P**
	Temperature-rise test (requirements of clause 19):		**P**
	Test current as required for the normal operation test, given in table 20,passed for 1 h (A)……:		**P**
	Temperature rise of terminals not exceed 45 k (K)……..……:		**P**
	separate tests made passing the current through:		**P**

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Cl.	**Requirement – Test**	**Result - Remark**	**Verdict**
	-the neutral contact, if any, and the adjacent phase contact(K)……..…..:		**N/A**
	-the earthing contact, if any, and the nearest phase contact(K)……..……..:		**P**
	socket-outlets: electric strength (sub-clause 17.2),test voltage (a. c., for 1 min):		**P**
	a)test voltage(v) ……..……:	1500V	**P**
	b)test voltage(v) ……..……:		**N/A**
	c)test voltage(v) ……..……:		**N/A**
	d)test voltage(v) ……..……:		**N/A**
	e)test voltage(v) ……..……:		**N/A**
	plugs: electric strength (sub-clause 17.2), test voltage (a. c ., for 1 min):		**P**
	a)test voltage(v) ……..……:		**P**
	b)test voltage(v) ……..……:		**N/A**
	c)test voltage(v) ……..……:		**N/A**
	d)test voltage(v) ……..……:		**N/A**
	During the test : no flashover or breakdown		**P**
	fixed socket-outlets: test according to 13.1		**N/A**
	pins of plugs and portable socket-outlets: test according to 14.2		**P**

22.	**FORCE NECESSARY TO WITHDRAW THE PI UG**		**P**
	Construction of accessory shall the easy insertion and withdrawal of the plug, and prevent the plug from working out of the socket-outlet in normal use		**P**
22.1	Verification of the maximum withdrawal force (multi-pin gauge)		**P**
	-Maximum withdrawal force (N)…….…….. ...…:	54N	**P**
	The plug not remain in the socket-outlet		**P**
22.2	Verification of the minimum withdrawal force (single-pin gauge)		**P**

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Cl.	**Requirement – Test**	**Result - Remark**	**Verdict**
	-Minimum withdrawal force (N) ……..……:	1.5N	**P**
	The plug not fall from each individual contact-assembly within 30 s	>30S	**P**

23.	**FLEXIBLE CABLES AND THEIR CONNECTION**		**N/A**
23.1	Plugs and portable socket-outlets provided with a cord anchorage such that the conductors are relieved from strain and that their covering is protected from abrasion		**N/A**
	Sheath of flexible cable clamped within the cord anchorage		**N/A**
23.2	Pull and torque test		**N/A**
	Non-rewirable accessories:		**N/A**
	-rating of accessory ……..……. ……..…..:		**N/A**
	-type of flexible cable; number of conductors and nominal cross-sectional area (mm^2) ……...…..:		**N/A**
	-pull (100 times)(N) ……. ……..:		**N/A**
	-torque (1 min) as specified in table 18 (Nm) ……:		**N/A**
	After the test:		**N/A**
	Displacement ≤2 mm ……. ……. ……. …….:		**N/A**
	No break in the electrical connections		**N/A**
	Rewirable accessories:		**N/A**
	-rating of accessory ……. ……. ……. ……..:	.	**N/A**
	-clamping screws, if any, tightened with a torque equal to 2/3 of that specified in 12.2.8 (Nm) ……:		**N/A**
	-type of flexible cable; number of conductors and smallest nominal cross-sectional area (mm^2) as show in table 17 ……. …. …… ……:		**N/A**
	-Pull (100 times) (N) ……. …. …… ……..…:		**N/A**
	-torque (1 min) as specified in table 18 (Nm) …..:		**N/A**
	After the test:		**N/A**
	Displacement ≤2 mm ……..… …… ……..……:		**N/A**

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Cl.	**Requirement – Test**	**Result - Remark**	**Verdict**
	End of conductors not have moved noticeably in the terminals		**N/A**
	-type of flexible cable; number of conductors and larges nominal cross-sectional area (mm^2) as show in table 17 ……..… …… ……:		**N/A**
	-pull (100 times) (N) ……..… …… ……..…:		**N/A**
	-torque (1 min) as specified in table 18 (Nm) ….:		**N/A**
	After the test:		**N/A**
	Displacement ≤2 mm ……..… …… ……..……:		**N/A**
	End of conductors not have moved noticeably in the terminals		**N/A**
	Rewirable accessories having rated current up to and including 16A:		**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) ……..…:		**N/A**
23.3	Non-rewirable plugs and non-rewirable portable socket-outlets: provided with a flexible cable complying with IEC 227 or IEC 245		**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: 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		**N/A**
	Guards shall be of insulating material and fixed in reliable manner		**N/A**
	Flexing test (10.000 flexings):		**N/A**
	-type of flexible cable and nominal cross-sectional area (mm^2) ……..… …… …….. ……:		**N/A**
	-test current (A) ……..… …… ……..…. :		**N/A**
	-mass (N) …….. …… ……..…….. :		**N/A**

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Cl.	**Requirement – Test**	**Result - Remark**	**Verdict**
	During the test: no interruption of the test current and no short-circuit between conductors		**N/A**
	Voltage drop test: test current (A); voltage drop (≤10mV) …….. …… ……..…….. :		**N/A**
	After the test: guard no separated from the body, insulation shows no sign of abrasion or wear, broken strands become no accessible		**N/A**
24.	**MECHANICAL STRENGTH**		**P**
	Accessories, surface mounting boxes and screwed glands have adequate mechanical strength		**P**
24.1	Fixed socket-outlets, portable multiple socket-outlets and surface mounting boxes; impact test (apparatus shown in fig. 16, 17, 18and 19)		**N/A**
	After the test: no damage, live parts no become accessible		**N/A**
24.2	Portable single socket-outlets and plugs: tumbling barrel test; number of falls ……..……..:		**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	Ordinary surface type socket-outlets: first fixed to a cylinder of rigid steel sheet and then fixed to a flat steel sheet		**P**
	During and after the test: no damage		**P**

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Cl.	**Requirement – Test**	**Result - Remark**	**Verdict**
24.4	Portable single socket-outlets, multiple socket-outlets and plugs (elastomeric or thermoplastic material): impact test, weight 1000 g, height 100mm		**P**
	Specimens placed in a refrigerator at-15℃ ±2℃ for at least 16 h		**P**
	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. 22)		**P**
24.6	Screwed glands of accessories other than ordinary: torque test (1 min)		**N/A**
	-diameter of test rod (mm) …….. …… ……..…:		**N/A**
	-type of material …….. …… ……..…. …:		**N/A**
	-torque (Nm) …….. …… ……..…. ……..:		**N/A**
	-type of material …….. …… ……..…. …:		**N/A**
	After the test: no damage of glands and enclosure of the specimens		**N/A**
24.7	Plug pins provided with insulating sleeves: 20000 movements, 4N (apparatus shown in fig. 23)		**N/A**
	After the test: no damage of pins, insulating sleeve not have punctured or rucked up		**N/A**
24.8	Shuttered socket-outlets: mechanical test carried out on specimens submitted to the normal operation test according to clause 21		**P**
	Force applied for 1 min against the shutter of an entry hole by means of one pin …….. :		**P**
	Pin not come in contact with live parts		**P**
	After the test: no damage		**P**
24.9	Rewirable multiple portable socket-outlet: mechanical test		**N/A**

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Cl.	**Requirement – Test**	**Result - Remark**	**Verdict**
	Rewirable multiple socket-outlets: flexible cable of the smallest cross-sectional area specified in table 3 ……..……..…….. :		**N/A**
	8 falls on concrete floor with the specimens arranged as shown in figure 24		**N/A**
	After the test: no damage, no part have become detached or loosened		**N/A**
	Accessories other than ordinary submitted again to the test 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)		**P**
	Maximum withdrawal force (table 16) applied for 1min on each pin in turn, after the specimen has been placed at 70℃ for 1 h …….. :		**P**
	After the test: displacement of pins in the body of the plug ≤1 mm …….. ……..:		**P**
24.11	Barriers of portable socket-outlets having means for suspension on a wall:		**N/A**
	Force applied for 10 s against the barrier by means of a cylindrical steel rod (1,5 times the maximum plug withdrawal force specified in table 16) (N) …….. ……..:		**N/A**
	Rod not pierce the barrier		**N/A**
24.12	Portable socket-outlets having means for suspension on a wall (pull test):		**P**
	Pull applied to the supply flexible cable for 10 s (force prescribed in 23.2 for checking the flexible cable anchorage) (N) …….. ……..…..:		**P**
	During the test: no break of the means for suspension on a wall		**P**
24.13	Portable socket-outlets having means for suspension on a wall (pull test):		**P**
	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) …….. …….. …..……:		**P**

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Cl.	**Requirement – Test**	**Result - Remark**	**Verdict**
	During the test: no break of the means for suspension on a wall		**P**
24.14	Force necessary for covers or cover-plates to come off or not to come off (accessibility with the test finger to live parts)		**N/A**
24.14.1	Verification of the non-removal of covers or cover-plates		**N/A**
	Force applied for 1 min in direction perpendicular to the mounting surface. ……:		**N/A**
	Covers or cover-plates 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. 8)		**N/A**
	Covers or cover-plates 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 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. 8)		**N/A**
	Covers or cover-plates come off		**N/A**
	After the test: no damage		**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**
24.16	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 ≤25V a.c. or metal parts separated from live parts by creepage distances twice those according to table 23)		**N/A**

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Cl.	**Requirement – Test**	**Result - Remark**	**Verdict**
24.17	Test with gauge for verification of the outline of covers or cover-plates: distances between face C of gauge and outline of side under test, not decrease ……..……...:		**N/A**
24.18	Test with gauge (1N): gauge not enter more than 1 mm ……. ……. …. ……. ……. …. ……:		**N/A**
25.	**RESISTANCE TO HEAT**		**P**
25.1	Fixed and portable accessories: heating cabinet 100℃ for 1 h		**P**
	During the test: no change impairing their further use and sealing compound, if any, not flow		**P**
	After the test: markings still legible		**P**
25.2	Parts of insulating material of fixed socket-outlets necessary to retain current-carrying pars and parts of the earthing circuit in position, and parts of the front surface zone of 2 mm width surrounding the phase and neutral pin entry holes: ball-pressure test (1 h, 125 ℃)		**N/A**
	After the test: diameter of impression ≤ 2 mm …..:		**N/A**
25.3	For parts 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**
	Test temperature (℃) ……. …..……:	70℃ temperature rise determined during the test of clause 19	**P**
	After the test: diameter of impression ≤2 mm……:	diameter of impression: 0.8mm	**P**
25.4	Portable accessories: compression test (20N, 1 h, 80℃) by means of the apparatus shown in figure 28		**P**
	After the test: no damage		**P**
26.	**SCREWS, CURRENT-CARRYING PARTS AND CONNECTIONS**		**P**
26.1	Connections withstand mechanical stresses		**P**

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Cl.	**Requirement – Test**	**Result - Remark**	**Verdict**
	Thread-forming or thread-cutting screws used only if supplied together with the piece in which they are intended to be inserted		**N/A**
	Thread-cutting screws intended to be used during installation: captive		**N/A**
	Screws and nuts which transmit contact pressure: in engagement with a metal thread		**N/A**
	Test:		**N/A**
	- 10 times for screws in engagement with a thread of insulating and for screws of insulating material		**N/A**
	- 5 times for all other cases		**N/A**
	- terminals: screw diameter (mm); torque (Nm);		**N/A**
	- earthing terminals: screw diameter (mm); torque (Nm); times ……. …….. ……. …….:		**N/A**
	- assembly screws: screw diameter (mm); torque (Nm); times ……. ……. ……..:		**N/A**
	- cord anchorage: screw diameter (mm); torque (Nm); times ……. ……. ……..…..:		**N/A**
	- other screws or nuts: diameter (mm); torque (Nm); times ……. ……. ……..…..:		**N/A**
	During the test: no damage impairing the further use of the screwed connections		**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		**N/A**
	Connections made by insulation piercing of tinsel cord reliable		**N/A**

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Cl.	**Requirement – Test**	**Result - Remark**	**Verdict**
26.4	Screws and rivets locked against loosening and /or turning		**N/A**
26.5	Current-carrying parts of metal having mechanical strength, electrical conductivity and resistance to corrosion adequate:		**N/A**
	- 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;		**N/A**
	- stainless steel with at least 13 % chromium and not more than 0,09 % carbon		**N/A**
	- steel with electroplated coating of zinc (ISO 2081), with thickness of at least;		**N/A**
	5 µm, service condition ISO no. 1, for ordinary equipment		**N/A**
	12 µm service condition ISO no. 2, for splash-proof equipment		**N/A**
	25 µm, service condition ISO no. 3, for jet-proof equipment		**N/A**
	- steel with electroplated coating of nickel and chromium (ISO1456), with thickness of at least:		**N/A**
	20 µm, service condition ISO no. 2, for ordinary equipment		**N/A**
	30 µm, service condition ISO no. 3, for splash-proof equipment		**N/A**
	40 µm, service condition ISO no. 4, for jet-proof equipment		**N/A**
	- steel with electroplated coating of tin (ISO2093), with thickness of at least:		**N/A**
	12 µm, service condition ISO no. 2, for ordinary equipment		**N/A**
	20 µm, service condition ISO 3, for splash-proof equipment		**N/A**
	30 µm, service condition ISO no. 4, for jet-proof equipment		**N/A**
	Current-carrying parts subjected to mechanical wear: not of steel with electroplated coating		**N/A**

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Cl.	**Requirement – Test**	**Result - Remark**	**Verdict**
	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: of metal resistant to corrosion		**N/A**
26.7	Thread-forming screws and thread-cutting screws not used for the connection of current-carrying parts		**N/A**
	Thread-forming screws and thread-cutting screws used to provide earthing connection: not necessary to disturb the connection and at least two screws are used for each connection		**N/A**
27	**CREEPAGE DISTANCES, CLEARANCES AND DISTANCES THROUGH SEALING COMPOUND**		**P**
27.1	Creepage distances, clearances and distances through sealing compound no less than the values shown in table 23		**P**
	Creepage distances (cr):		**P**
	1) between live parts of different polarity ≥4(3) mm ……. ……. ……..:	>3mm	**P**
	2) between live parts and:		**P**
	- accessible insulating and earthed metal parts ≥3 mm ……. ……. ……..:	>3mm	**P**
	- parts of earthing circuit ≥ 3mm . ……..:		**N/A**
	- metal frames supporting the base of flush-type socket-outlets ≥3mm ……. ……..:		**N/A**
	- screws or devices for fixing bases, covers or cover-plates of fixed socket-outlets ≥3mm……:		**N/A**
	- external assembly screws, other than screws which are on the engagement face of plugs and are isolated from the earthing circuit ≥3mm…….:		**N/A**

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IEC 60884-1 & IEC 60884-2-5			
Cl.	**Requirement – Test**	**Result - Remark**	**Verdict**
	3) between pins of plugs and metal parts connected to them, when fully engaged, and a socket-outlet of the same system having accessible unearthed metal parts ≥6(4,5)mm……:		**N/A**
	4) between the accessible unearthed metal parts of a socket-outlet and a fully engaged plug of the same system having pins and metal parts connected to them≥6(4,5)mm …. …. …. …..... ….:		**N/A**
	5) between live parts of a socket-outlet (without a plug) and its accessible unearthed metal parts ≥6(4,5)mm……..……:		**N/A**
	Clearances (cl):		**P**
	6) between live parts of different polarity ≥3mm ……..……:	>3mm	**P**
	7) between live parts and:		**P**
	- accessible insulating and earthed metal parts not mentioned under 8 and 9 ≥3mm……..…..…:	>3mm	**P**
	- parts of earthing circuit ≥3mm……..……:		**N/A**
	- metal frames supporting the base of flush-type socket-outlets ≥3mm……..……:		**N/A**
	- screws or devices for fixing bases, covers or cover-plates of fixed socket-outlets ≥3mm…...…:		**N/A**
	- external assembly screws, other than screws which are on the engagement face of plugs and are isolated from the earthing circuit ≥3mm…...…:		**N/A**
	8) between live parts and:		**N/A**
	- exclusively earthed metal boxes ≥3mm……:		**N/A**
	- unearthed metal boxes, without insulating lining ≥4.5 mm ……..……..…:		**N/A**
	9) between live parts and the bottom of any conductor recess, if any, in the base of a socket-outlet for surface mounting is mounted≥6mm……...:		**N/A**
	10) between live parts and the bottom of any conductor recess, if any, in the base of a socket-outlet for surface mounting ≥3mm…..……:		**N/A**
	Distance through insulating sealing compound:		**N/A**

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Cl.	**Requirement – Test**	**Result - Remark**	**Verdict**
	11) between live parts covered with at least 2 mm of sealing compound and the surfaces on which the base of a socket-outlet for surfaces mounting is mounted ≥ 4(3) mm……...……:		**N/A**
	12) between live parts covered with at least 2 mm of sealing compound and the bottom of any conductor recess, if any, in the base of a socket-outlet for surface mounting ≥2,5 mm ……:		**N/A**
27.2	Insulating sealing compound: not protrude above the edge of the cavity in which it is contained		**N/A**
27.3	Ordinary surface-type socket-outlets: no bare current-carrying strips at the back		**N/A**
28.	**RESISTANCE OF INSULATING MAERIAL 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		**P**
	For parts of fixed accessories necessary to retain current-carrying parts and parts of the earthing circuit in position: test temperature 850 ℃		**N/A**
	No visible flame and no sustained glowing		**N/A**
	Flame and glowing extinguish within 30 s ……:		**N/A**
	No ignition of the tissue paper		**N/A**
	For parts of portable accessories needed to retain the earth terminal in position in a box: test temperature 750 ℃		**P**
	No visible flame and no sustained glowing		**P**
	Flame and glowing extinguish within 30 s ……:		**P**
	No ignition of the tissue paper		**P**
	For parts not necessary to retain current-carrying parts and parts of the earthing circuit in position, even though in contact with them: test temperature 650 ℃		**N/A**
	No visible flame and no sustained glowing		**N/A**
	Flame and glowing extinguish within 30 s ……:		**N/A**
	No ignition of the tissue paper		**N/A**
28.1.2	Plugs with pins provided with insulating sleeves:		**N/A**
	Test temperature maintained for 3 h by means of the apparatus shown in figure 26 ……..…:		**N/A**
	Impact test according to sub-clause 30.4 (mass 100 g, height 100 mm, 4 impacts): no cracks of the insulating sleeves		**N/A**
28.2	Resistance to tracking		**P**

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Cl.	**Requirement – Test**	**Result - Remark**	**Verdict**
	Parts of insulating material retaining live parts in position of accessories other than ordinary: test voltage 175 V, 50 drops, solution A of IEC 112		**P**
	No flashover or breakdown		**P**
29.	**RESISTANCE TO RUSTING**		**P**
	Ferrous parts protected against rusting		**P**
	No signs of rust after 10min in carbon tetrachloride, trichloroethane or equivalent degreasing agent, 10 min in a box with air saturated with moisture and 10 min at 100 ℃		**P**
30.	**ADDITIONAL TESTS ON PINS PROVIDED WITH INSULATING SLEEVES**		**N/A**
30.1	Pressure test at high temperature		**N/A**
	Apparatus shown in figure 29, with the test specimen in position, maintained for 2 h at 200 ℃, Force applied through the blade: 2,5 N	No insulating sleeves	**N/A**
	Thickness of insulation measured: before the test (mm); after the test (mm) ……:		**N/A**
	Thickness of insulation measured: ≥50% of the thickness measured before the test: percent value(%) ……:		**N/A**
30.2	Static damp heat test		**N/A**
	Set of 3 specimens submitted to two damp heat cycles in accordance with IEC 68-2-30		**N/A**
	After the test:		**N/A**
	Insulation resistance and electric strength test (clause 17)		**N/A**
	Abrasion test (sub-clause 24.7)		**N/A**
30.3	Test at low temperature		**N/A**
	Set of 3 specimens maintained at —15 ℃ ±2 ℃for 24 h		**N/A**

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Cl.	**Requirement – Test**	**Result - Remark**	**Verdict**
	After the test:		**N/A**
	Insulation resistance and electric strength test (clause 17)		**N/A**
	Abrasion test (sub-clause 24.7)		**N/A**
30.4	Impact test at low temperature		**N/A**
	Specimens maintained at —15 ℃ ±2 ℃for 24 h Subjected to 4 impacts (mass 100g , height 100 mm) by means of the apparatus shown in figure 30 rotating the specimen through 90^0		**N/A**
	After the test: no crack of the insulating sleeves		**N/A**

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19.	Table : Temperature rise		(socket)
Rate voltage(V): 250		Rate current : 16A	Start time: 09:10
Rate voltage(V): 250		Test current : 16A	complete time: 12:00
No	location of thermocouple	Temperature rise (k)	Limit (k)
1	L terminal	8.7	45
	N terminal	6.8	45
	Earthing terminal	6.2	45
	Enclosure material	5.9	For 25

19.	Table: temperature rise		(plug)
Rate voltage(V): 250		Rate current : 16A	Start time: 12:00
Rate voltage(V): 250		Test current : 16A	complete time: 19:00
No	location of thermocouple	Temperature rise (k)	Limit (k)
1	L terminal	8.4	45
	N terminal	6.6	45
	Earthing terminal	6.1	45
	Enclosure material	5.8	For 25

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Attachment: Photos of the product:

Photo 1

Description: Overview

Photo 2

Description: Overview

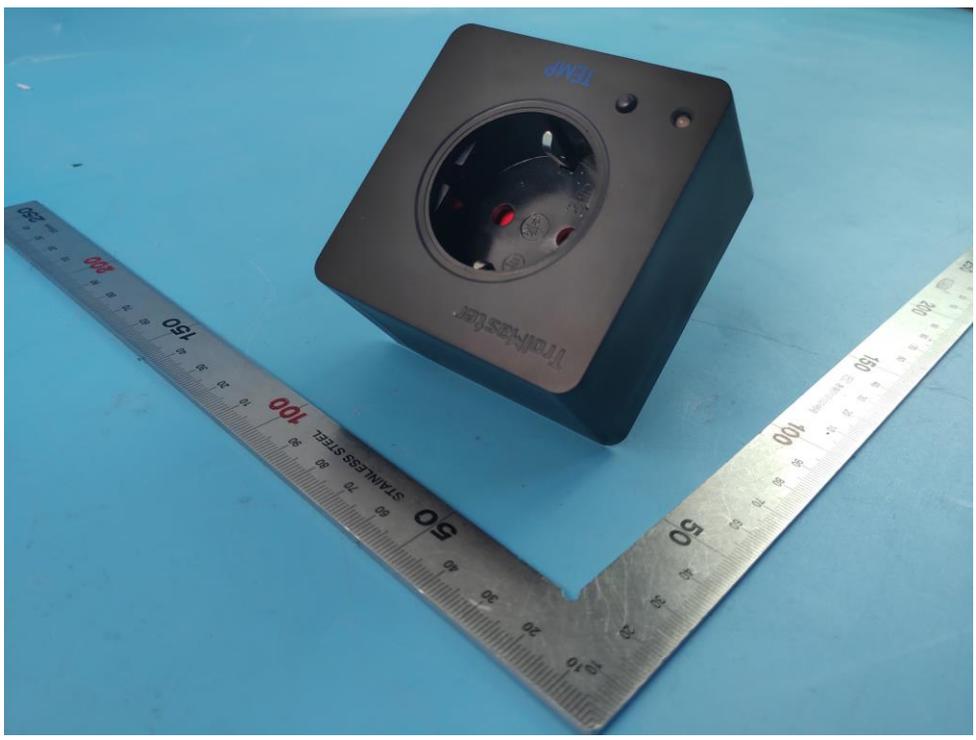

Photo 3

Description: Overview

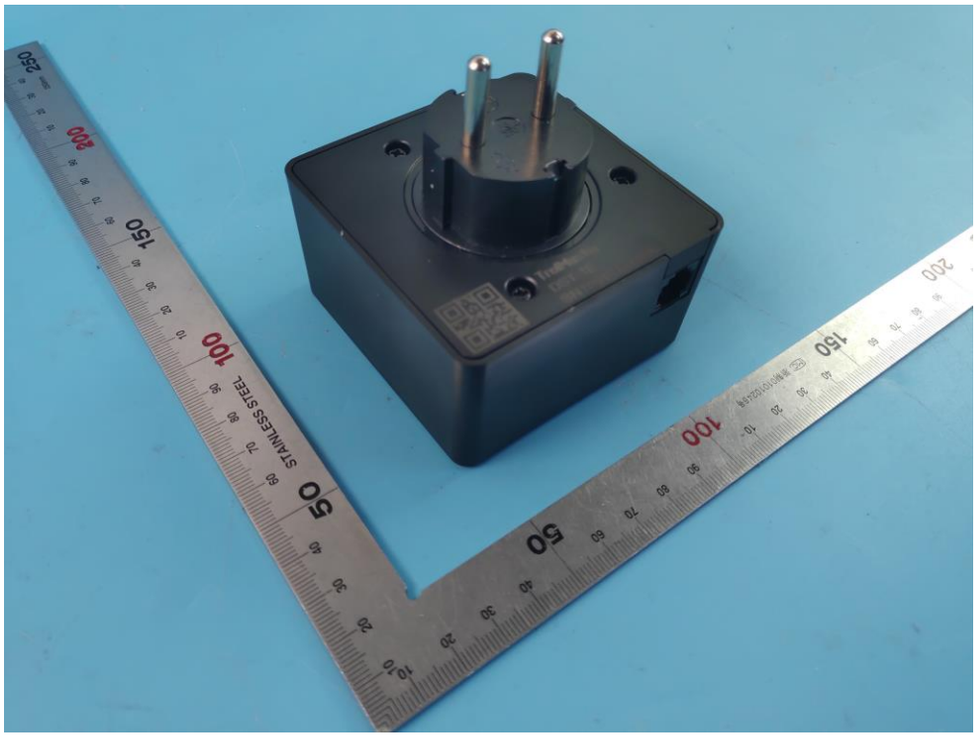

Photo 4

Description: Overview

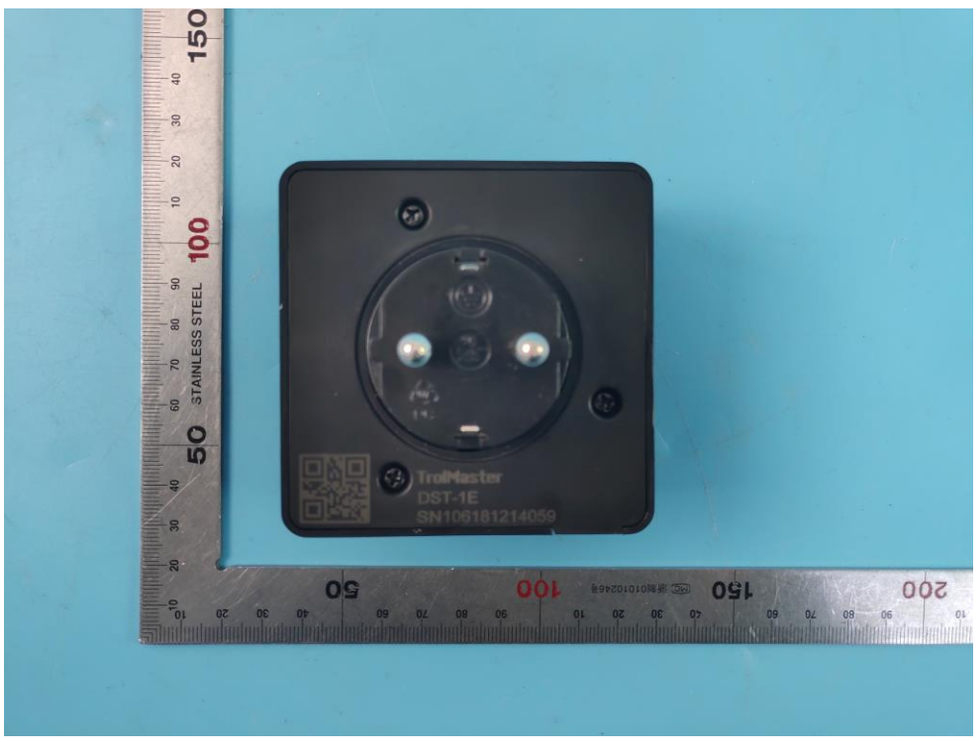

Photo 5

Description: Overview

Photo 6

Description: Overview

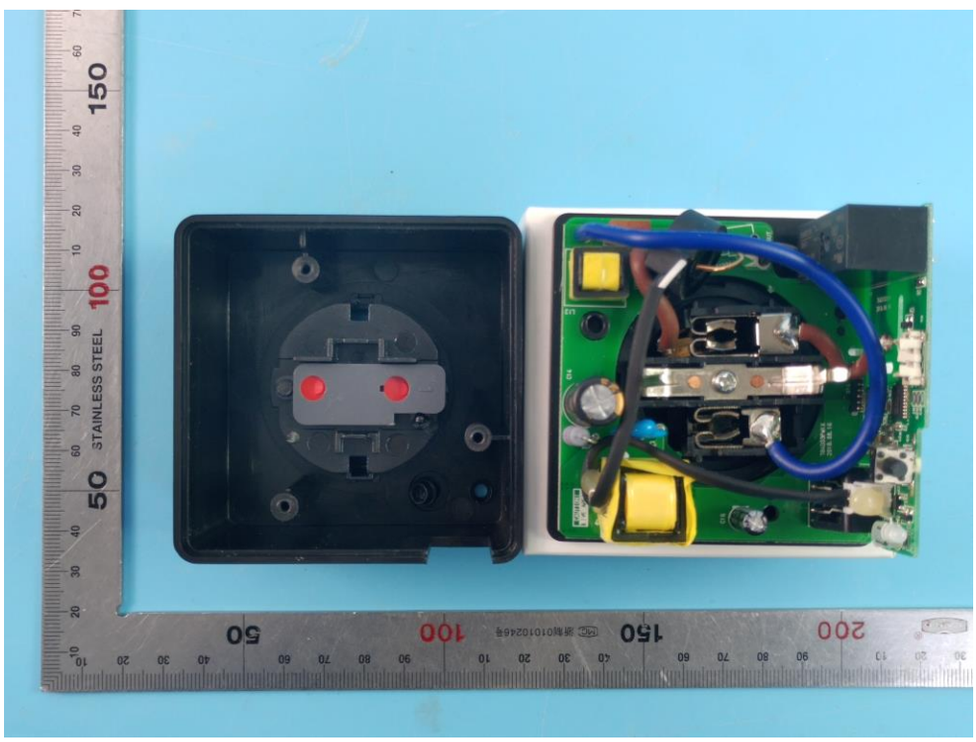

Photo 7

Description: PCB view

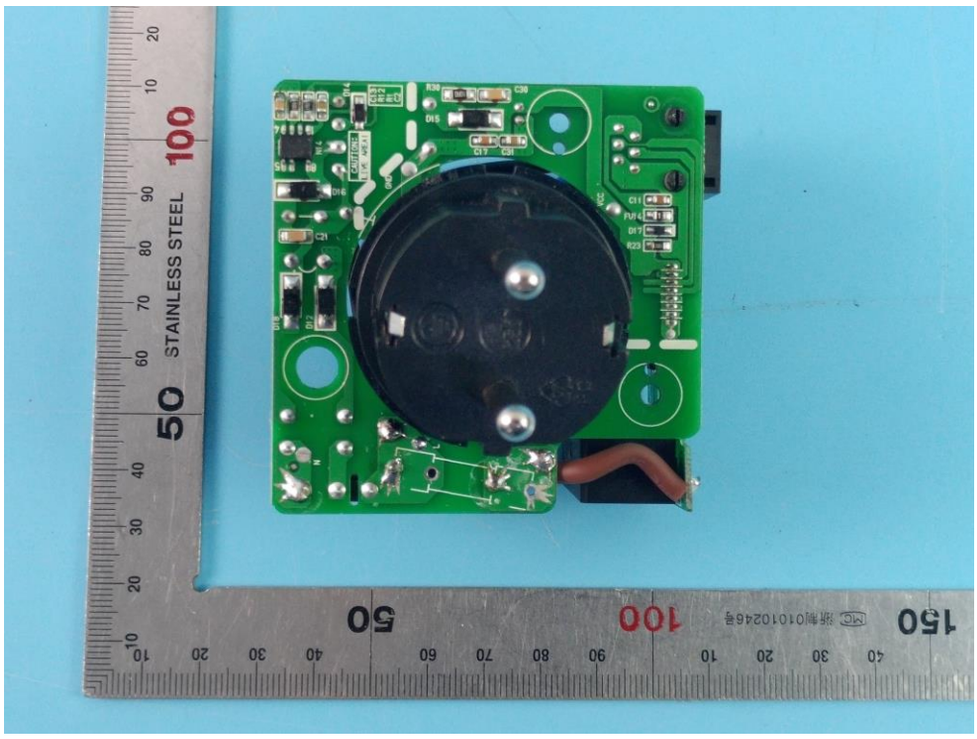

Photo 8

Description: PCB view

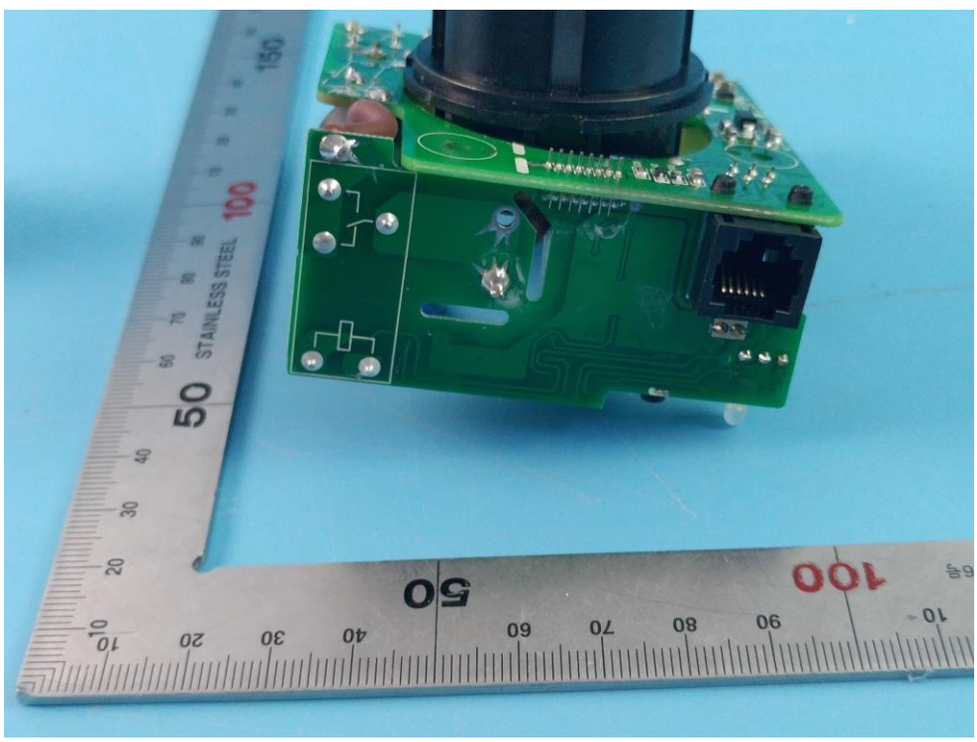

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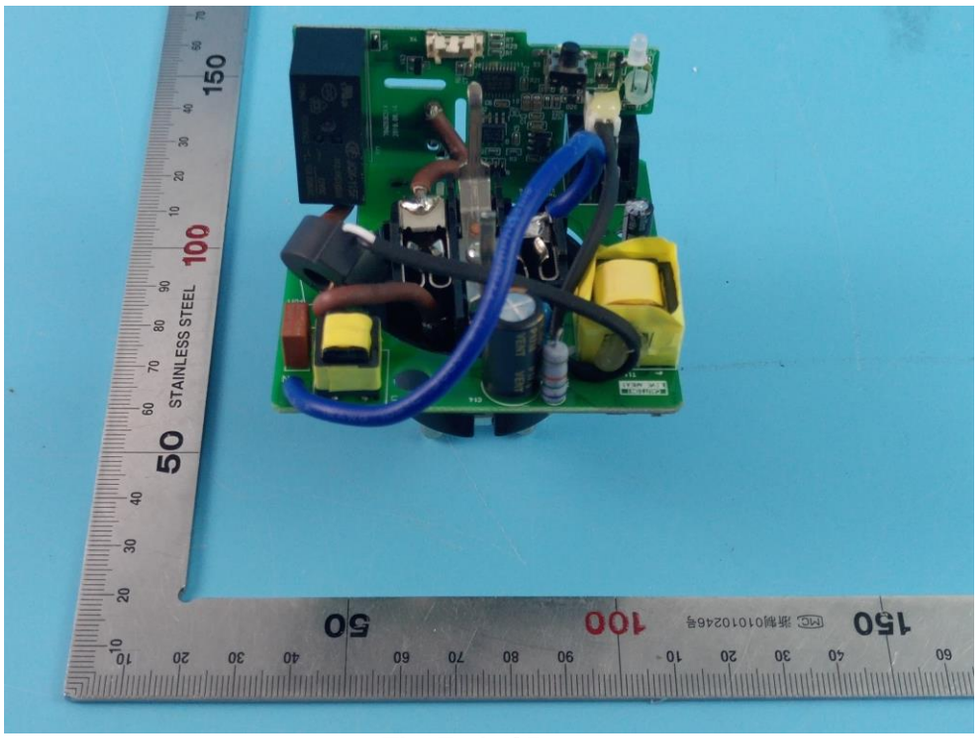
Photo 9

Description: PCB view



---The End of Report---

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