TEST REPORT
BS 1363-2 : 2016
13A switched and unswitched socket-outlets

Report reference No. ..... :	200302309SHA-001
Compiled by (+ signature) ..... :	Rachel Wang
Approved by (+ signature) ..... :	Young Wu
Date of issue ..... :	2020-08-24
Testing laboratory ..... :	INTERTEK TESTING SERVICES SHANGHAI.
Address ..... :	Building No.86, 1198 Qinzhou Road (North), Shanghai 200233, China
Testing location ..... :	As above
Applicant ..... :	TCL-Legrand International Electrical (Huizhou) Co., Ltd.
Address ..... :	Bldg. B1-B3, East No.39 Hechang 6th Rd., HZZK Hi-tech Industrical Development Zone, Huizhou, Guangdong, China
Test specification:	
Standard ..... :	BS 1363-2 : 2016 + A1:2018
Test procedure ..... :	Testing
Non-standard test method…….. :	N/A
Test Report Form:	
Test Report Form No. ..... :	BS1363-2V5
TRF Originator……..…….. :	Intertek
Master TRF ..... :	2018-04-09
Type of test object ..... :	Fixed socket outlet with USB charger, flush type
Trademark ..... :	legrand (for all types except 738143), tenby (for type 738143)
Model/type reference ..... :	617*44, 28**36, 832*79, 833*79, 282443***, K8/15/13/U2***-HK, 57****, 730079, 738143
Manufacturer ..... :	Same as applicant
Rating ..... :	13A 250V~ 50/60Hz, IP20, Class I (Socket-outlet), Max. output: 3A 5V⎓ (USB charger)

Remark :

Determination of the test conclusion is based on IEC Guide 115 in consideration of measurement uncertainty.

Summary of testing:

The product in this test report complies with BS 1363-2: 2016 + A1: 2018.

This report is based on original report 190101450SHA-001 for below updating:

1 Change applicant and manufacturer from original “Legrand (Beijing) Electrical Co., Ltd” to be “TCL-Legrand International Electrical (Huizhou) Co., Ltd”;
2 Delete factory “Legrand (Beijing) Electrical Co., Ltd”;
3 Add new type 282443, 282443-C, 282443-C1, 282443-C2, 282443-C3, K8/15/13/U2-HK, K8/15/13/U2-C-HK, K8/15/13/U2-C1-HK, K8/15/13/U2-C2-HK, K8/15/13/U2-C3-HK, K8/15/13/U2-C4-HK, 570081, 571081;
4 As for USB charger, update with total new construction and change evaluating standard from IEC 60950-1:2005 + A1:2009 + A2:2013 to be IEC 62368-1: 2018 which in conjunction with standard IEC 62368-3:2017;
5 Add frequency 50/60Hz.

For Annex I for requirement for BS EN62680-1-1, only Std A port test for this requirement.

Possible test case verdicts:

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

Testing..... :

Date of receipt of test item..... :	2020-03-20
Date (s) of performance of tests..... :	2020-03-20 ~ 2020-08-24

General remarks:

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

Copy of marking plate:

legrand
617144
13A 250V~ 50/60Hz
BS 1363

L, N,  **(symbol for earthing terminals)**

Marking for USB charger portion:
USB CHARGER

Only for IT equipment
(For all other types except 738143, all marking is the same as above, only different type designation)

tenby
738143
13A 250V~ 50/60Hz
BS 1363

L, N,  **(symbol for earthing terminals)**

Marking for USB charger portion:

Only for IT equipment

Product description:

13A 250V~, 50/60Hz, flush type, IP20, Class I, rewirable, two way of BS 1363 outlets, with shutters, with single pole switch, with USB charger which evaluated according to IEC 62368-1:2018 and IEC 62368-3:2017 with report no 200302028SHA-001 and 200302028SHA-002, with plastic cover or metal cover, with design A or design B construction, see below for details.

617*44	617144	design A construction, with plastic cover with arc transition chamfer, with front cover without embossing pattern, with trademark “legrand”	white colour
	617344		dark grey colour
	617444		brown colour
	617644	design A construction, with plastic cover with angle chamfer, with front cover with embossing pattern, with trademark “legrand”	white colour
	617744		anthracite colour
	617844		ivory colour

28**36	281136	design A construction, plastic cover, with trademark “legrand”	white colour
	283136		silver colour
	283336		pearl colour
	283536		dark silver colour
	283936		champagne colour
	282136		matt black colour

832*79	832079	design A construction, metal cover, with trademark “legrand”	flat BSS color
	832279		flat PSS color
	832479		flat gold color

833*79	833079	design B construction, metal cover, with trademark “legrand”	Trad BSS color
	833279		Trad PSS color
	833479		Trad Gold color

282443***	282443	design A construction, plastic cover, with trademark “legrand”	White colour
	282443-C		Matt black colour
	282443-C1		Rose gold colour
	282443-C2		CHAMPAGNE colour
	282443-C3		DARK SILVER colour

K8/15/13/U2***-HK	K8/15/13/U2-HK	design A construction, plastic cover, with trademark “legrand”	White colour
	K8/15/13/U2-C-HK		Matt black colour
	K8/15/13/U2-C1-HK		Rose gold colour
	K8/15/13/U2-C2-HK		Champagne colour
	K8/15/13/U2-C3-HK		Dark silver colour
	K8/15/13/U2-C4-HK		Pink colour

57****	572142	design A construction, without cover, all test evaluated when with mated plastic cover or metal cover which provided by the manufacturer as far as possible, with trademark “legrand”;	White colour
	572642		Magnesium colour
	570081		Soft ALU colour
	571081		Champagne colour

730079: design B construction, plastic cover, white colour, with trademark “legrand”;

738143: same as 730079 except with different enclosure shape and trademark “tenby”.

For 282443*** series and K8/15/13/U2***-HK series, they with total same construction, only different type designation according to client’s request.

Table of critical components and materials:

Object / Part No.	Manufac-turer / Trademark	Type / Model	Technical data	Standard	Mark(s) of conformity
Detachable cover plate (for type 617*44,28**36, 282443***, K8/15/13/U2***-HK series)	Covestro	Makrolon PC	PC, minimum thickness 1,0mm	IEC 60884-2-3 BS 1363-2	Test with appliance
Main cover body for cover 575117	Covestro	Makrolon PC	PC, minimum thickness 1,0mm	IEC 60884-2-3 BS 1363-2	Test with appliance
Plastic frame for cover 575117 and 575118	Covestro	FR6005+(z)	PC, minimum thickness 1,5mm, with UL file UL E41613	IEC 60884-2-3 BS 1363-2	Test with appliance
Front cover (for type 617*44,28**36, 282443***, K8/15/13/U2***-HK series and 572142,572642)	Covestro	Makrolon PC	PC, minimum thickness 1,5mm	IEC 60884-2-3 BS 1363-2	Test with appliance
Front cover (for type 738143, 730079)	Liyang Josen Plastic Co.,Ltd.	L110B	UREA, minimum thickness 1,0mm	IEC 60884-2-3 BS 1363-2	Test with appliance
Front plastic frame (for type 833*79 series)	Covestro	FR6005+(z)	PC, minimum thickness 1,5mm, with UL file UL E41613	IEC 60884-2-3 BS 1363-2	Test with appliance
Back plastic frame (for type 832*79 series)	Covestro	FR6005+(z)	PC, minimum thickness 1,5mm, with UL file UL E41613	IEC 60884-2-3 BS 1363-2	Test with appliance

Object / Part No.	Manufacturer / Trademark	Type / Model	Technical data	Standard	Mark(s) of conformity
Front metal plate (for type 833*** & 832*** series)	Legrand UK	304	stainless steel, minimum thickness 1,0mm	IEC 60884-2-3 BS 1363-2	Test with appliance
Switch rocker	Covestro	Makrolon PC	PC, minimum thickness 1,0mm	IEC 60884-2-3 BS 1363-2	Test with appliance
Base	SHANGHAI SUNNY NEW TECHNOLOGY	HFP1010-R	PP, minimum thickness 1,5mm,with UL file E200750	IEC 60884-2-3 BS 1363-2	Test with appliance
Shutter body	Kingfa.	PA6-G30 AWBK036	PA6 material, minimum thickness 1,5mm	IEC 60884-2-3 BS 1363-2	Test with appliance
Shutter box	Mitsubishi	RX2123	PC material, minimum thickness 1.5mm	IEC 60884-2-3 BS 1363-2	Test with appliance
USB Charger	TCL-Legrand International Electrical (Huizhou) Co., Ltd.	PYS-16S-050310	Input 220~250V~, 50-60Hz Max 0,3A, Output 5.0Vdc 3.0A 15.0W (in total)	IEC 62368-1	Intertek report 200302028SHA-001
				IEC 62368-3	Intertek report 200302028SHA-002

Factory information:

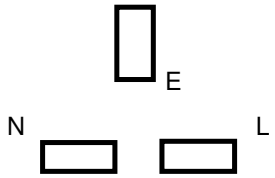
Factory 1: Legrand Electric Ltd
Unit 12 No.1 Industrial Estate Medomsley Road,Consett County Durham, DH8 6SR United Kingdom
Factory 2: TCL-Legrand International Electrical (Huizhou) Co., Ltd.
Bldg. B1-B3, East No.39 Hechang 6th Rd., HZZK Hi-tech Industrical Development Zone, Huizhou, Guangdong, China

BS 1363-2 : 2016			
Clause	Requirement – Test	Result - Remark	Verdict
Seq. 1	**Inspection, measurement, gauging and manipulation**		—
5	All tests shall be type tests		P
6	Classification		—
	Socket-outlet is:		—
	• single		N/A
	• multiple	Two way	P
	• switched		P
	• unswitched		N/A
	• fused		N/A
	• unfused		P
	• (if fixed) flush		P
	• (if fixed) surface		N/A
	• panel-mounting		N/A
	• (if portable) rewireable		N/A
	• (if portable) non-rewireable		N/A
	• with indicator lamp		N/A
	• without indicator lamp		P
	• having IP rating with plug inserted		N/A
	• having IP rating only when no plug inserted		N/A
	• screw-type terminals		P
	• with screwless terminals for rigid conductors		N/A
	• with screwless terminals for flexible conductors		N/A
	• with screwless terminals for rigid and flexible conductors		N/A
	• Intended for electric vehicle charging		N/A
	• not intended for electric vehicle charging		P
	• with electronic components		P
	• without electronic components		N/A
7	Marking and labelling		—
7.1	Socket-outlets shall be legibly & durably marked with the following information:		—

BS 1363-2 : 2016			
Clause	Requirement – Test	Result - Remark	Verdict
	a) trade mark	See page 1	P
	b) BS standard no.	BS 1363	P
	c) portable socket-outlet no. of BS followed by		N/A
	d) electric vehicle charging no. of BS followed by		N/A
	e) rewireable socket-outlet terminals identified	L, N, ⏚	P
	f) fused socket-outlet		N/A
	g) fixed fused multiple socket		N/A
	h) for all socket		—
	h1) rated current	13A	P
	h2) rated volts	250V	P
	h3) nature of supply	~	P
	i) for socket-outlets with screwless terminals		—
	i1) the length of insulation to be removed		N/A
	i2) rigid conductors only		N/A
	i3) flexible conductors only		N/A
	j) IP classification (higher than IP20)		N/A
7.1.1	marking method	Moulding / Printing	P
	After the test, the marking durable and legible		P
7.2	Portable socket-outlets fitted with a flexible cord.	Tag / Label / Instructions	N/A
7.3	Rewirable portable socket-outlets shall be provided with adequate instructions.		N/A
7.4	Symbols used shall be as follow:		—
	• amperes	A	P
	• volts	V	P
	• alternating current	~	P
	• direct current	⎓	P
	• line	L	P
	• neutral	N	P
	• earth	⏚	P
	• fuse	⏛	N/A
	• screwless terminals for rigid conductors	r	N/A
	• screwless terminals for flexible conductors	f	N/A
	• degree of protection	IPXX	N/A

BS 1363-2 : 2016			
Clause	Requirement – Test	Result - Remark	Verdict
7.5	Instructions for installation and use of socket-outlets having IP classification greater than IP20.		N/A
9.1	Socket-outlets shall be so designed, live part are not accessible.		P
9.1.1	A test pin is applied, it shall not be possible to touch live parts.		P
11.1	Terminals & terminations shall provide for effective clamping and securing of conductors.		P
11.2	Line terminals shall be provided		P
	Neutral terminals shall be provided		P
	Earth terminal shall be provided		P
	Separate terminals shall be provided for incoming and outgoing connections		N/A
11.3	Non-rewirable portable socket-outlets.		—
	- Provided with soldered		N/A
	- Welded		N/A
	- Crimped		N/A
	For all these methods of termination		—
	- Not more than one stand of a 0,5mm^2 or		N/A
	- Two stands of other sized conductors shall be fractured during connection.		N/A
	Screwed and 'snap-on' terminals not used.		N/A
	Crimped connections not per-soldered unless the soldered area is entirely outside the crimp.		N/A
11.4	Terminals in rewirable portable socket-outlets permit the connection, without special preparation of flexible cords having normal conductor cross-sectional area of 1mm^2 to 1,5mm^2.		N/A
11.5	Line and neutral terminals in fixed socket-outlets permit the connection		—
	- One or two or three 2,5mm^2 solid or stranded conductor		P
	- One or two 4,0mm^2 stranded conductors		P

BS 1363-2 : 2016			
Clause	Requirement – Test	Result - Remark	Verdict
11.6	Earthing terminals in fixed socket-outlets permit the connection, without special preparation.		—
	- One or two or three 1,5mm^2 solid or stranded conductor		P
	- One or two or three 2,5mm^2 solid or stranded conductor		P
	- One or two 4mm^2 stranded conductors		P
11.7	Pillar terminals use clamping screws of sufficient length to extend to the far side of the conductor hole.		P
	The end of the screw shall be slightly rounded.		P
	Clearance between the sides of the major diameter of the clamping screw & the conductor hole.		P
	Cord connection, ≤0,4mm		N/A
	Fixed wiring, ≤0,6mm	<0,6mm	P
11.8	Declared outside diameter of terminal screw, ≥3mm or 6 B.A.	>3mm	P
	Thread cutting screws not used.		P
	Thread forming screws not used.		P
11.9	in rewirable portable socket-outlets terminals so located or shielded that should a stray of a flexible conductor escape no risk of accidental connection between live parts of accessible external surface.		N/A
	a) not touch any metal part by pass fuse link.		N/A
	b) not touch any accessible metal part.		N/A
	c) not reduce creepage and clearance to less than 1,3mm		N/A
	Free stand to earthing shall not touch any living part.		N/A
9.2	Socket-outlet designed and constructed to protect against accidental contact with live parts.		P
9.4	A rigid metal pin, 1mm diameter and 60mm long		P

BS 1363-2 : 2016			
Clause	Requirement – Test	Result - Remark	Verdict
	is introduced through the earthing aperture and live parts is not touched.		
10.1	Earth connection is made before the current-carrying pins of the plug become live.		P
	When withdrawing the plug, the current-carrying parts shall separate before the earth contact is broken.		P
13.1	The disposition of the socket contacts shall be as follow: 		P
	Any steps or profile contours on the engagement surface shall not result in the surface deviating from the plane of engagement by more than 3mm.		P
	Holes not exceeding 8mm diameter for the purpose of assembly fixing shall be deemed acceptable.		P
	There shall be no projection on the engagement surface of a socket-outlet such as would prevent the full insertion of a plug.		P
	No projection more than 0,5mm on the engagement surface of the socket-outlet.		P
	The spacing of the socket contacts, ‘Go’ gauge is used to test the contacts.		P
13.2	After testing with ‘contact gauge’, the line and neutral socket contact satisfactory with the corresponding pins of the plug.		P
13.3	After testing with the “non-contact gauge”, the travel of current-carrying pin in any position the socket contacts may occupy, not less than 9,6mm.		P
13.9	The apertures for line, neutral and earth plug pins		P

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Clause	Requirement – Test	Result - Remark	Verdict

		Spec (mm)	Measured:	—
	L (mm)	≤ 7,2 × 4,8	Max.7,1 × 4,4	P
	N (mm)	≤ 7,2 × 4,8	Max.7,1 × 4,4	P
	E (mm)	≤ 8,8 × 4,8	Max.8,5 × 4,6	P
13.10	The distance from the apertures of line and neutral to the periphery of the engagement surface. Limit : ≥ 9,5mm /18,0mm		Measured: L (mm): Min.18 N (mm): Min.18	P
13.12	Multiple socket-outlet simultaneous use by 'Go' gauge test.		2 way socket outlets	P
13.14	Conductive component parts of socket-outlet shall be so located and separated that, in normal use, they can not be displaced so as to affect adversely the safety or proper operation of the socket-outlet.			P
13.15	For flush socket-outlets intended to be used in enclosures conformity with BS 4662 shall be such that the clearance for the purpose of wiring between the base or bases and the inside walls of the box is not less than 6mm.			P
	The clearance between the overall depth of the base of the bottom of a 35mm deep box is not less than 14mm.			P
	There shall be no live metal protruding from or flush with the socket-outlet base.			P
13.16	Flush-mounted socket plates have provision for two M3,5 fixing screw			P
	Flush-mounted socket plates intended for mounting on boxes. The distance between the two screws at centre. required = 60,3mm ± 0,2mm for 1 gang = 120,6mm ± 0,3mm for 2 gang = 180,9mm ± 0,4mm for 3 gang		Measured dimension (mm): 120,6mm for 2 gang	P

BS 1363-2 : 2016			
Clause	Requirement – Test	Result - Remark	Verdict
13.17	Dimension for flush socket-outlet pates either of insulating material or metal. Limit ≥ 82,5mm x 82,5mm for 1 gang ≥ 82,5mm x 142,5mm for 2 gang	Measured dimension (mm): Min.86,0x 145,6 (for 2 gang)	P
13.18	The base and cover of non-rewirable portable socket-outlets shall be permanently attached to each other.		N/A
	The base and cover of rewirable portable socket-outlets shall be firmly secured to each other.		N/A
13.20	For non-rewirable portable socket-outlets means shall be provided to prevent loose strands of conductor connected to current-carrying parts from reducing the minimum insulation thickness requirements between such parts and all accessible external surface of the socket-outlet.		N/A
19.2	Cord anchorages shall anchor the cord securely to the socket-outlet.		N/A
	a) the cord anchorage can not be released from the outside without the use of a tool.		N/A
	b) it shall not be possible to touch cord anchorage screws with test probe B of BSEN 61032:98		N/A
	c) the cord is not clamped by a matel part bearing directly on the flexible cord		N/A
	d) at least one part of the anchorage is securely fixed to the socket-outlet.		N/A
	e) clamping the cord does not require the use of a special purpose tool.		N/A
	f) the cover may be correctly fitted without damage.		N/A
19.3	Clamping screws shall not serve to fix other components.		N/A
19.4	Non-rewireable portable socket shall be fitted with 3-core flexible cords.		N/A

BS 1363-2 : 2016			
Clause	Requirement – Test	Result - Remark	Verdict
19.6	The cord entry to rewireable portable socket-outlets shall be so shaped as to prevent damage to the cord.		N/A
8	Clearances, creepage distances and solid insulation		—
	The distance between lead wires in the pinch of a neon lamp with external resistor shall be a minimum of 1mm		N/A
8.1	Clearances		—
	Default pollution degree (Width X)	2 (1,0mm)	P
	Pollution degree declared by manufacturer (Width X)	1 / 3 (0,25mm / 1,5mm)	N/A
	Default rated impluse voltage (overvoltage category)	4000V (III)	P
	Declared rated impluse voltage (overvoltage category)	1500 / 2500 (I / II)	N/A
8.1.1	Clearances for basic insulation	>3mm (test by gauge)	P
8.1.2	Clearances for functional insulation	>3mm (test by gauge)	P
8.1.3	Clearances for supplementary insulation		N/A
8.1.4	Clearances for reinforced insulation	>5,5mm	P
8.1.5	The minimum contact gap shall be 1,2mm in the open position		
8.2	Creepage distances		—
	Default pollution degree (Width X)	2 (1,0mm)	P
	Pollution degree declared by manufacturer (Width X)	1 / 3 (0,25mm / 1,5mm)	N/A
	Min. CTI/PTI (material group)	100 (IIIb)	N/A
	Declared material group	I / II / **IIIa**	P
	Corresponding CTI/PTI of declared material group	175≤ CTI/PTI <400	P
8.2.1	Creepage distances for basic insulation	>3mm (test by gauge)	P
8.2.2	Creepage distances for functional insulation	>3mm (test by gauge)	P
8.2.3	Creepage distances for supplementary insulation		N/A
8.2.4	Creepage distances for reinforced insulation	>5,5mm	P

BS 1363-2 : 2016			
Clause	Requirement – Test	Result - Remark	Verdict
8.3	Solid insulation		—
	No minimum thickness for solid insulation		P
	Basic, functional, supplementary, reinforced solid insulation shall withstand the required impulse voltage declared by manufacturer of the accessory		P
	The insulation shall continue to conform to the electric strength test with clause 15.1.3		P
8.3.1	Basic solid insulation	1500V	P
	Functional insulation	1500V	P
	Supplementary solid insulation:	~~1500V~~	N/A
	During the test, no breakdown or flashover occurred		P
8.3.2	Reinforced solid insulation:	3000V	P
	During the test, no breakdown or flashover occurred		P
8.4	Requirements for printed wiring boards and equivalent construction		—
	Printed wiring boards and equivalent construction shall conform to BS EN 60664-5		N/A
	Where coating, potting or moulding is used articles shall conform to BS EN 60664-3		N/A
21	Screws, current-carrying parts and connections		—
21.1	Screws directly transmitting electrical contact pressure did screw into metal.		P
	Screws shall not be of metal which is soft and liable to creep. screws shall not be of insulating material.		P
	Screwed connection shall withstand the mechanical stresses occurring in normal use.		P

BS 1363-2 : 2016			
Clause	Requirement – Test	Result - Remark	Verdict
	Contact pressure in electrical connections shall not be transmitted through insulating material unless there is insufficient resiliency in the metallic parts.		P
21.1.1	Torque test:		P
	- 10 times for thread of insulating material .....:		N/A
	- 5 times for others .....:	3,9mm; 1,2Nm	P
	After the test, no damage impairing the further use of the screwed connection.		P
21.2	Thread-cutting and thread forming screws shall not be used for the making of current-carrying or earth continuity connections.		P
	Screws which make a mechanical connection on between different parts of the socket-outlet shall be locked against loosening, if the connection carries current.		P
	Rivets shall be locked against loosening		P
21.3	Current-carrying part shall be of brass		P
	parts of earthing circuit shall be of brass		P
Seq. 2	**General**		—
5	All tests shall be type tests		P
9.3	The resilient accessible external surface, no risk as a result of undue pressure, live parts could penetrate the accessible surfaces.		P
	The design of the apparatus shall be steadied force of 240 $^{0}_{-10}$ N.	Test force: 240N	P
	A test voltage of 2000V±60V 50Hz is applied for 60 $^{+5}_{0}$ s between all live parts bonded together and the earthed test pressure block.	Test voltage: 2000V	P
	During the test no flashover or breakdown occurred.		P
	After the test it shall not be possible to touch live parts.		P

BS 1363-2 : 2016			
Clause	Requirement – Test	Result - Remark	Verdict
21.3	Current-carrying parts shall be of brass		P
	Earthing contacts shall be of brass		P
10.2	All accessible metal parts of socket-outlets shall be in effective electrical contact with the earthing contact. Then voltage drop across them is measured and the resistance is calculated.		P
10.2.1	a). for metal parts insulated from live parts, by the test described in clause 15.1.3.		N/A
	b). for metal parts connected to an earthing terminal	Test current: 25A;	P
	c). the resistance between the earthing terminal and any other nominated part shall not exceed 0.05Ω	Measured: Max.0,02Ω	P
10.3	The connection between the screw and earthing terminal shall be of low resistance.		P
10.3.1	Between the socket-outlet earthing terminals and any fixing screw in electrical contact with the earthing circuit shall be checked by clause 10.2.1b).	Test current: 25A; Torque value: 0,8 Nm; Measured: Max.0,02Ω	P
19.1	The cord anchorage shall be such that the conductors are relieved from strain, including twisting, where they are connected to the terminals.		N/A
	The cord anchorage did contain the sheath and should either be of insulating material.		N/A
	Tying the cord into a knot or tying the ends with string or the like not used		N/A
19.1.1	Rewirable portable socket-outlet are fitted with a 3-core flexible cord. The conductors are introduced into the terminals and the terminal screws tightened just sufficiently to prevent the conductors easily changing their positions.	Clamping screw torque = _____ Nm	N/A
	For non-rewirable portable socket-outlet, the test is carried out with the cord with which it is supplied		N/A

BS 1363-2 : 2016			
Clause	Requirement – Test	Result - Remark	Verdict
	Using the appropriate load and torque in table 2		N/A
	During the test, the insulation of the flexible cord shall not be damaged.		N/A
	A voltage of 3750V is applied for 60s between the conductors. No breakdown or flash over is occurred.		N/A
	Size of cord (mm^2)	Displacement (mm)	Limit (mm) —
	0.5		≤ 2.0 N/A
	1.5		≤ 2.0 N/A
	(supplied)		≤ 2.0 N/A
14.2	Socket-outlets shall be proof against humid conditions in normal use.	25 °C, 93%	P
13.13	The fuse link is fitted to a socket-outlet it shall conform to BS 1362 and shall be mounted in suitable contacts between the line terminal.		N/A
	The design shall be such that the fuse link can not be displaced accidentally during use.		N/A
	The contact for a fuse link connected to the line terminal shall be formed in one piece with a fixed part of the terminal.		N/A
9.1.1	Socket-outlets shall be so designed, live parts are not accessible in normal use.		P
13.4.1	a) Socket contacts shall have effective electrical contact with a corresponding plug pin. Limit ≤ 25mV	Measured: L (mV): Max.12 N (mV): Max.13	P
	b) Socket contacts shall have effective mechanical contact with a corresponding plug pin.		P
13.5	Socket contacts shall withstand the stresses.		P
	1) Line socket contacts		P
	2) Neutral socket contacts		P
13.6	Earth socket contacts shall withstand the stresses.		P
	After the test, the earth socket contacts shall		P

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Clause	Requirement – Test	Result - Remark	Verdict
	retain the gauge for 30s.		
Seq. 3	**General**		—
5	All test shall be type tests		P
13.13	The fuse link is fitted to a socket-outlet it shall conform to BS 1362 and shall be mounted in suitable contacts between the line terminal.		N/A
	The design shall be such that the fuse link can not be displaced accidentally during use.		N/A
	The contact for a fuse link connected to the line terminal shall be formed in one piece with a fixed part of the terminal.		N/A
20.1.2	The fuse clips of a fused socket-outlet shall have adequate mechanical strength.		N/A
17	Breaking capacity of socket-outlets		—
17.1.2	The breaking capacity of socket contacts shall be adequate.		P
	Test current (A), test voltage (V)	16.25A, 250V~	P
	After the test, the socket-outlet shall be capable of satisfying.		P
17.1.3	The breaking capacity of switches incorporated in socket outlets shall be adequate.		P
	Test current (A), test voltage (V)	16.25A, 275V~	P
	After the test, the socket-outlet shall be capable of satisfying.		P
17.1.4	The breaking capacity of fuse contacts incorporated in socket outlets shall be adequate.		N/A
	Test current (A), test voltage (V)		N/A
	After the test, the socket-outlet shall be capable of satisfying.		N/A
13.11	Switches shall be so constructed that undue arcing can not occur when the switch is operated slowly.		P
	The switch shall disconnect at least the supply to		P

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Clause	Requirement – Test	Result - Remark	Verdict
	the line socket contact.		
13.11.1	Following the test in clause 17, the circuit is broken a further 10 times, each time moving the actuating member by hand over a period of 2s in a manner such as to attempt to stop the moving contact in an intermediate position causing arcing.		P
	The actuating member shall be released after 2s of any arcing shall cease.		P
16	Temperature rise		—
16.1.2	The fixed socket-outlets and their surroundings shall not attain excessive temperatures in normal use.		P
	Test current (A), test voltage (V):	14A+6A, 250V~ for 2 gang	P
	Terminal screws: torque (Nm):	0,8Nm	P
	USB battery charging outlets shall be loaded with current (A):	USB load: 3A	P
	Temperature rise on terminals or terminations shall not exceed 52K:	Measured: Max.43	P
	Temperature rise on accessible external surface shall not exceed 52K:	Measured: Max.33	P
16.1.3	The portable socket-outlets and their surroundings shall not attain excessive temperatures in normal use.		N/A
	Test current (A), test voltage (V):		N/A
	Terminal screws: torque (Nm):		N/A
	USB battery charging outlets shall be loaded with current (A):	USB load:	N/A
	Temperature rise on terminals or terminations shall not exceed 52K:	Measured:	N/A
	Temperature rise on accessible external surface shall not exceed 52K:	Measured:	N/A
	The multiple portable socket-outlet, the test current being divided equally between a no. of		N/A

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Clause	Requirement – Test	Result - Remark	Verdict
	test plug, one inserted into each set of socket contacts in the portable socket-outlet.		
	Test current (A), test voltage (V):		N/A
	Terminal screws: torque (Nm):		N/A
	USB battery charging outlets shall be loaded with current (A):	USB load:	N/A
	Temperature rise on terminals or terminations shall not exceed 52K:	Measured:	N/A
	Temperature rise on accessible external surface shall not exceed 52K:	Measured:	N/A
16.1.4	Fixed and panel mounted socket-outlets with more than one terminal for line and/or neutral connections shall be subjected to an additional temperature rise test.		N/A
	Test current (A), test voltage (V):		N/A
	Terminal screws: torque (Nm):		N/A
	USB battery charging outlets shall be loaded with current (A):	USB load:	N/A
	Temperature rise on terminals or terminations shall not exceed 52K:	Measured:	N/A
	Temperature rise on accessible external surface shall not exceed 52K:	Measured:	N/A
	Between each line terminal and between each neutral terminal shall be in effective electrical contact.	Test current:	N/A
	The resistance shall not exceed 0.05Ω.	Measured:	N/A
19.5	Non-rewirable socket outlet shall be so designed that the flexible cord is not subjected to excessive bonding.		N/A
	The socket outlet is fixed to the oscillating member of the apparatus as specified		N/A
	The flexible cord is loaded with a weight	N	N/A
	A current is passed through the line and neutral conductors, the earthing conductor connected to	A V	N/A

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Clause	Requirement – Test	Result - Remark	Verdict

	neutral conductor		
	The number of flexings 10000 at 60 per minute		N/A
	After 5000 flexings, plugs with cords of circular section are turned through 90° about the cord entry centreline.		N/A
	During the test, no interruption of the current passing through the conductors and no short-circuited between them.		N/A
	After the test, the sample shall show no damage (breakage of more than 10% of the total no. of conductor strands).	No. of break strands : Total no. of strands : = ____%	N/A
	The insulation have been not pierced.		N/A
Seq. 4	**General**		—
5	All tests shall be type tests		P
14.1	The socket-outlet shall be maintained at 70°C for 7 days in the cabinet. After the treatment, the socket-outlet are removed from the cabinet and then show no damage which:		P
	- would lead to non-conformity with this standard		P
	- would impair safety; or		P
	- would prevent further use.		P
15	Insulation resistance and electric strength		—
15.1.2	Insulation resistance of socket-outlets shall be adequate. (500 V d.c. for 1 min)		P

	Parts between	Insulation resistance (MΩ)	Limit (MΩ)	—
	a) Line and neutral	>199	≥5	P
	b) Line/neutral and			—
	1. metal foil covered with the body	>199	≥5	P
	2. earthing	>199	≥5	P
	3. metal part of a cord anchorage		≥5	N/A
	c) Switch contacts - L	>199	≥2	P
	Switch contacts - N	>199	≥2	N/A

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Clause	Requirement – Test	Result - Remark	Verdict
15.1.3	Electric strength of socket outlets shall be adequate. (2000V a.c., for 1 min):		P
	Parts between		—
	a) Line and neutral		P
	b) Line/neutral and		—
	1. metal foil covered with the body		P
	2. earthing		P
	3. metal part of a cord anchorage		N/A
	c1) Switch contacts - L		P
	c2) Switch contacts - N		N/A
	During the test, no breakdown or flashover occurred.		P
15.2	Non-rewireable portable socket-outlet shall withstand with a.c. voltage between an a.c. voltage of 6000V is applied for current-carrying parts and accessible surface.		N/A
	During the test, no breakdown or flashover occurred.		N/A
18.1.2	The socket-outlet is subjected to make and break a current in a substantially non-inductive circuit.	Number of cycles: 13A 250V~, 15000 times	P
	After the test, the shutter shall be operating satisfactorily.		P
9.1	After the test, it shall not be possible to touch live parts.		P
16.1.2	The fixed socket-outlets and their surroundings shall not attain excessive temperatures in normal use.		P
	Test current (A), test voltage (V):	14A+6A, 250V~ for 2 gang	P
	Terminal screws: torque (Nm):		P
	USB battery charging outlets shall be loaded with current (A):	USB load: 3A	P
	Temperature rise on terminals or terminations shall not exceed 52K:	Measured: Max.45K	P

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Clause	Requirement – Test	Result - Remark	Verdict
	Temperature rise on accessible external surface shall not exceed 52K:	Measured: Max.36K	P
16.1.3	The portable socket-outlets and their surroundings shall not attain excessive temperatures in normal use.		N/A
	Test current (A), test voltage (V) :		N/A
	Terminal screws: torque (Nm):		N/A
	USB battery charging outlets shall be loaded with current (A):	USB load:	N/A
	Temperature rise on terminals or terminations shall not exceed 52K:	Measured:	N/A
	Temperature rise on accessible external surface shall not exceed 52K:	Measured:	N/A
	The multiple portable socket-outlet, the test current being divided equally between a no. of test plug, one inserted into each set of socket contacts in the portable socket-outlet.		N/A
	For portable socket-outlets with more than 4 outlets, the test shall be performed with 4 test plugs inserted into 4 sets of socket contacts, selected to give the most onerous conditions. The remaining outlets shall have nothing inserted into them.		N/A
	Test current (A), test voltage (V):		N/A
	Terminal screws: torque (Nm):		N/A
	Temperature rise on terminals or terminations shall not exceed 52K:	Measured:	
	Temperature rise on accessible external surface shall not exceed 52K:	Measured:	N/A
16.1.4	Fixed and panel mounted socket-outlets with more than one terminal for line and/or neutral connections shall be subjected to an additional temperature rise test.		N/A
	Test current (A), test voltage (V):		N/A

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Clause	Requirement – Test	Result - Remark	Verdict

	Terminal screws: torque (Nm):			N/A
	USB battery charging outlets shall be loaded with current (A):	USB load:		N/A
	Temperature rise on terminals or terminations shall not exceed 52K:	Measured:		N/A
	Temperature rise on accessible external surface shall not exceed 52K:	Measured:		N/A
	Between each line terminal and between each neutral terminal shall be in effective electrical contact.	Test current:		N/A
	The resistance shall not exceed 0.05Ω.	Measured:		N/A
13.19	Portable socket-outlet shall be so designed and constructed they can not be formed to allow access to live parts or to allow separated metal parts to be brought into contact with each other.			N/A
15.1.2	Insulation resistance of socket-outlets shall be adequate. (500 V d.c. for 1 min)			P
	Parts between	Insulation resistance (MΩ)	Limit (MΩ)	—
	a) Line and neutral	>199	≥5	P
	b) Line/neutral and			—
	1. metal foil covered with the body	>199	≥5	P
	2. earthing	>199	≥5	P
	3. metal part of a cord anchorage	-	≥5	N/A
	c) Switch contacts - L	>199	≥2	P
	Switch contacts - N	>199	≥2	N/A
15.1.3	Electric strength of socket outlets shall be adequate. (2000V a.c., for 1 min):			P
	Parts between			—
	a) Line and neutral			P
	b) Line/neutral and			—
	1. metal foil covered with the body			P
	2. earthing			P

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Clause	Requirement – Test	Result - Remark	Verdict
	3. metal part of a cord anchorage		N/A
	c1) Switch contacts - L		P
	c2) Switch contacts - N		N/A
15.2	Non-rewireable socket-outlet shall withstand with a.c. voltage between an a.c. voltage of 6000V is applied for current-carrying parts and accessible surface.		N/A
	During the test, no breakdown or flashover occurred.		N/A
13.4.1 a)	Socket contacts shall have effective electrical contact with a corresponding plug pin. Then the voltage drop between the terminal connecting strap at a point immediately adjacent to socket contact and the corresponding plug pin. Limit ≤ 40 mV	Measured: L (mV): Max.22 N (mV): Max.23	P
10.2	All accessible metal parts of socket-outlets shall be in effective electrical contact with the earthing contact. Then voltage drop across them is measured and the resistance is calculated.		P
10.2.1	a). for metal parts insulated from live parts, by the test described in clause 15.1.3.		P
	b). for metal parts connected to an earthing terminal	Test current: 25A;	P
	c). the resistance between the earthing terminal and any other nominated part shall not exceed 0.05Ω	Measured: Max.0,02Ω	P
13.6	After the test, the earth socket contacts shall retain the gauge for 30s.		P
	Earth socket contacts shall withstand the stresses.		P
13.7	After the test in 13.6, the gauge and test pin shall be no possible to touch current-carrying parts. Conformity shall be checked by the tests of 13.7.1		P

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Clause	Requirement – Test	Result - Remark	Verdict
	It shall not be possible to operate a shutter by inserting a 2-pin plug into a 3-pin socket-outlet. Conformity shall be checked by the tests of 13.7.2		P
13.8	The construction of socket-outlets shall be such as to allow for easy withdrawal of the plug.		P
	Force required to pull the plug out. Limit ≤ 36 N	<30N	P
Seq. 5	**General**		—
5	All tests shall be type tests		P
14.2	Socket-outlets shall be resistant to humid conditions.		P
	After the test, the samples show no damage.		P
18.1.3	The voltage drop across each switched pole. Limit ≤ 60 mV	Measured: L (mV):Max.32	P
	For switched socket-outlet, the switch is subjected to make and break a current.	Number of cycles:15000	P
	At the end of the test, the switch shall be capable of making and breaking the rated current of 13A at 250V.		P
	The voltage drop across each switched pole. Limit ≤ 75 mV	Measured: L (mV): Max.47	P
20	Mechanical strength		—
20.1.2	The fuse clips of a fused socket-outlet shall have adequate mechanical strength.		N/A
20.1.3	Fixed socket-outlets are tested with the impact test apparatus.		P
	For socket-outlets higher than IPX0, the test is carried out with any lid open.		N/A
	The lid is then closed with additional three blows.		N/A
	After the test, the socket-outlet shall still be in		P

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Clause	Requirement – Test	Result - Remark	Verdict
	accordance with clauses 8, 9 and 15.		
	For socket-outlets greater than IP20 shall show no damage which impairs its ingress protection.		N/A
20.1.4	Rewirable single and twin portable socket-outlets and non-rewirable single and twin portable socket-outlets are tested in the tumbling barrel.	Torque for terminal screw =_____ Nm Torque for cover screws =_____ Nm	N/A
	After the test the portable socket-outlet shall show no external damage which might affect the safety.		N/A
	Components did not have become detached.		N/A
	The portable socket-outlet shall satisfy the tests described in 13.4b and clause 15.		N/A
	The portable socket-outlet shall satisfy the tests described in16.	Test current: Measured: K (on terminations); K (on enclosure)	N/A
20.1.5	Rewirable portable socket-outlets with more than two outlets are fitted with 3-core 1.25mm^2. Non-rewirable accessories are tested as delivered. The specimen is held so that the cable is horizontal and then it is allowed to fall on to a concrete floor.		N/A
	After the test, the socket-outlet shall show no external damage which might affect the safety.		N/A
	Components shall not have become detached.		N/A
	The portable socket-outlet shall satisfy the tests described in 13.4 b) and clause 15.		N/A
	The portable socket-outlet shall satisfy the tests described in clause 16.	Test current: Measured: K (on terminations); K (on enclosure)	N/A
Seq. 6	**Materials**		—
5	All tests shall be type tests		P
22	Resistance to heat		—

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Clause	Requirement – Test	Result - Remark	Verdict

22.1.2	The socket-outlet is kept in a heating clamber, to test for resistance to heat. During the test, they shall not undergo any change impairing their further use.		100 °C; 60 min		P
	After the test, the socket-outlets shall satisfy the tests				—
	- clause 9.2.1)				P
	- clause 15.1.3				P
	- live parts not accessible by probe 11 of BSEN 61032		30 N		P
22.1.3	Portable socket-outlets with external parts of resilient material are subjected to a pressure test of an apparatus.		70 °C; 60 min		N/A
	After the test, the socket-outlets shall satisfy the tests				—
	- clause 15.1.2 b) i)				N/A
	- clause 15.1.3				N/A
	- accept the gauge (Fig. 11)				N/A
22.2	Parts of insulating material are subjected to the ball-pressure test at a test temperature. After the test, the diameter of immersion caused by the ball is measured.				P
	Parts	Test temp (°C)	Diameter of impression (mm)	Limit (mm)	—
	Not retain live part (Shutter/plastic frame for cover 575117 and 575118)	75	Max.1.2	≤2	P

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Clause	Requirement – Test	Result - Remark	Verdict

	Retain live part (Switch rocker/cover plate/front cover/ front plastic frame/ Back plastic frame (PC material); Front cover (UREA material); Shutter box (PC with type RX2123); Base)	125	Max.1.6	≤2	P
Seq. 7	**Materials**				—
5	All tests shall be type tests				P
23.2	The specimen is subjected to glow-wire test. Insulating parts shall be of material resistant to abnormal heat and fire.				P
	Not retain live part		650 °C (Shutter/ plastic frame for 575117 and 575118)		P
	- no visible flame and no sustained glowing		no visible flame		P
	- flames and extinguish within 30 s after removal of glow-wire				N/A
	- no ignition of tissue paper				P
	Retain one live part		850°C (Switch rocker/cover plate/front cover/ front plastic frame/ Back plastic frame (PC material); Front cover (UREA material); Shutter box (PC with type RX2123); Base)		P
	- no visible flame and no sustained glowing				N/A
	- flames and extinguish within 30 s after removal of glow-wire		Extinguish within 5s		P
	- no ignition of tissue paper				P
8.2	Annex C: Determination of CTI & PTI				—
	Insulation materials resistant to tracking		PTI 175		P
Seq. 8	**Materials**				—
5	All tests shall be type tests				
24	Resistance to excessive residual stresses and to rusting				—

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Clause	Requirement – Test	Result - Remark	Verdict
24.1	The current-carrying parts of copper alloy are subjected to a chemical test.		P
	After the test, there shall be no cracks visible with normal or corrected vision without additional magnification.		P
24.2	The ferrous parts of the socket-outlet are subjected to a chemical test.		P
	After the test, their surface shall show no signs of rust.		P
Seq. 9	**Positive break**		—
5	All tests shall be type tests		P
13.11.2	Actuating member of switch shall not at rest in the off position whilst the switch contacts remain closed		P
	Actuating mechanism remain a position		P
	- giving adequate contact		P
	- adequate separation of contacts		P
13.11.4	Measured force F	Max.18N	P
	Force applied, i.e. 3F	54N	P
	After the test actuating member shall not remain at rest in the “OFF” position.		P
Seq. 10	**Ingress protection**		—
5	All tests shall be type tests		N/A
13.22	Socket-outlets higher than IP20 shall be so constructed that there are no free openings in their enclosures according to their classification.		N/A
	Conformity is checked by inspection and the tests in accordance with 14.3.		N/A
13.23	Surface mounted socket-outlets higher than IP20 shall maintain IP classification when fitted with		N/A

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Clause	Requirement – Test	Result - Remark	Verdict
	conduits or with sheathed cables.		
	Degrees of protection IPX4, IPX5 or IPX6 shall have provisions for opening a drain hole.		N/A
	The drain hole shall be not less than 5mm in diameter, or 20mm^2 in area with a width and a length not less than 3mm.	Measured:	N/A
	The drain hole shall be effective in the position.		N/A
	Lid springs, if any, shall be corrosion resistant.		N/A
14.3	The enclosure of the socket-outlets shall provide protection in accordance with the IP classification of the socket.		N/A
	Protection against access to hazardous parts		—
	The appropriate test according to BS EN 60529 shall be performed.		N/A
	Protection against harmful effects due to ingress of solid foreign bodies		—
	The appropriate test according to BS EN 60529 shall be performed.		N/A
	Socket-outlets classified as IP5X, the enclosure shall be deemed to be category 2.		N/A
	Protection against harmful effects due to ingress of water		—
	Conformity shall be checked by the appropriate tests of BS EN 60529.		N/A
	Surface mounted socket-outlets shall be fitted with circular cables having a code H07RN-F and a cross-sectional area of 1.5mm^2.		N/A
	Socket-outlets having an IP classification with a		—

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Clause	Requirement – Test	Result - Remark	Verdict
	plug inserted in the socket-outlet shall be tested:		
	- with a plug fitted with 2-core 0.5mm^2 flexible cable.		N/A
	- with a Plug fitted with 3-core 1.5mm^2 flexible cable.		N/A
	- without a plug fitted.		N/A
	Socket-outlets having an IP classification with no plug inserted shall be tested for this arrangement.		N/A
	Mounting screws shall be tightened with a torque according to the manufacturer's instructions or two thirds of the values given in table 6.	Test torque: Nm	N/A
	Socket-outlets with screw glands or membranes are fitted with circular cables having a code H07RN-F and a cross-sectional area of 1.5mm^2.		N/A
	Glands shall be tightened with a torque according to the manufacturer's instructions or two thirds of the values given in table 8.	Test torque: Nm	N/A
	Glands shall not be filled with sealing compound or the like.		N/A
	Parts which can be removed without the aid of a tool shall be removed.		N/A
	Completion of the test samples shall withstand an electric strength test in 15.1.3.		N/A
	Inspection shall show that if any water has entered, it shall not:		—
	a) be sufficient to interfere with the correct operation of the equipment or impair safety;		N/A
	b) deposit on parts of insulating material where it		N/A

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Clause	Requirement – Test	Result - Remark	Verdict
	could lead to tracking along the creepage distances;		
	c) reach live parts not designed to operate when wet;		N/A
	d) accumulate near the cable end or enter the cable if any.		N/A
	If the drain holes have been opened, any water which enters does not accumulate and that it drains away without doing any harm to the complete assembly.		N/A
Seq. 11	**Electric vehicle charging**		—
5	All tests shall be type tests		N/A
14.1	The socket-outlet shall be maintained at 70oC for 7 days in the cabinet. After the treatment, the socket-outlet are removed from the cabinet and then show no damage which:		N/A
	- would lead to non-conformity with this standard		N/A
	- would impair safety; or		N/A
	- would prevent further use.		N/A
17.2	Socket-outlets intended for electric vehicle charging the tests of 17.1.2 & 17.1.3 are performed at a power factor of:	Power factor:	N/A
17.1.2	The breaking capacity of socket contacts shall be adequate.		N/A
	Test current (A), test voltage (V)		N/A
	After the test, the socket-outlet shall be capable of satisfying.		N/A
17.1.3	The breaking capacity of switches incorporated in socket outlets shall be adequate.		N/A
	Test current (A), test voltage (V)		N/A
	After the test, the socket-outlet shall be capable of satisfying.		N/A

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Clause	Requirement – Test	Result - Remark	Verdict
18.2	Socket-outlets intended for electric vehicle charging the tests of 18.1.2 & 18.1.3 are performed at a power factor of:	Power factor:	N/A
18.1.2	The socket-outlet is subjected to make and break a current in a substantially non-inductive circuit.	Number of cycles:	N/A
	After the test, the shutter shall be operating satisfactorily.		N/A
18.1.3	The voltage drop across each switched pole. Limit ≤ 60 mV	Measured: L (mV): N (mV):	N/A
	For switched socket-outlet, the switch is subjected to make and break a current.	Number of cycles: 5,000	N/A
	At the end of the test, the switch shall be capable of making and breaking the rated current of 13A at 250V.		N/A
	The voltage drop across each switched pole. Limit ≤ 75 mV	Measured: L (mV): N (mV):	N/A
16	The socket-outlet shall satisfy the tests described in clause 16.	Test current: Measured: K (on terminations); K (on enclosure)	N/A
Seq. 12	**Electric vehicle charging**		—
5	All tests shall be type tests		N/A
26	Socket-outlets classified as being suitable for electric vehicle charging shall withstand the associated electrical and mechanical stresses.		N/A
	Conformity shall be checked by the following test:		—
	The socket-outlet shall be wired in accordance to 16.1.2 using 2.5mm^2 PVC cable.		N/A
	The test shall be carried out at rated voltage:	250V	N/A
	The plug shall be connected to a load of:	13A	N/A
	The test shall be conducted for 28 continuous		N/A

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Clause	Requirement – Test	Result - Remark	Verdict
	cycles, each cycle consisting of 8h “on”, 1h “off”, 8h “on” and 7h “off”.		
	The socket-outlet shall be checked by inspection.		N/A
16	The socket-outlet shall satisfy the tests described in clause 16.	Test current: Measured: K (on terminations); K (on enclosure)	N/A
	The socket-outlet shall accept the gauge (Fig. 11)		N/A
Seq. 13	**Additional tests for rewirable fixed socket-outlets with screwless terminals**		—
5	All tests shall be type tests		N/A
14.1	The socket-outlet shall be maintained at 70oC for 7 days in the cabinet. After the treatment, the socket-outlet are removed from the cabinet and then show no damage which:		N/A
	- would lead to non-conformity with this standard		N/A
	- would impair safety; or		N/A
	- would prevent further use.		N/A
11.10.1	Screwless terminals for fixed socket-outlets shall be provided with clamping units which allow the proper connection of conductors.		N/A
	The terminals shall be of the type suitable for the following		—
	a) rigid (solid or stranded) copper conductors only; or		N/A
	b) flexible copper conductors only; or		N/A
	c) both rigid (solid or stranded) and flexible copper conductors.		N/A
	Conformity shall be checked by inspection and by fitting the appropriate conductors.		N/A
	The tests shall be carried out with rigid conductors first and then repeated with flexible conductors.		N/A
	The conductor can be connected without special		N/A

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Clause	Requirement – Test	Result - Remark	Verdict
	preparation.		
11.10.2	With sufficient contact pressure and without undue damage to the conductor.		N/A
	The conductor shall be clamped between metal surfaces.		N/A
11.10.3	The intended disconnection of a conductor shall require an operation, which can be effected manually other than a pull on the conductor.		N/A
	Openings for the use of a tool intended to assist the insertion or disconnection shall be clearly distinguishable.		N/A
11.10.4	Screwless terminals which are intended to be used for the interconnection of two or more conductors:		N/A
	- during the connection or disconnection the conductors can be connected or disconnected either at the same time or separately;		N/A
	- each conductor is introduced in a separate clamping unit.		N/A
11.10.5	Screwless terminals shall be so designed that undue insertion of the conductor is prevented and adequate insertion is obvious.		N/A
	Marking indicating the length of insulation to be removed.		N/A
11.10.6	Screwless terminals shall be properly fixed to the socket-outlet.		N/A
	Screwless terminals shall not work loose when the conductors are inserted or disconnected during installation.		N/A
11.10.7	Screwless terminals shall withstand the mechanical stresses occurring in normal use.		N/A
	Conductors shall be inserted and disconnected five times.		N/A
	After each insertion, the conductor shall be	Test pull: N	N/A

BS 1363-2 : 2016			
Clause	Requirement – Test	Result - Remark	Verdict
	subjected to a pull of:		
	During the application of the pull, the conductor shall not come out.		N/A
	The terminal shall not have become detached.		N/A
11.10.8	Screwless terminals shall withstand the electrical and thermal stresses occurring in normal use.		N/A
	The screwless terminals shall be connected with 1m long & 1.5mm2 conductors and loaded for 60min with a current of:	Test current: A	N/A
	During the test the current shall not be passed through the socket-outlet but only through the terminals.		N/A
	Immediately after this period, the voltage drop across each screwless terminals shall not exceed 15mV at 13A.	Measured: mV	N/A
	The screwless terminals, after being subjected to the determination of the voltage drop shall be tested as follows:		—
	During the test, a current of 19A shall be passed through the terminal.		N/A
	The terminals shall be subjected to 192 temperature cycles having a duration of 1h.		N/A
	The voltage drop in each screwless terminal shall be determined after every 24 temperature cycles and after 192 temperature cycles have been completed and shall not exceed 22.5mV at 13A.	Measured: mV	N/A
	The mechanical stress test in accordance with 11.10.7 shall be repeated.		N/A
Annex I	**Requirements for incorporated electronic components**		N/R
5	All tests shall be type tests		N/A
14.1	The socket-outlet shall be maintained at 70oC for 7 days in the cabinet. After the treatment, the socket-outlet are removed from the cabinet and then show no damage which:		N/A
	- would lead to non-conformity with this standard		N/A

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Clause	Requirement – Test	Result - Remark	Verdict
	- would impair safety; or		N/A
	- would prevent further use.		N/A
11.10.1	Screwless terminals for fixed socket-outlets shall be provided with clamping units which allow the proper connection of conductors.		N/A
	The terminals shall be of the type suitable for the following		—
	a) rigid (solid or stranded) copper conductors only; or		N/A
	b) flexible copper conductors only; or		N/A
	c) both rigid (solid or stranded) and flexible copper conductors.		N/A
	Conformity shall be checked by inspection and by fitting the appropriate conductors.		N/A
	The tests shall be carried out with rigid conductors first and then repeated with flexible conductors.		N/A
	The conductor can be connected without special preparation.		N/A
11.10.2	With sufficient contact pressure and without undue damage to the conductor.		N/A
	The conductor shall be clamped between metal surfaces.		N/A
11.10.3	The intended disconnection of a conductor shall require an operation, which can be effected manually other than a pull on the conductor.		N/A
	Openings for the use of a tool intended to assist the insertion or disconnection shall be clearly distinguishable.		N/A
11.10.4	Screwless terminals which are intended to be used for the interconnection of two or more conductors:		N/A
	- during the connection or disconnection the conductors can be connected or disconnected either at the same time or separately;		N/A

BS 1363-2 : 2016			
Clause	Requirement – Test	Result - Remark	Verdict

	- each conductor is introduced in a separate clamping unit.		N/A
11.10.5	Screwless terminals shall be so designed that undue insertion of the conductor is prevented and adequate insertion is obvious.		N/A
	Marking indicating the length of insulation to be removed.		N/A
11.10.6	Screwless terminals shall be properly fixed to the socket-outlet.		N/A
	Screwless terminals shall not work loose when the conductors are inserted or disconnected during installation.		N/A
11.10.7	Screwless terminals shall withstand the mechanical stresses occurring in normal use.		N/A
	Conductors shall be inserted and disconnected five times.		N/A
	After each insertion, the conductor shall be subjected to a pull of:	Test pull: N	N/A
	During the application of the pull, the conductor shall not come out.		N/A
	The terminal shall not have become detached.		N/A
11.10.8	Screwless terminals shall withstand the electrical and thermal stresses occurring in normal use.		N/A
	The screwless terminals shall be connected with 1m long & 1.5mm2 conductors and loaded for 60min with a current of:	Test current: A	N/A
	During the test the current shall not be passed through the socket-outlet but only through the terminals.		N/A
	Immediately after this period, the voltage drop across each screwless terminals shall not exceed 15mV at 13A.	Measured: mV	N/A
	The screwless terminals, after being subjected to the determination of the voltage drop shall be tested as follows:		—

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Clause	Requirement – Test	Result - Remark	Verdict

	During the test, a current of 19A shall be passed through the terminal.		N/A
	The terminals shall be subjected to 192 temperature cycles having a duration of 1h.		N/A
	The voltage drop in each screwless terminal shall be determined after every 24 temperature cycles and after 192 temperature cycles have been completed and shall not exceed 22.5mV at 13A.	Measured: mV	N/A
	The mechanical stress test in accordance with 11.10.7 shall be repeated.		N/A
Annex I	**Requirements for incorporated electronic components**		—
I.1	Incorporated electronic components shall conform to their relevant standard(s).		P
I.2	Electromagnetic compatibility (EMC) requirements		—
	Socket-outlets incorporating electronic circuits shall conform to the immunity and emission requirements of the relevant product or generic BS EN 61000 standard series.		P
I.3	USB circuits intended for charging portable devices		—
I.3.1	USB circuits incorporated in a socket-outlet shall conform to the requirements of:		—
	- BS EN 60950-1; or		N/A
	- BS EN 62368-1; or		P
	- BS EN 61558-2-16 and BS EN 61558-2-6; and		N/A
	- BS EN 62680-1-1.		P
I.3.1.1	Power rating and identification markings		P
	The input voltage of the USB circuit shall not be less than the rated voltage of the socket-outlet.	Input: 220-250V	P
	- symbol for nature of supply, for d.c. only;		P
	- rated current, in milliamperes or amperes; and	3A	P
	- rated output voltage.	5Vdc	P
I.3.2	Overcurrent protection shall be provided on the primary side of the USB circuit, or;		P
	Appropriate overcurrent protection in the supply		N/A

BS 1363-2 : 2016			
Clause	Requirement – Test	Result - Remark	Verdict

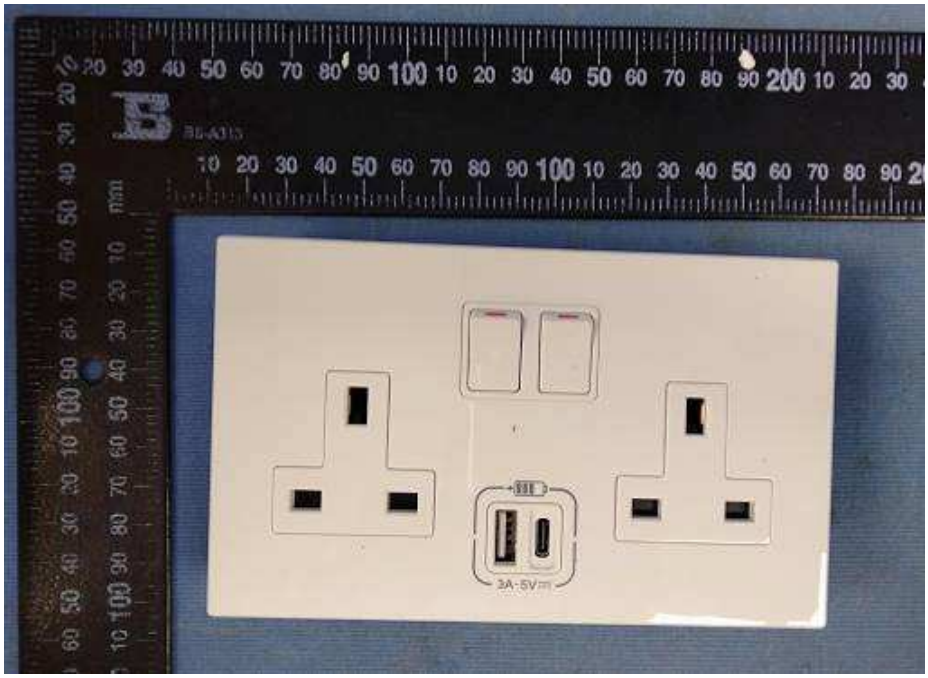
	to the USB circuit within the socket-outlet.		
	The USB circuit shall not rely on the building or installation protection device for overcurrent protection.		P
I.3.2.1	A single overcurrent protection device shall be provided and it shall be located in the line circuit		P
I.3.2.2	Double or reinforced insulation shall be provided between the primary and secondary circuits of the USB circuit.		P
	The output of the USB circuit shall be SELV or equivalent.		P
	Double or reinforced insulation shall be provided between the primary circuit and accessible parts of the socket-outlet.		P
I.3.2.3	The USB circuit shall be designed and constructed to conform to the requirements of Overvoltage Category III.		P
	USB circuits of Overvoltage Category II can be used where additional overvoltage protection is provided within the socket-outlet.		N/A
I.3.3	The requirement in BS EN 60950-1 for the provision of a disconnect device shall not apply.		P
I.3.4	Clause 20 of BS 1363-2 shall be applied to the USB circuit.		P
I.3.4.1	A fire enclosure shall be provided which meets the requirements of BS EN 60950-1, or;		P
	Assessment and testing of all possible single fault tests shall be applied.		N/A
	The material requirements of BS 1363-2, Clauses 22 and 23 are also applicable.		P
I.3.4.2	USB circuits intended for charging portable devices shall conform to the requirements for dedicated charging ports of BS EN 62680-1-1.	only for Std A port test for this requirement	P
I.3.5	Conformity to I.3.1 to I.3.4 shall be checked by		P

BS 1363-2 : 2016			
Clause	Requirement – Test	Result - Remark	Verdict
	inspection of conformity evidence or by test.		
I.4	Surge protective devices		—
I.4.1	Surge protective devices incorporated in BS 1363-2:2016 socket-outlets shall conform to the requirements in I.4.2.		N/A
I.4.2	The following types of SPD shall be considered acceptable:		—
	- metal oxide varistors conforming to BS EN 61643-331.		N/A
	- gas discharge tubes conforming to BS EN 61643-311.		N/A
	- avalanche breakdown diodes conforming to BS EN 61643-321.		N/A
	VDRs conforming to BS IEC 61051-2 and having the following characteristics shall be considered acceptable:		—
	a) Lower category temperature −10 ° C Upper category temperature +85 ° C Duration of damp heat, steady state test: 21 days		N/A
	b) The maximum continuous a.c. voltage shall be not less than 315 V.		N/A
	c) Combination pulses of 6 kV/3 kA of alternating polarity are used, having a pulse shape of 1.2/50 μs for voltage and 8/20 μs for current.		N/A
	The clamping voltage after the test shall not have changed by more than 10%.		N/A
I.4.3	Conformity to I.4.2 shall be checked by inspection of component conformity evidence.		N/A
I.4.4	Incorporation of VDRs in socket-outlets		—
	A circuit interrupting device having adequate breaking capacity shall be connected in series with the VDR to provide protection against:		—
	a) temporary overvoltages above the maximum continuous voltage;		N/A
	b) thermal overload due to leakage current within the VDR;		N/A
	c) burning and bursting of the VDR in the event		N/A

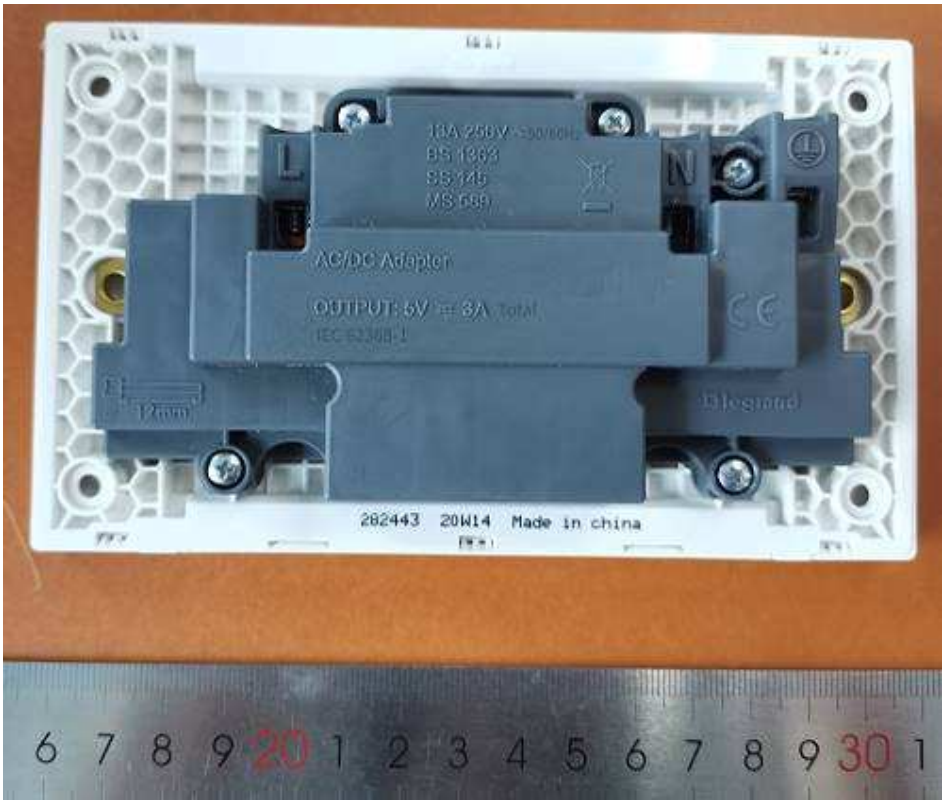
BS 1363-2 : 2016			
Clause	Requirement – Test	Result - Remark	Verdict

	of a short-circuit fault.		
	The following methods of VDR incorporation are permitted:		—
	1) Between L and N:		—
	A circuit interrupting device having adequate breaking capacity shall be incorporated within the product in series with the VDR.		N/A
	2) Between L and E:		—
	In series with a circuit interrupting device having adequate breaking capacity, and is connected in series with a spark gap/gas tube meeting the requirements for basic insulation.		N/A
I.4.5	Conformity to I.4.4 shall be checked by inspection.		N/A
I.5	Electronic switches		—
I.5.1	Electronic switches incorporated in socket-outlets shall conform to BS EN 60669-2-1.		N/A
I.5.2	Conformity to I.5.1 shall be checked by inspection of conformity evidence or by test.		N/A

Photos:

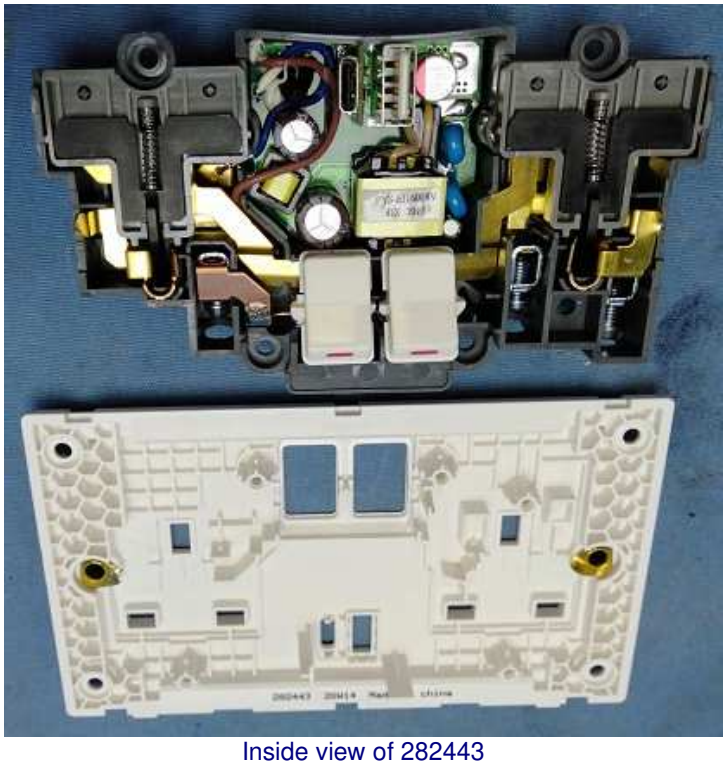


Front view of 282443

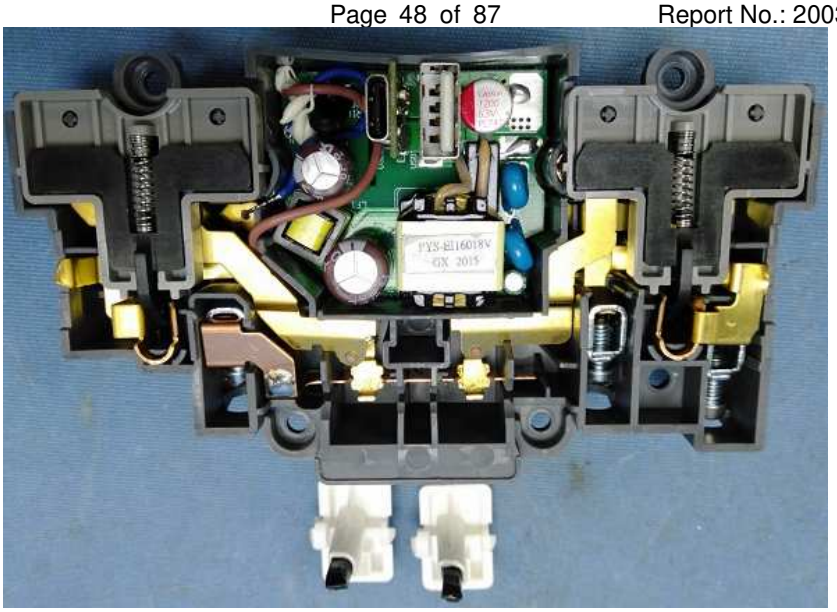


Back view of 282443

Inside view of 282443



Inside view of 282443



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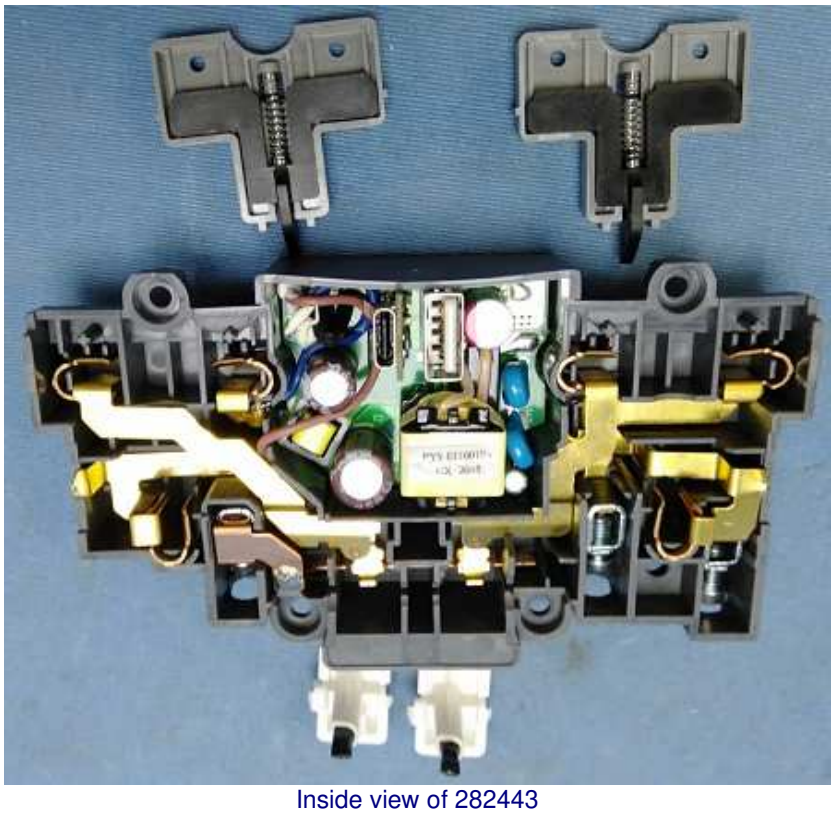
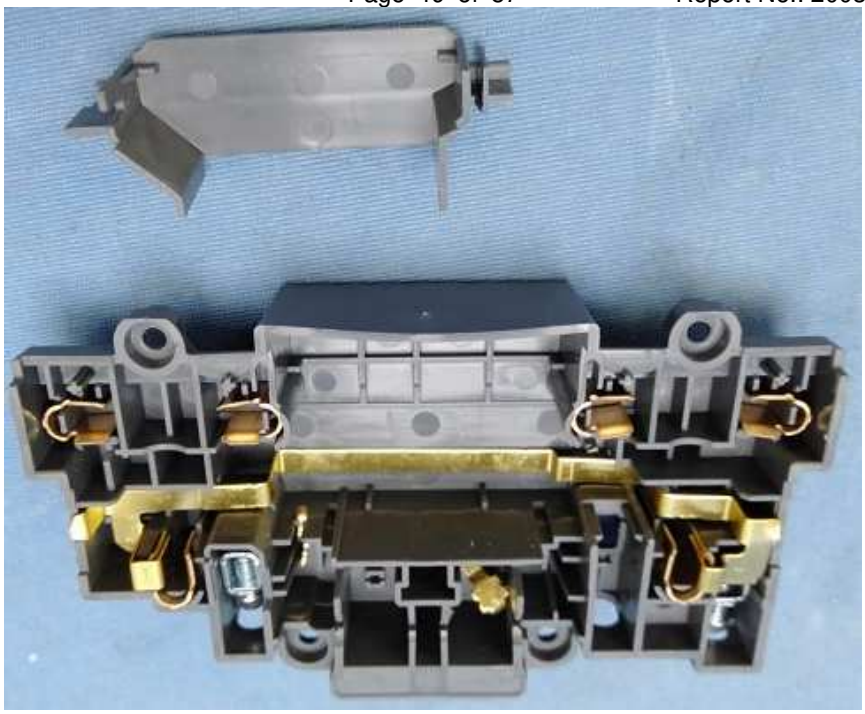
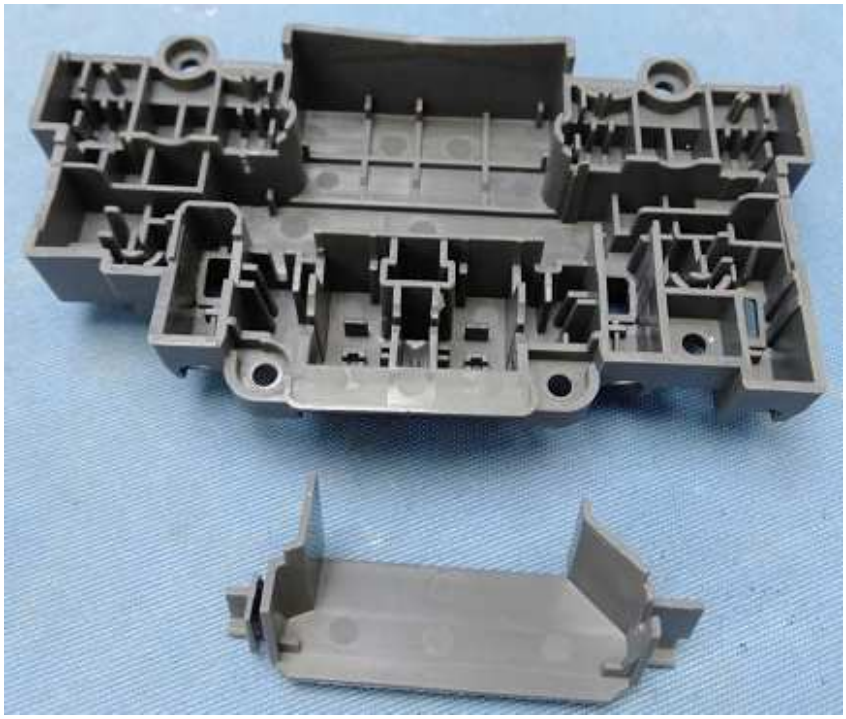


Inside view of 282443

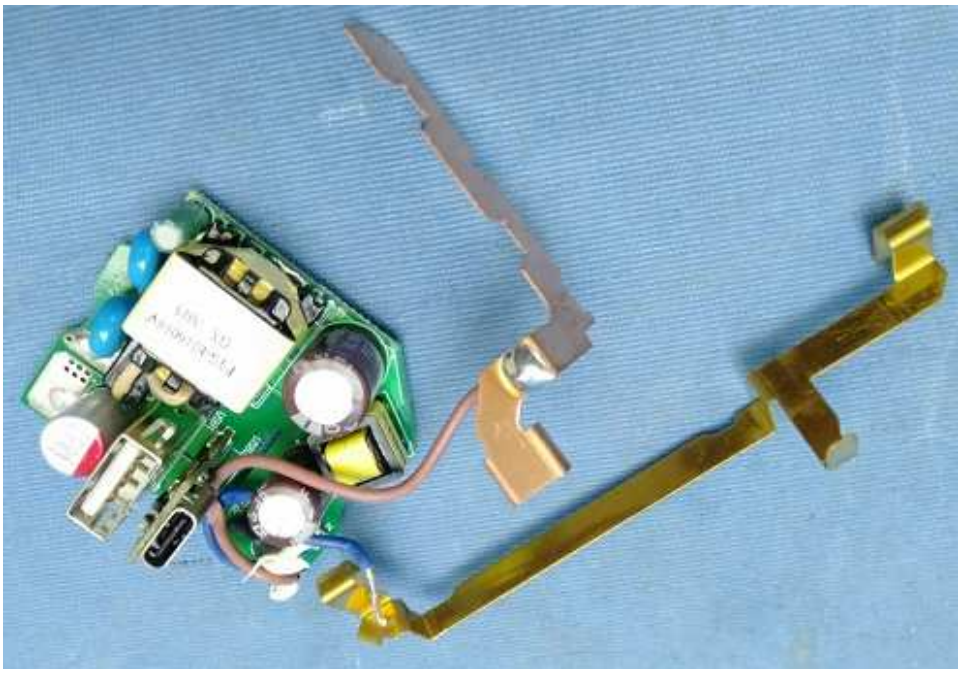


Inside view of 282443



Inside view of 282443

Inside view of 282443



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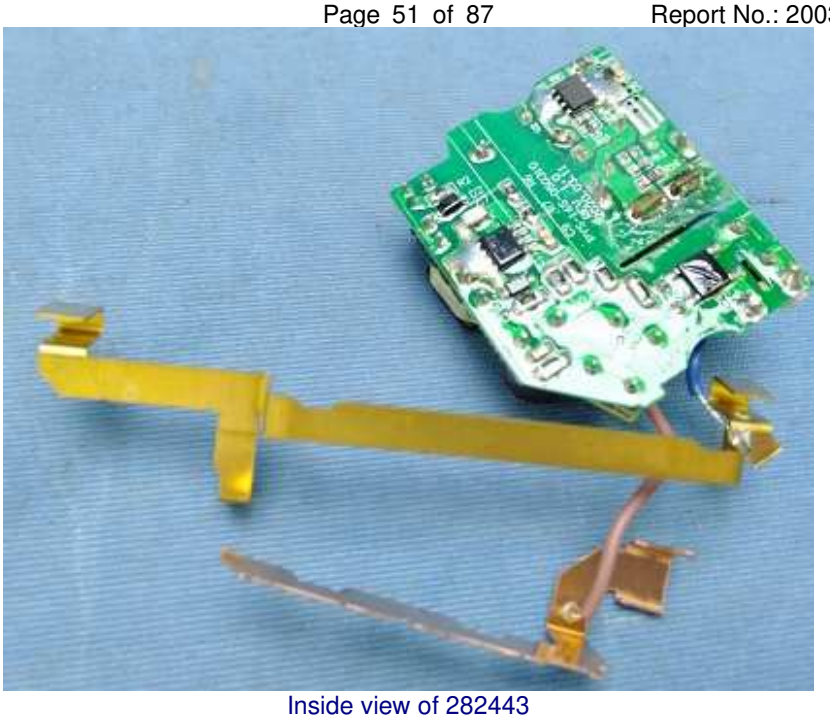
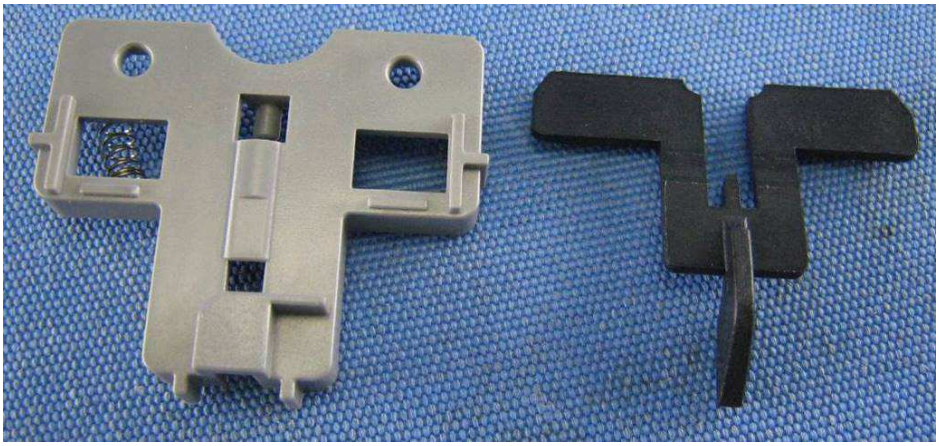


Inside view of 282443

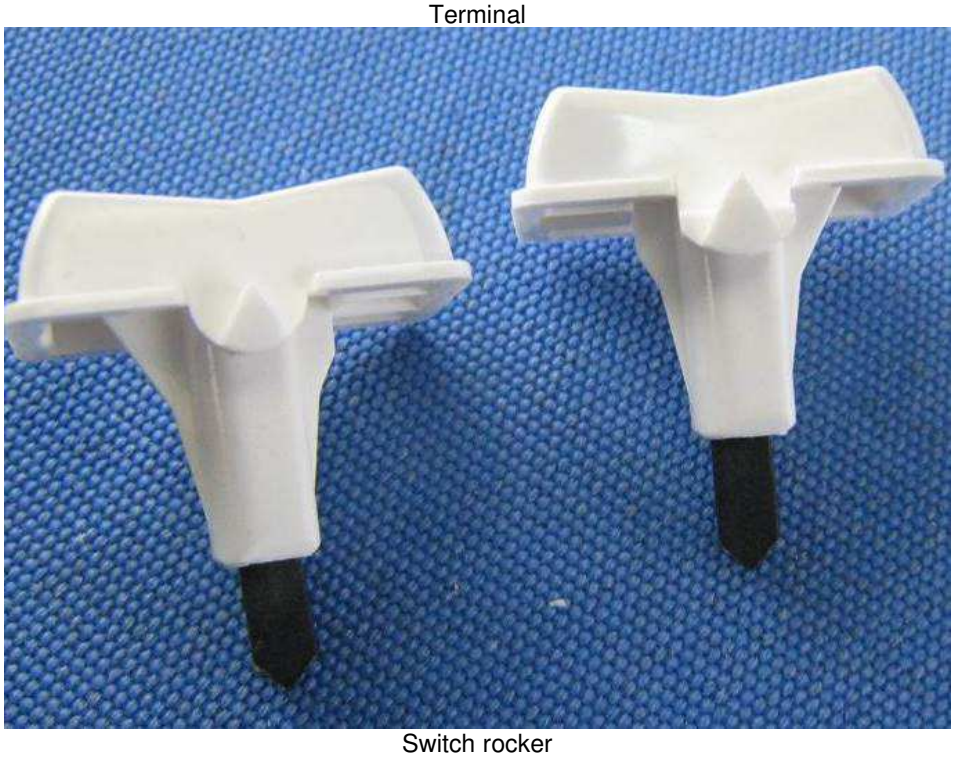
Shutter

Shutter

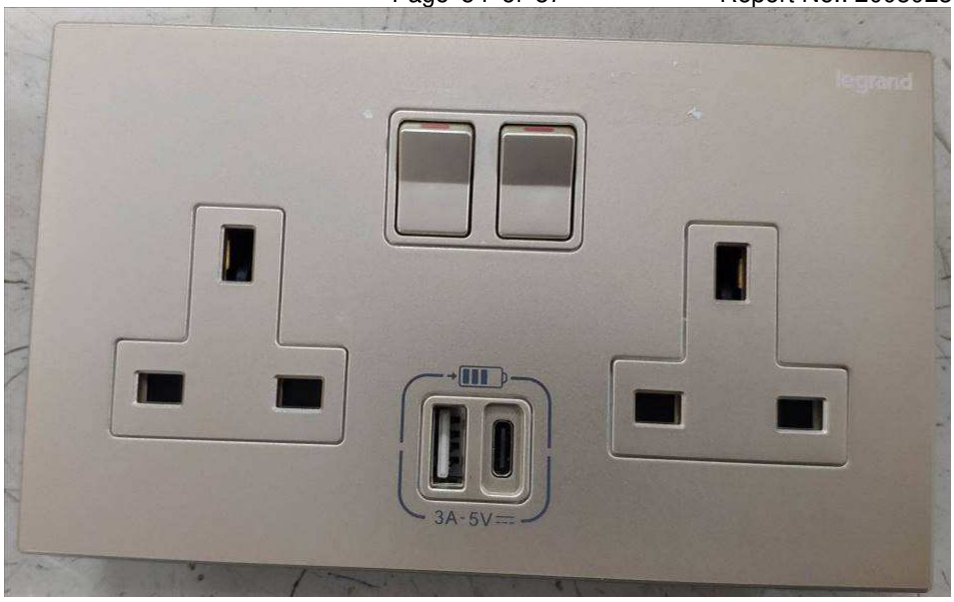


Shutter

Terminal

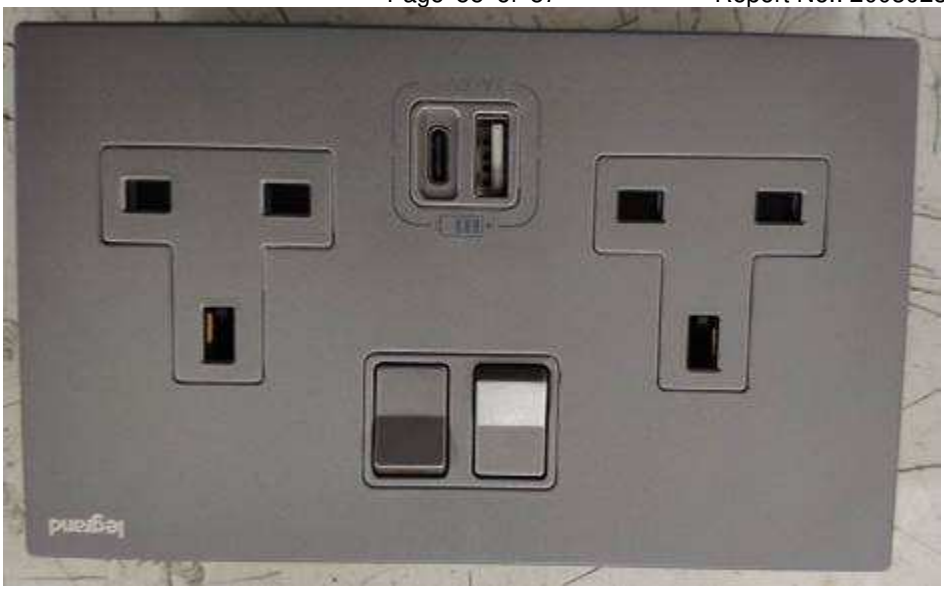


Switch rocker



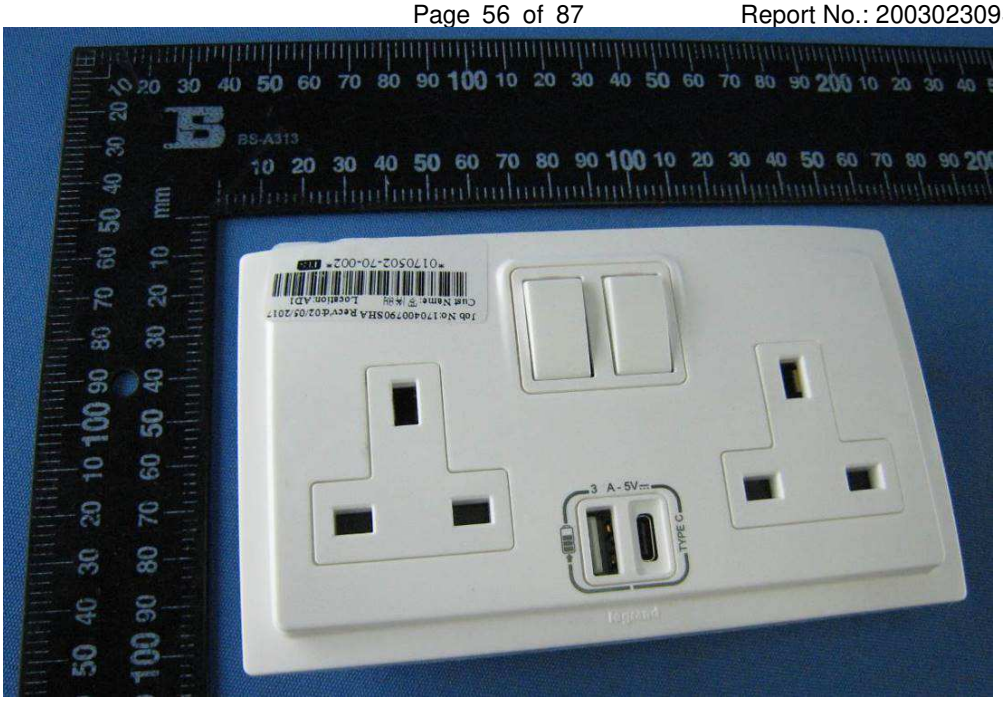
Front view of 282443-C2

Back view of 282443-C2



Front view of 282443-C3

Back view of 282443-C3

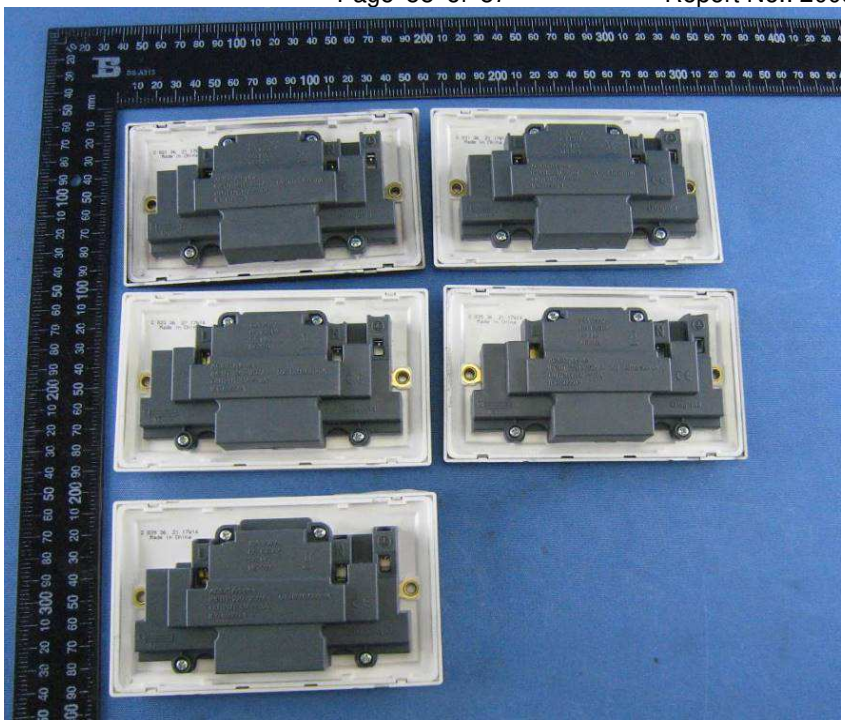


Front view of 281136

Inside view of 281136

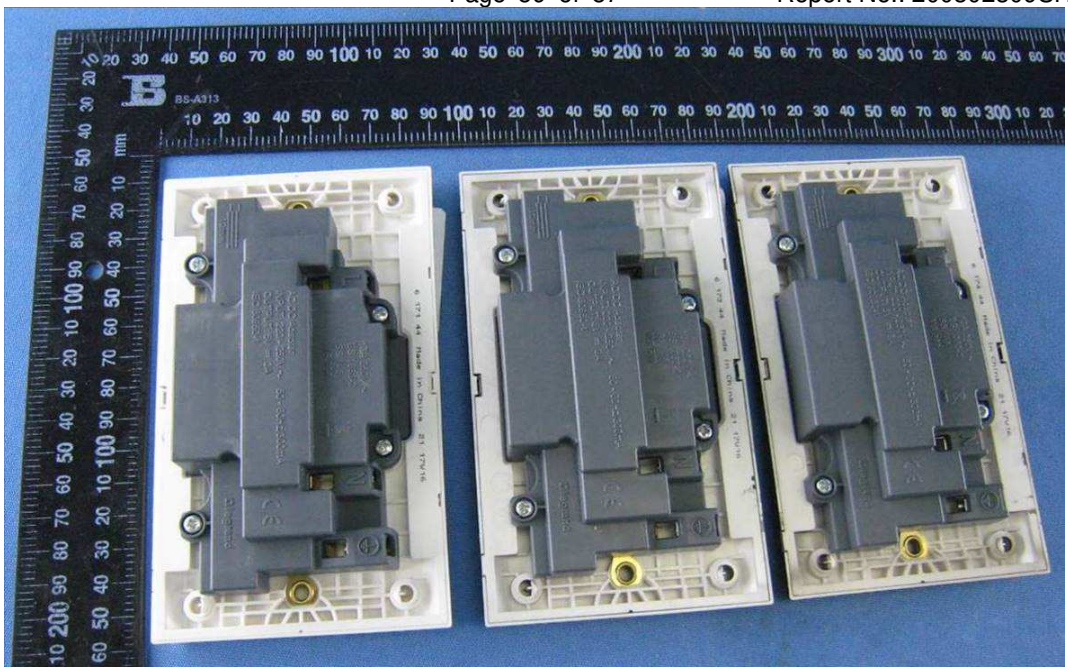
Inside view of 281136

From left to right for first row: Front view of 282136,283136
From left to right for second row: Front view of 283336,283536
For third row: Front view of 283936



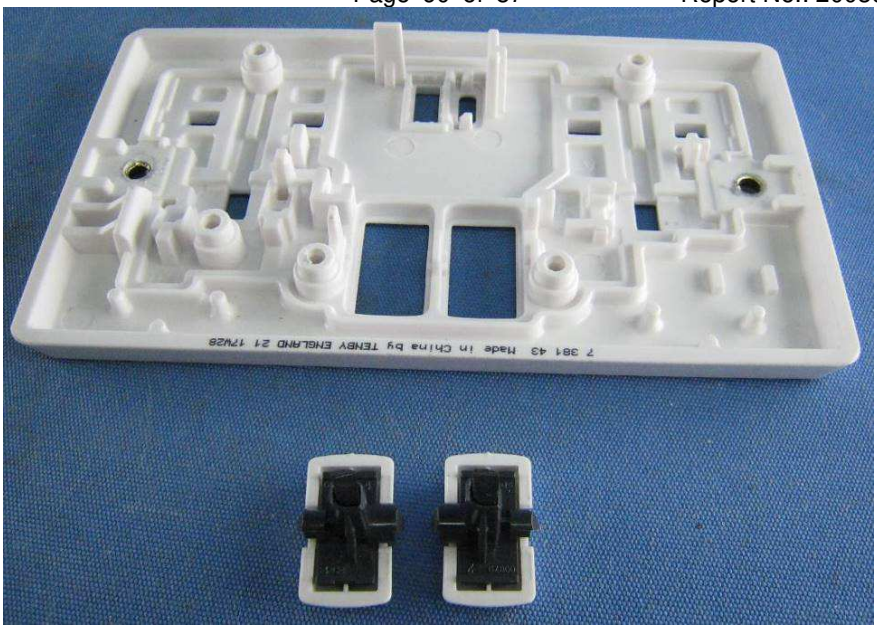
From left to right for first row: Back view of 282136,283136
From left to right for second row: Back view of 283336,283536
For third row: Back view of 283936

From left to right: Front view of 617144, 617344,617444

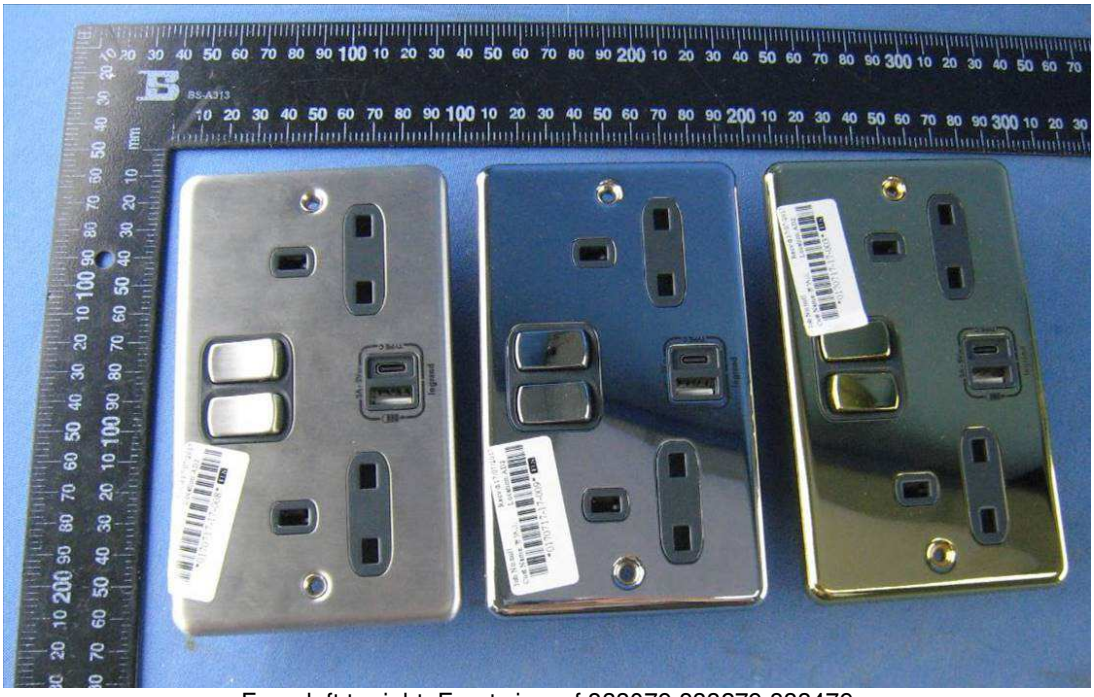


From left to right: Front view of 617144, 617344,617444

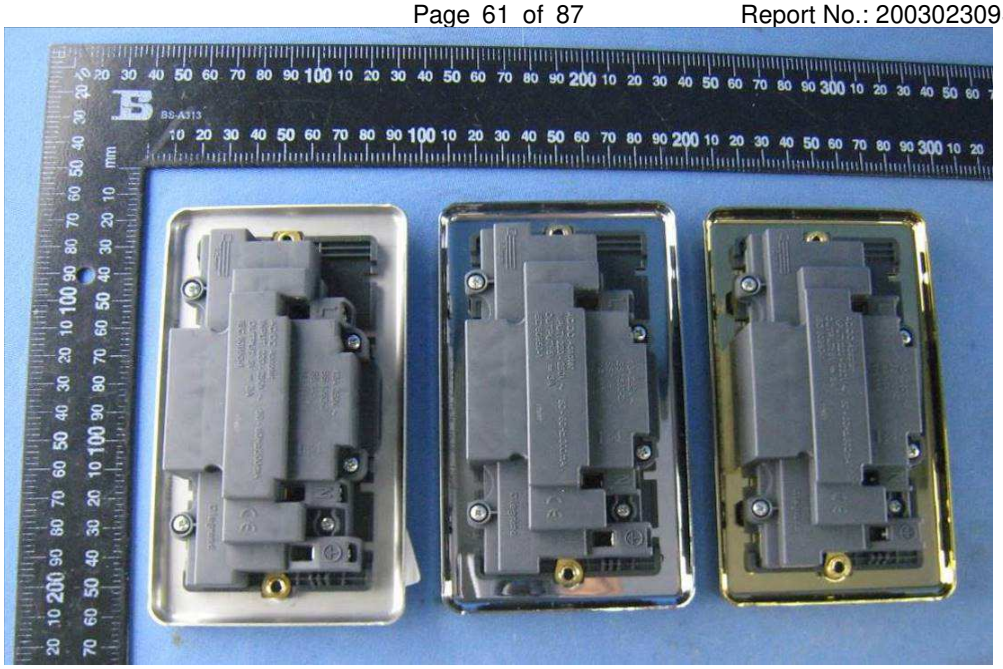
From up to down: Front view of 730079,738143



Inside view of 738143

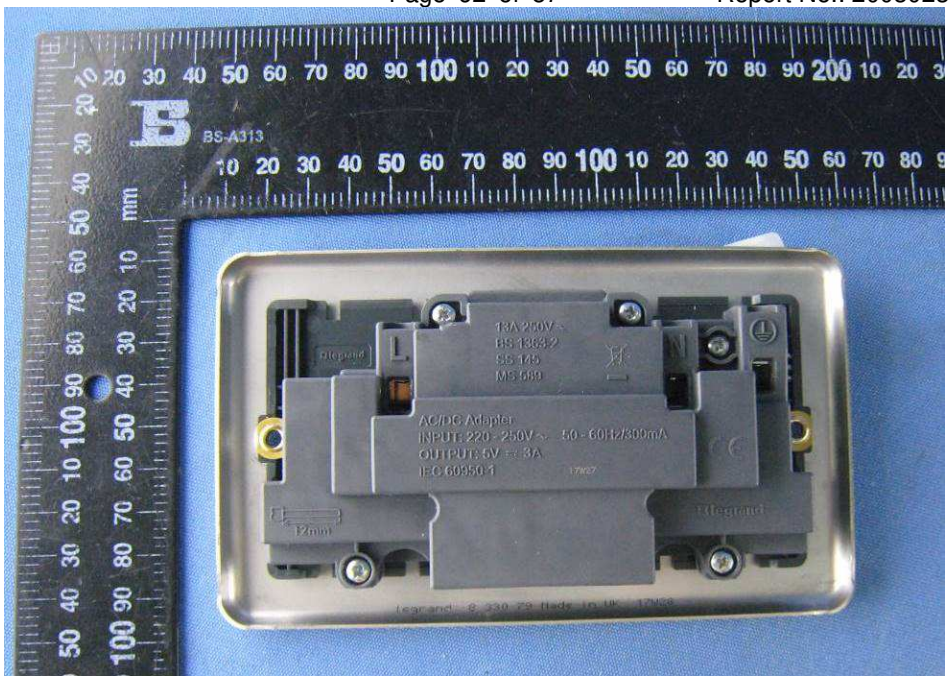


From left to right: Front view of 833079,833279,833479



From left to right: Back view of 833079,833279,833479

Front view of 833079



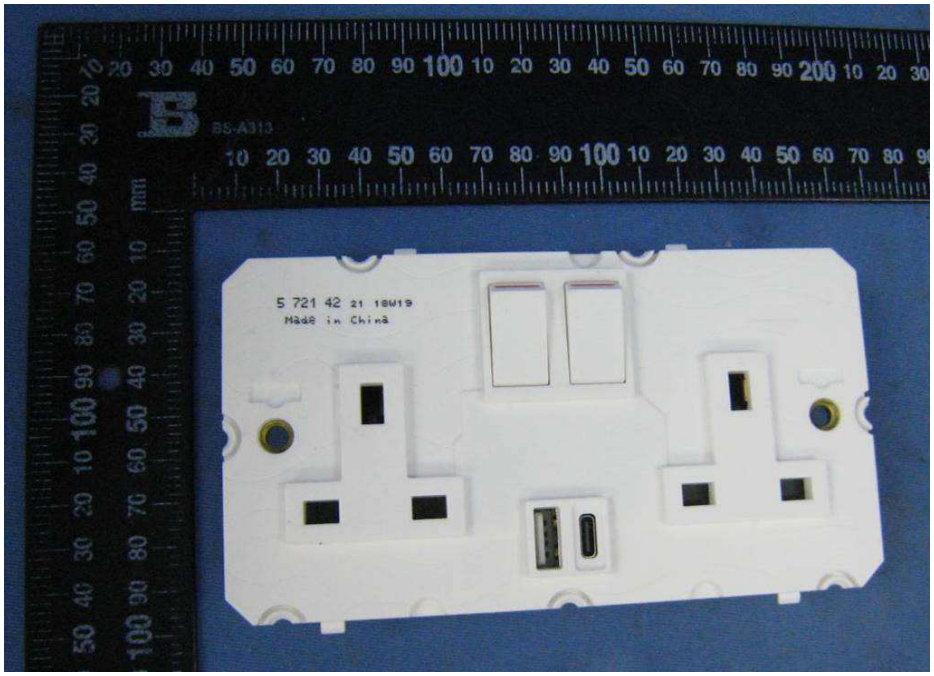
Back view of 833079

Switch rocker for 833079

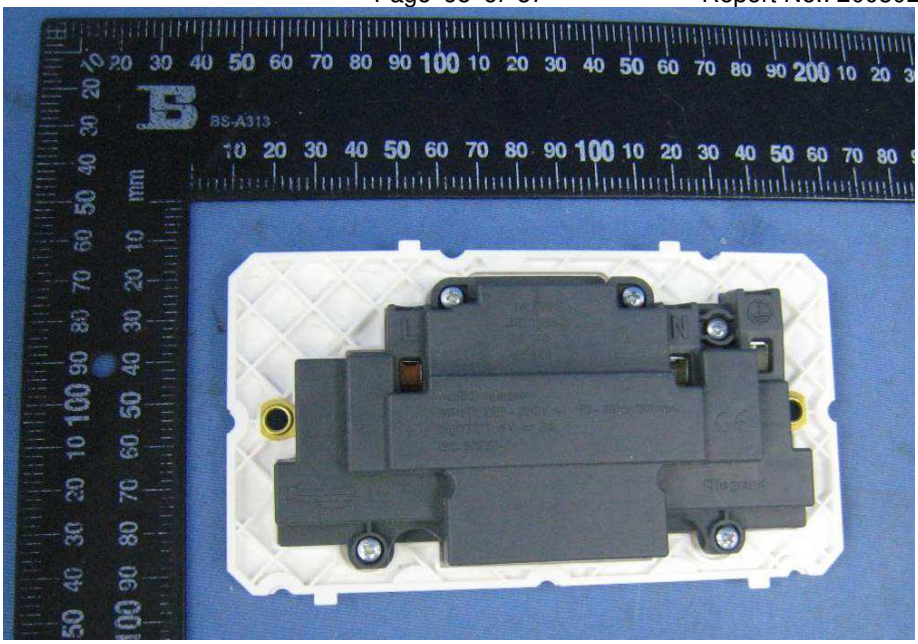
Inside view of 833079

From left to right: Front view of 832079,832279,832479

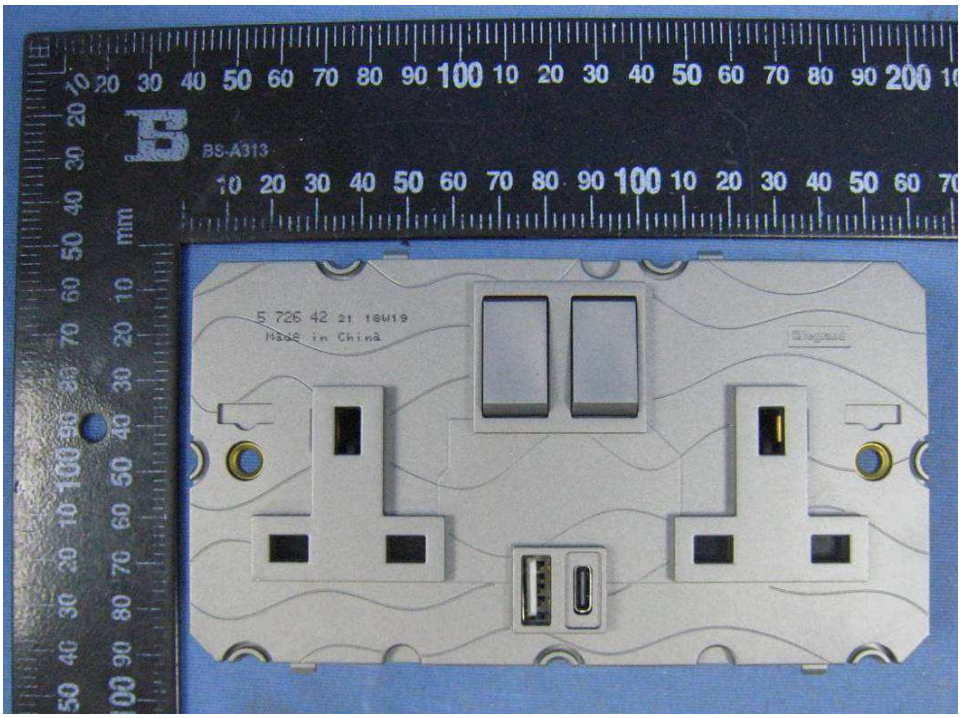
From left to right: Back view of 832079,832279,832479



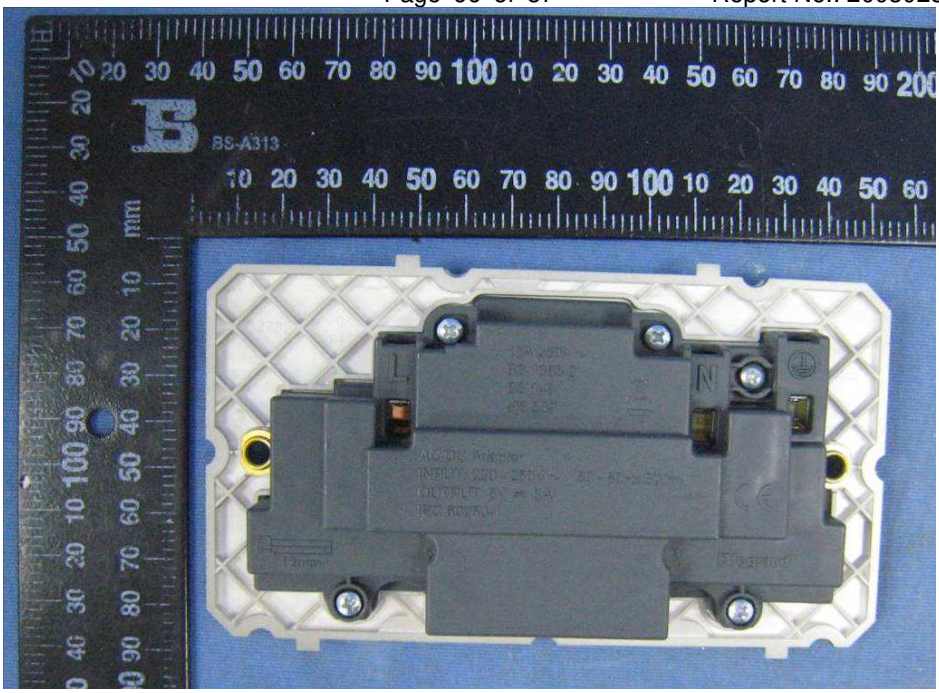
Front view of 572142



Back view of 572142

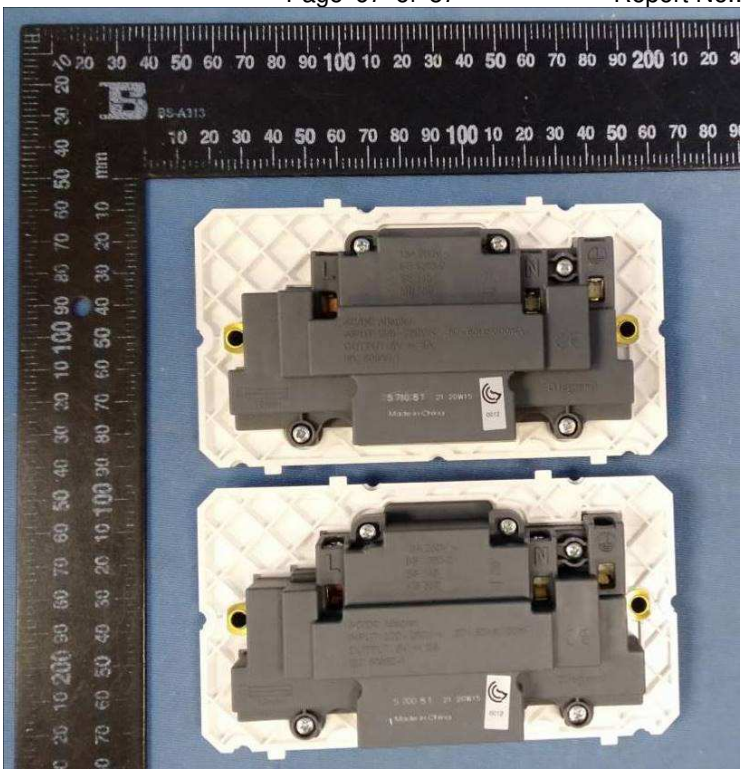


Front view of 572642

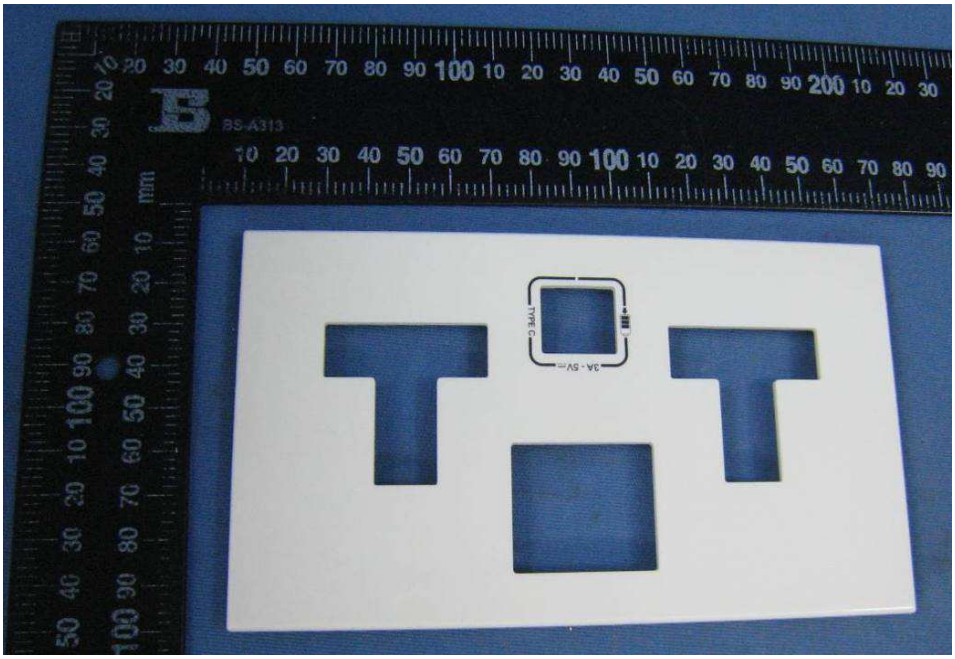


Back view of 572642

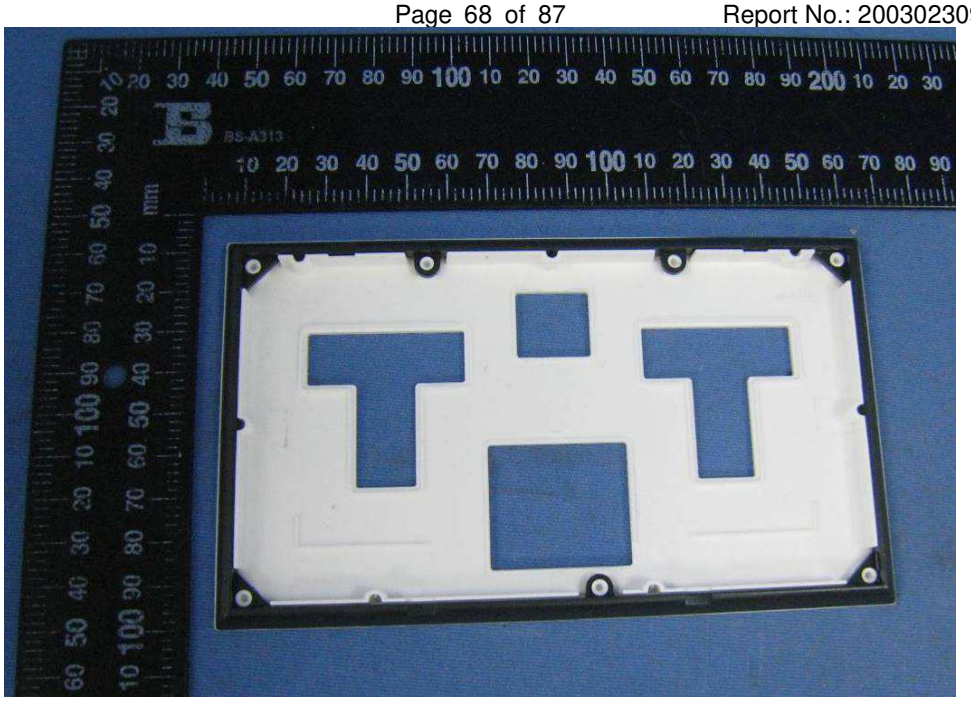
From up to down: Front view of 571081, 570081



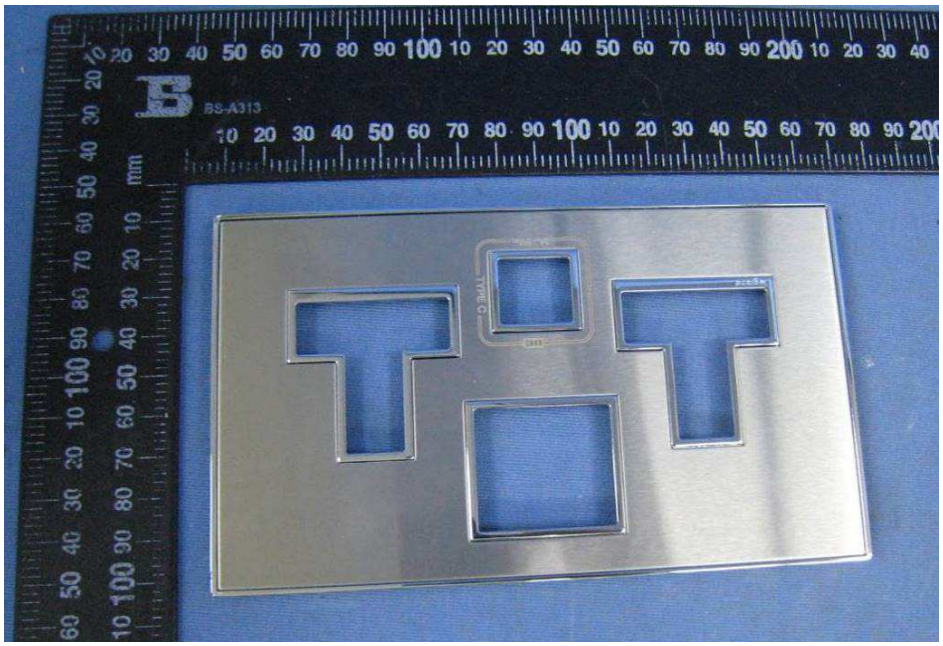
From up to down: Back view of 571081, 570081



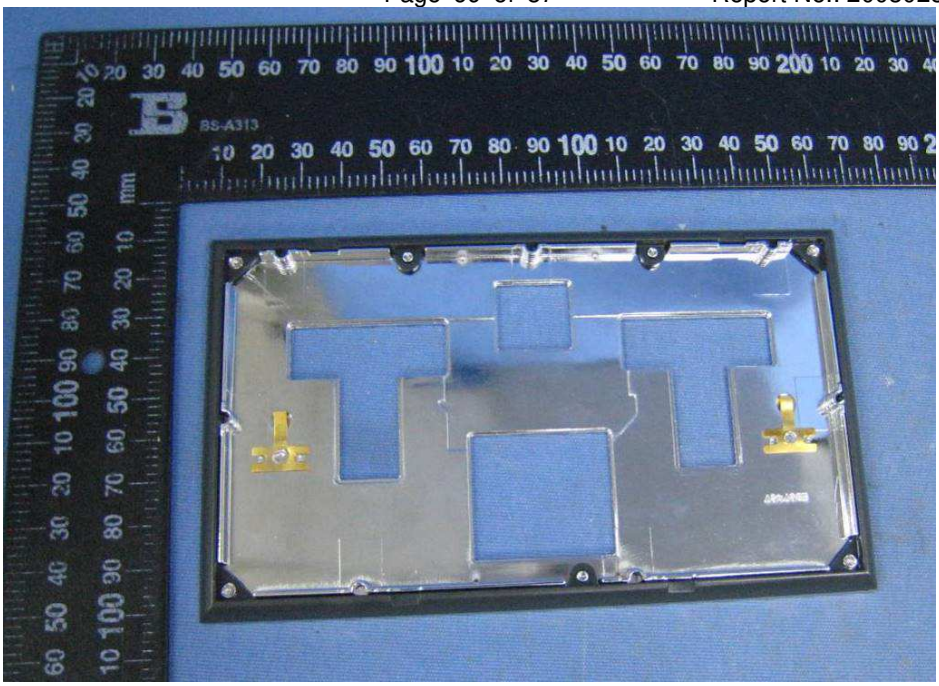
Front view of plastic cover 575117



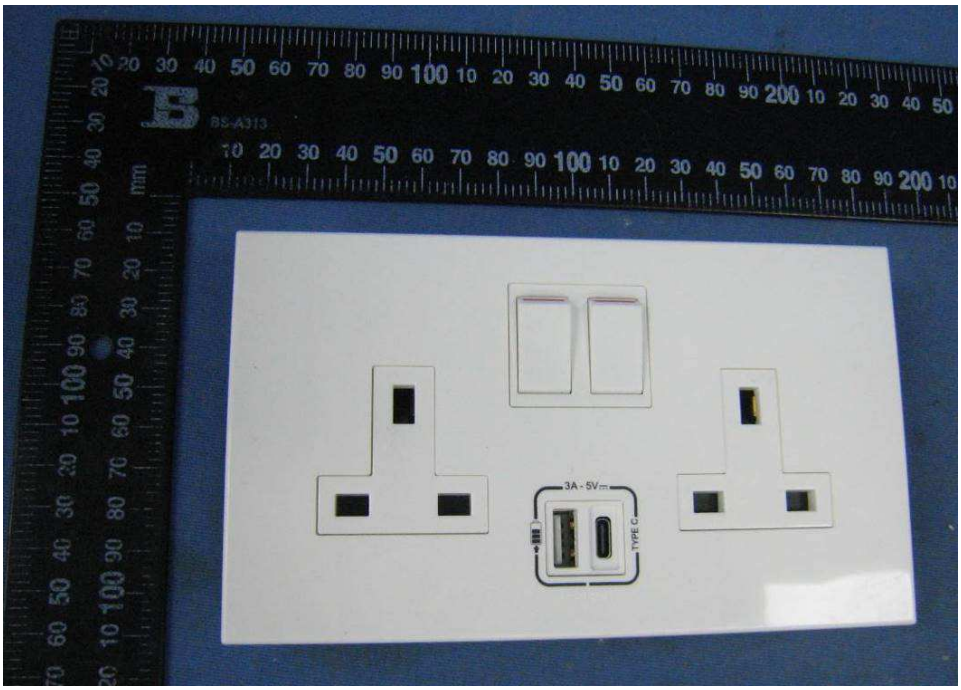
Back view of plastic cover 575117



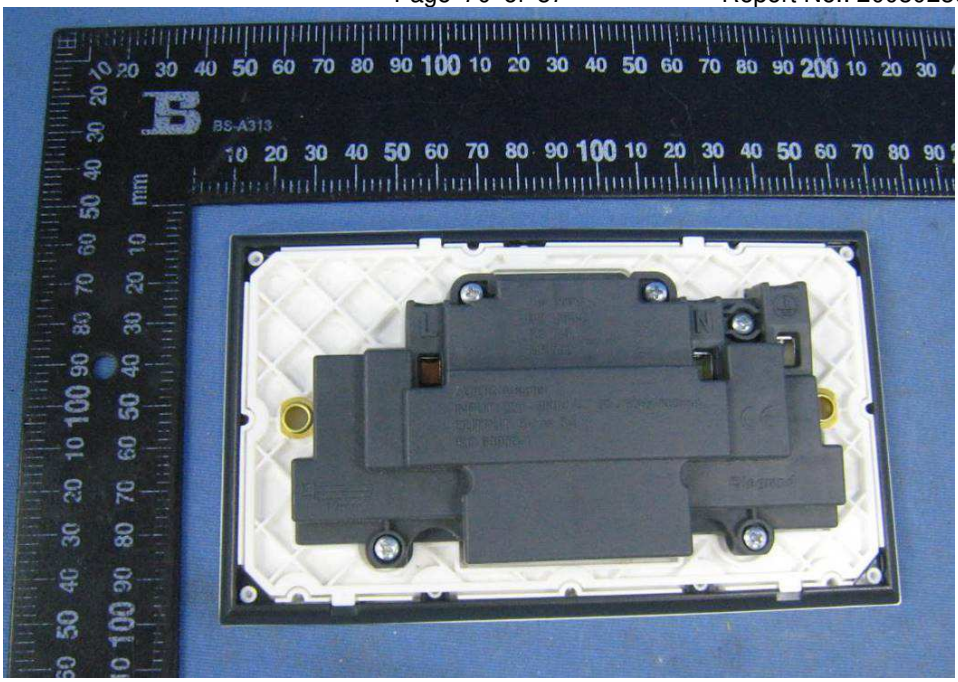
Front view of metal cover 575118



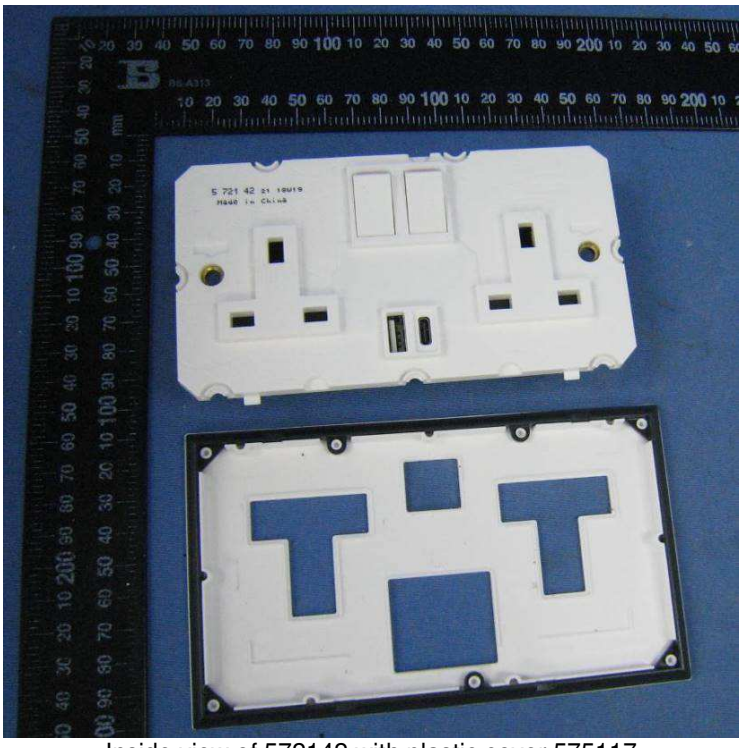
Back view of metal cover 575118



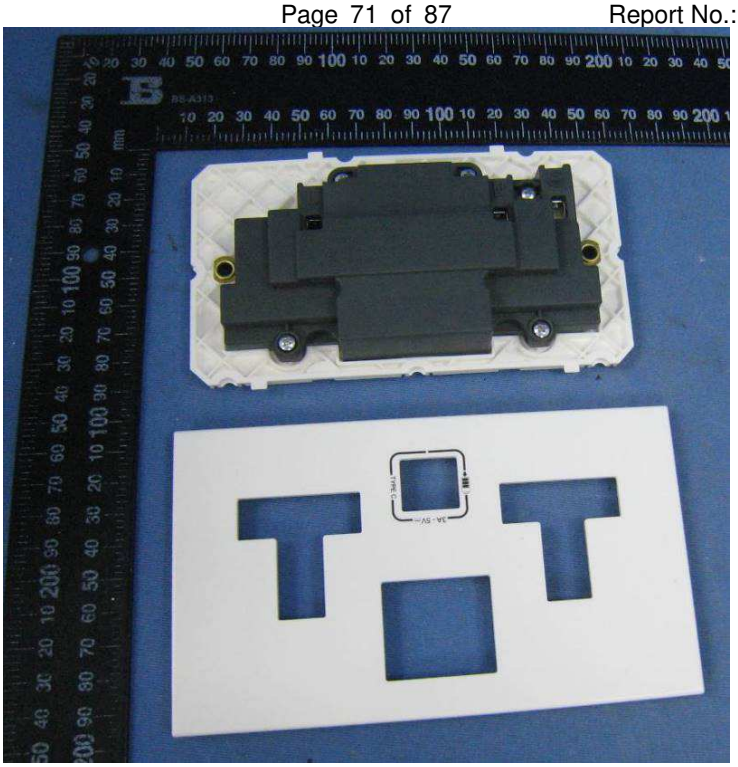
Front view of 572142 with plastic cover 575117



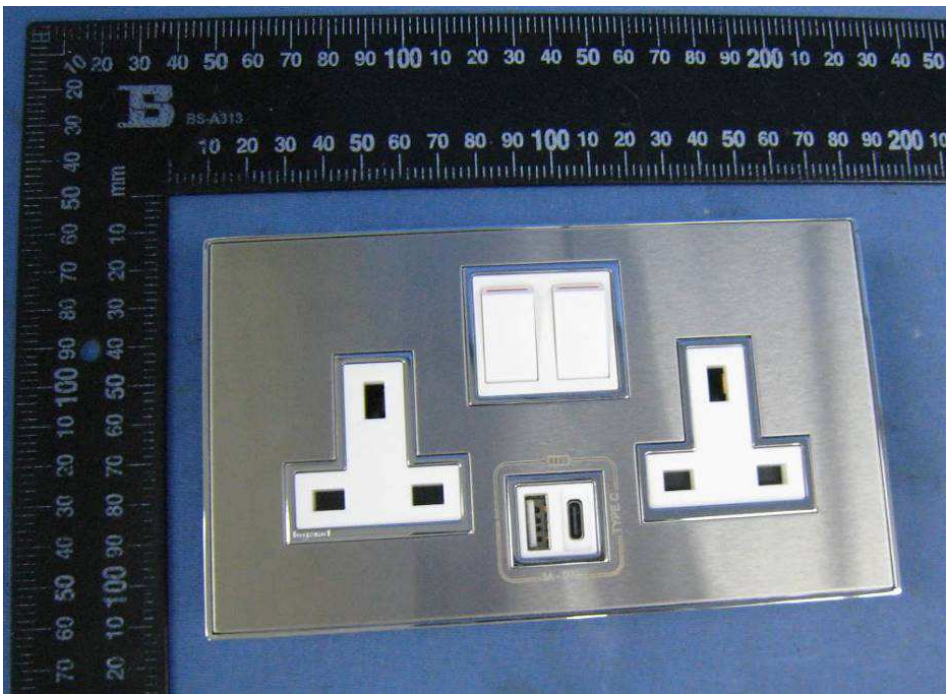
Back view of 572142 with plastic cover 575117



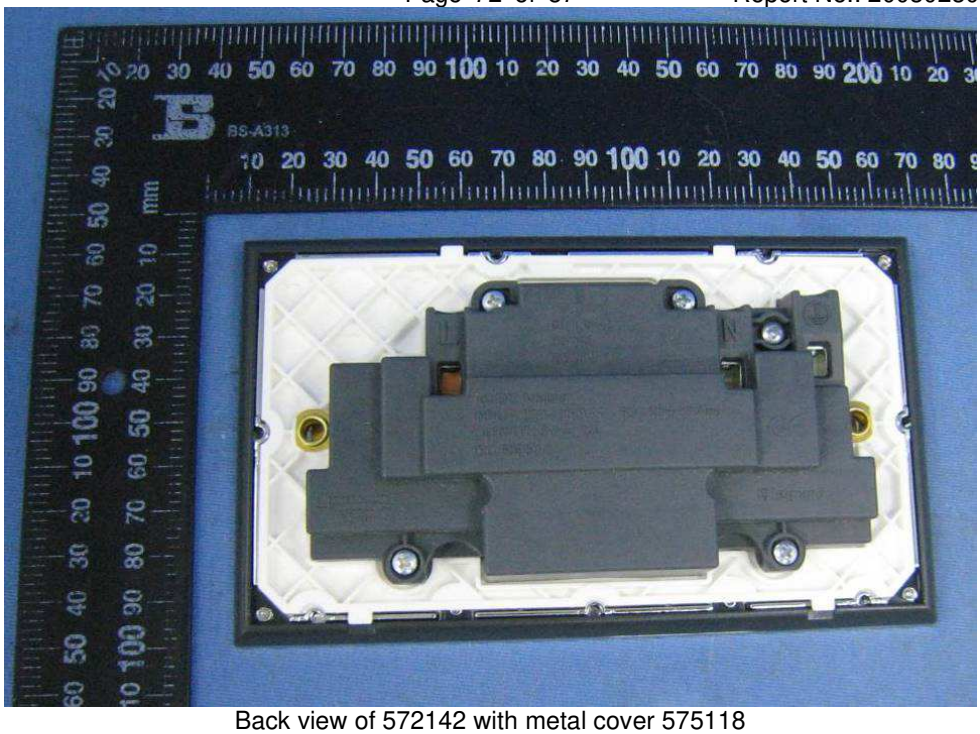
Inside view of 572142 with plastic cover 575117



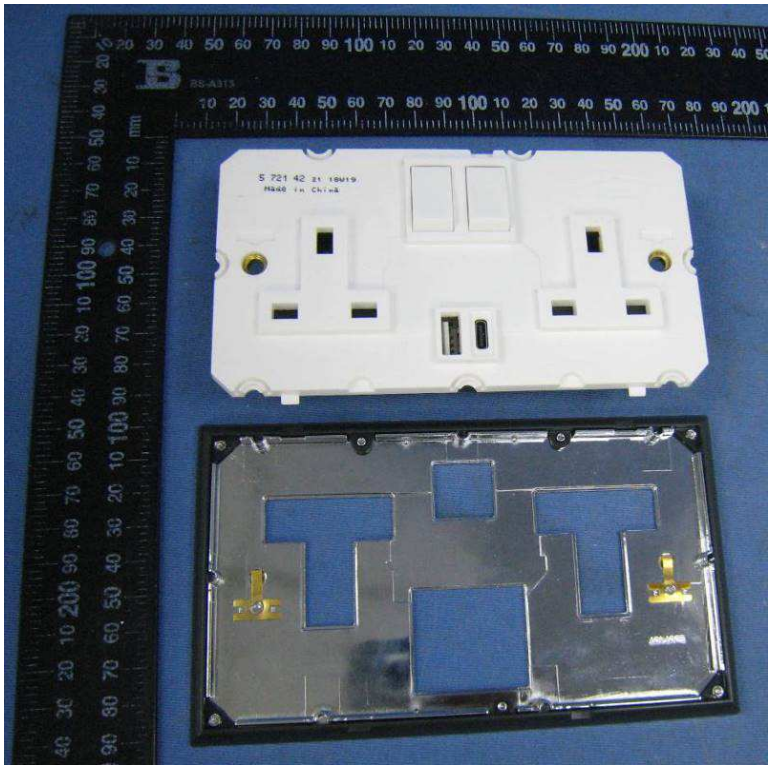
Inside view of 572142 with plastic cover 575117



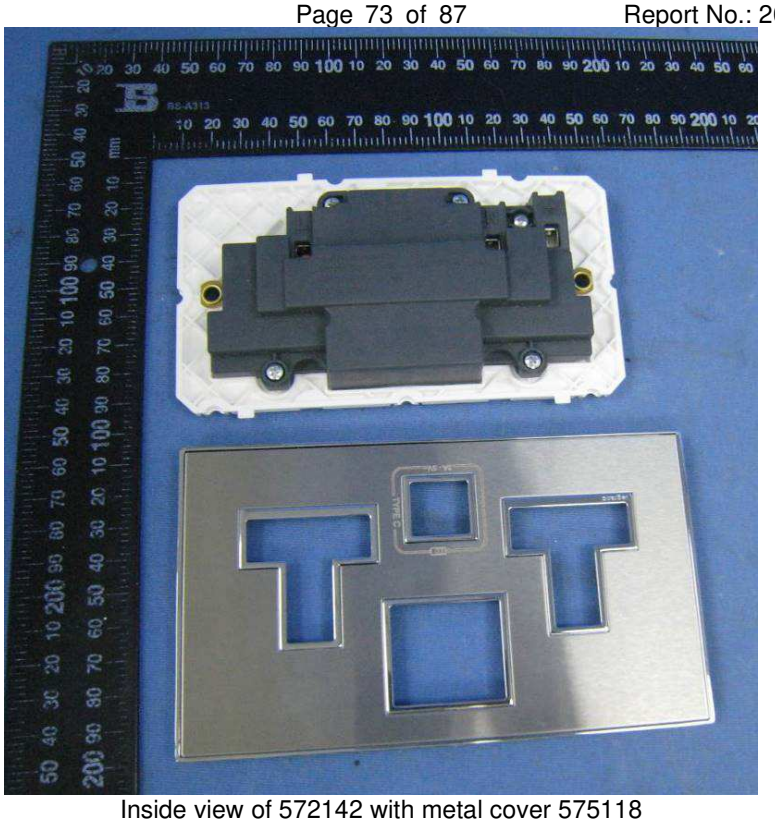
Front view of 572142 with metal cover 575118



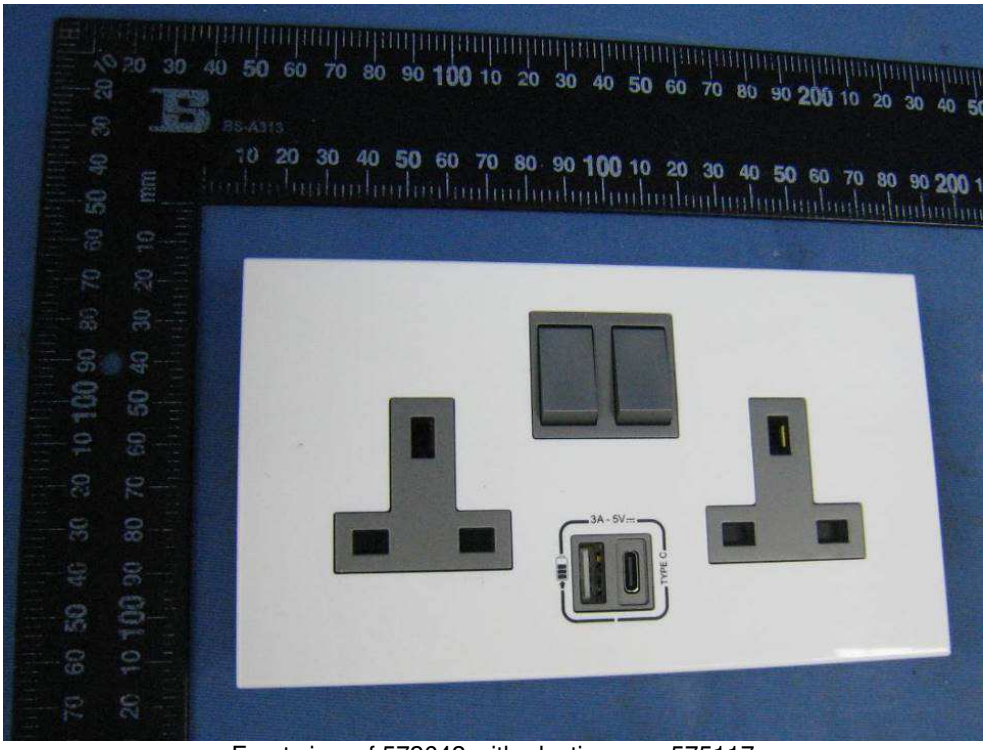
Back view of 572142 with metal cover 575118



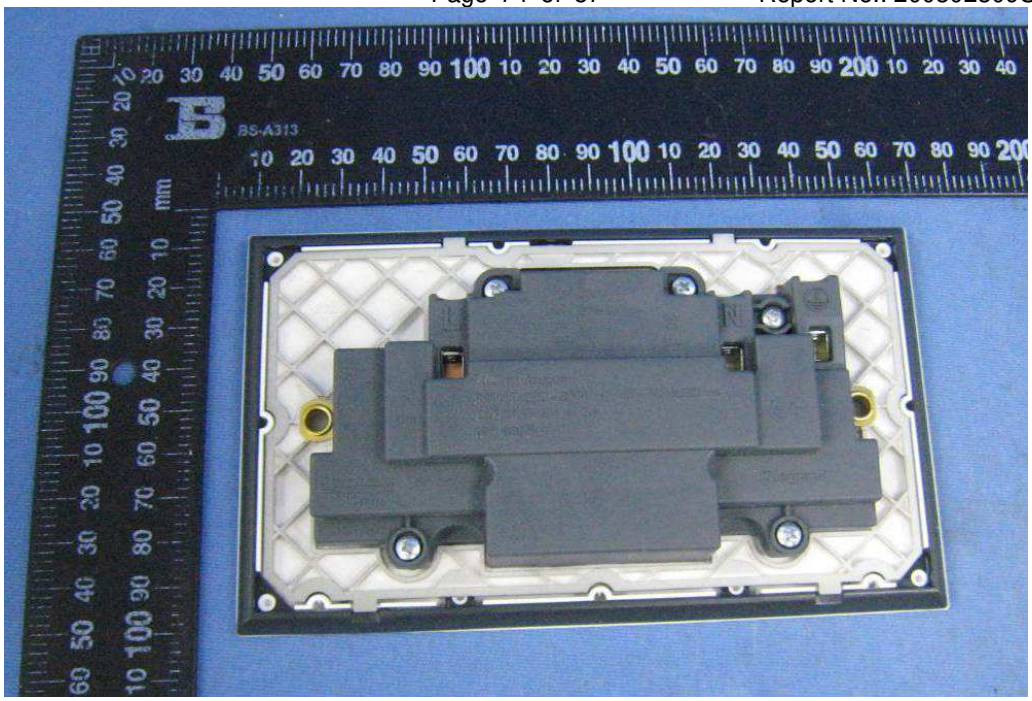
Inside view of 572142 with metal cover 575118



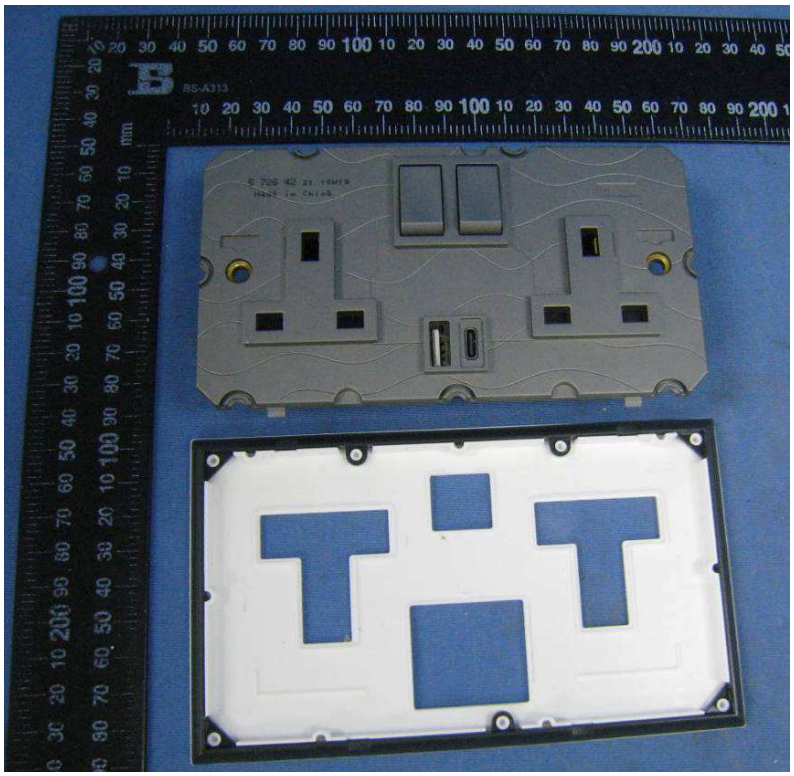
Inside view of 572142 with metal cover 575118



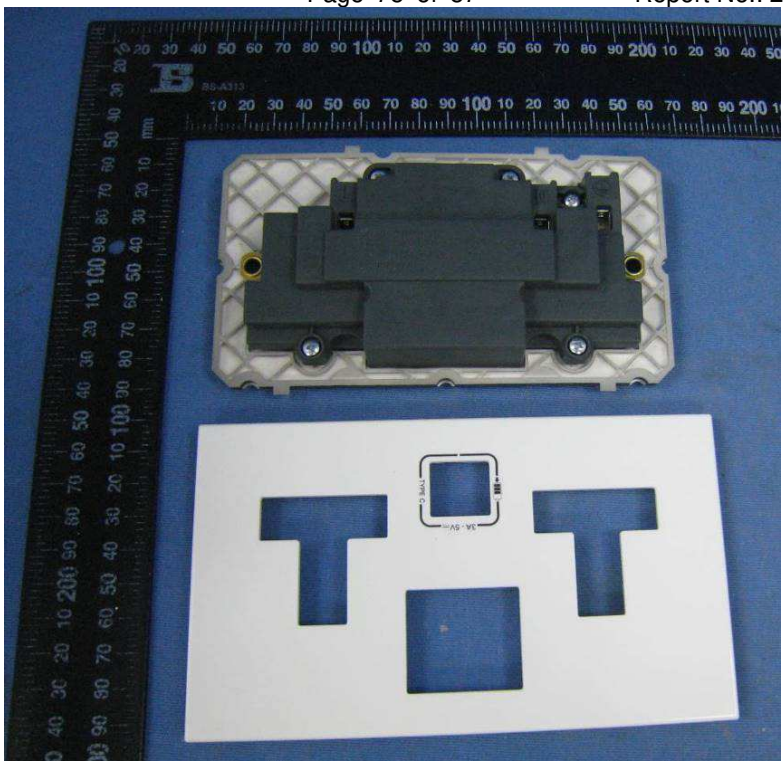
Front view of 572642 with plastic cover 575117



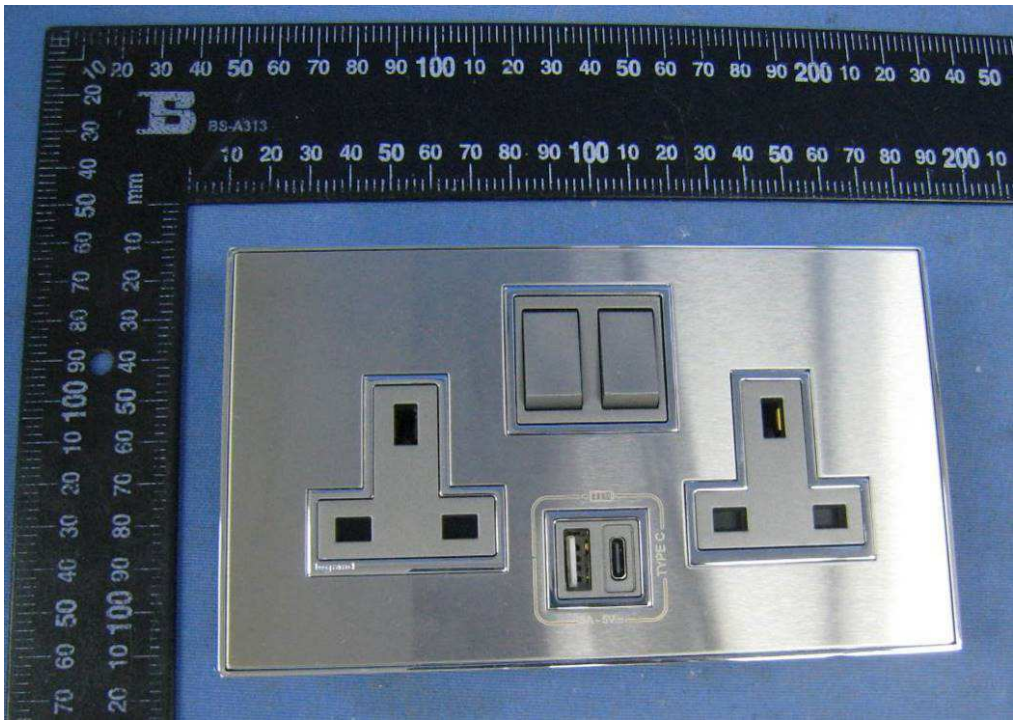
Back view of 572642 with plastic cover 575117



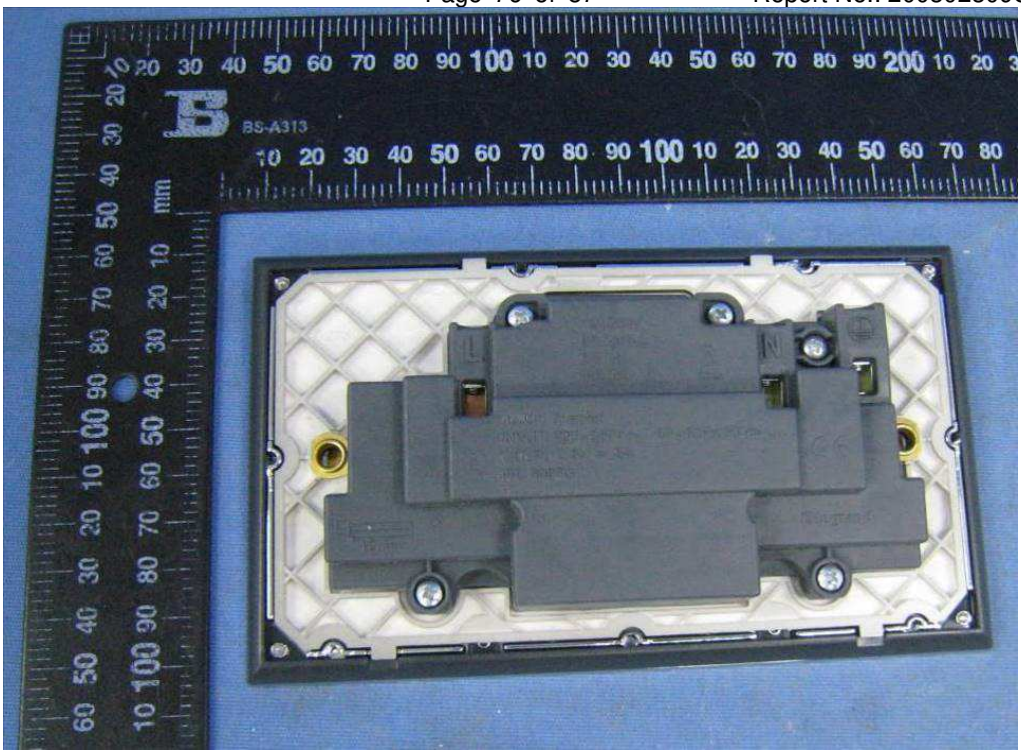
Inside view of 572642 with plastic cover 575117



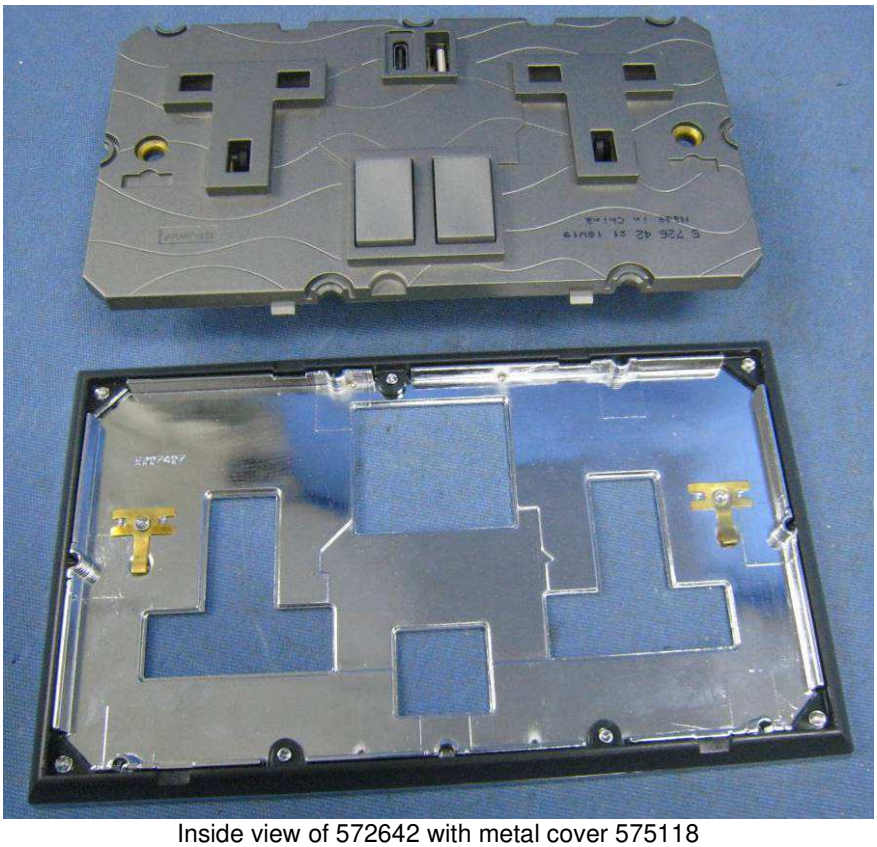
Inside view of 572642 with plastic cover 575117



Front view of 572642 with metal cover 575118

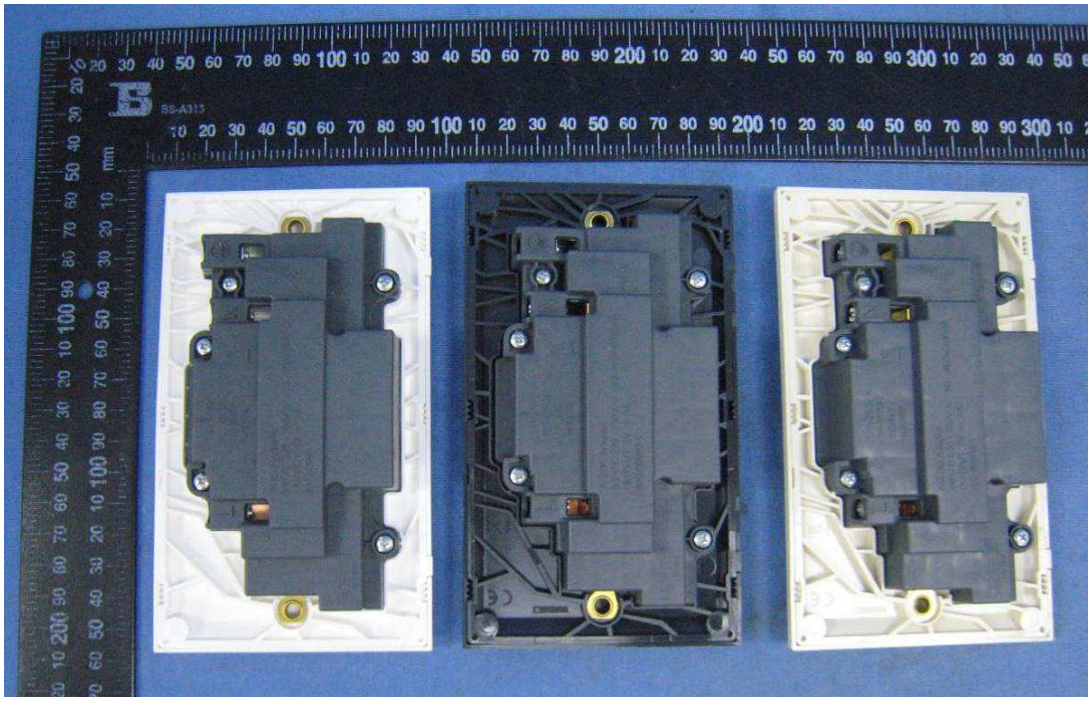


Back view of 572642 with metal cover 575118

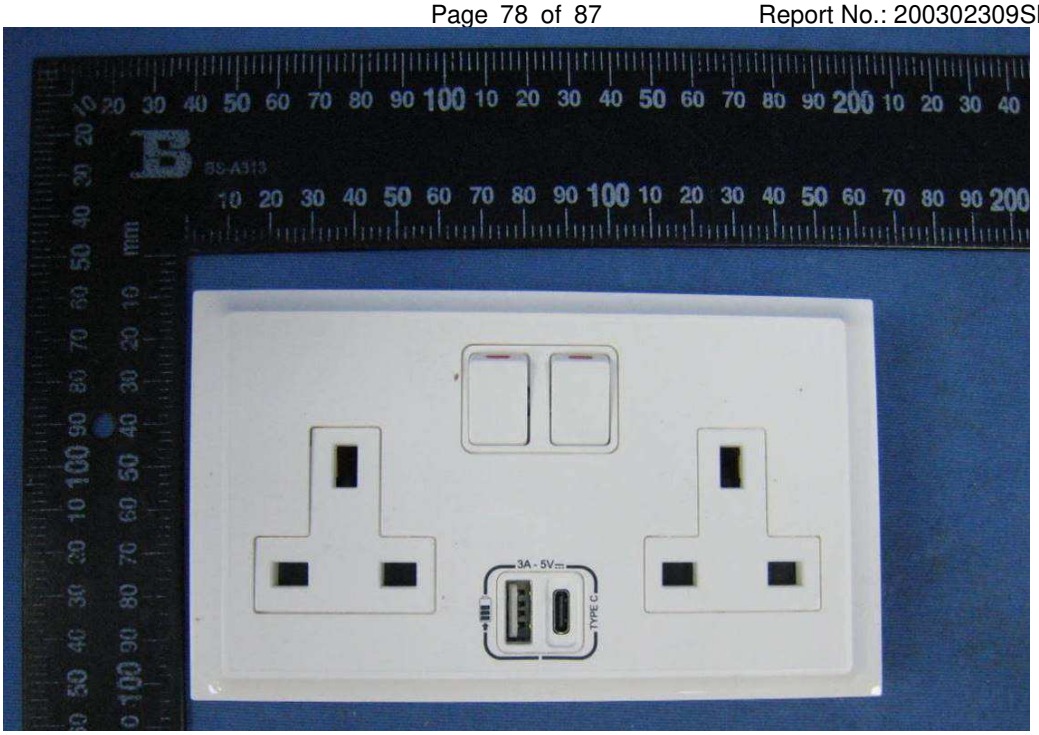


Inside view of 572642 with metal cover 575118

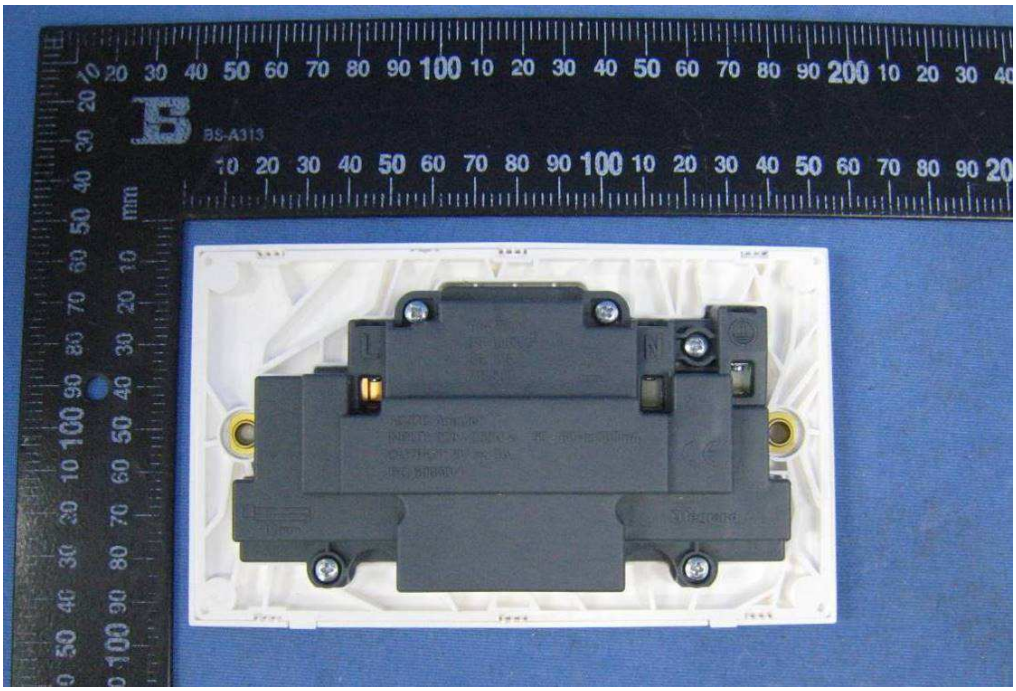
From left to right: Front view of 617644,617744,617844



From left to right: Back view of 617644,617744,617844

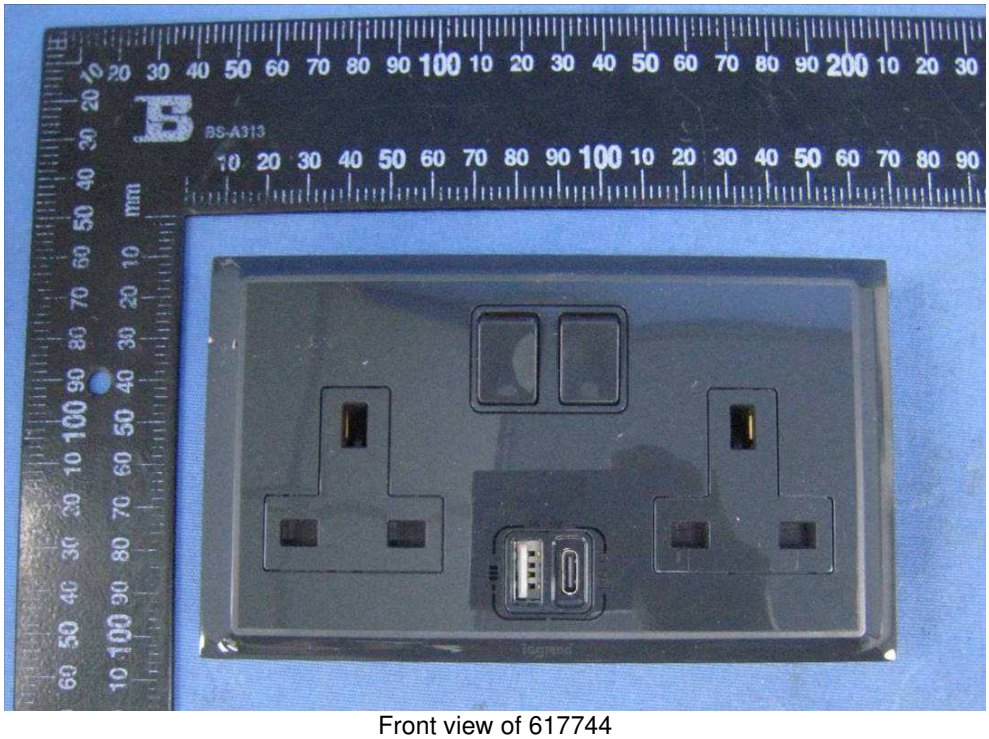


Front view of 617644

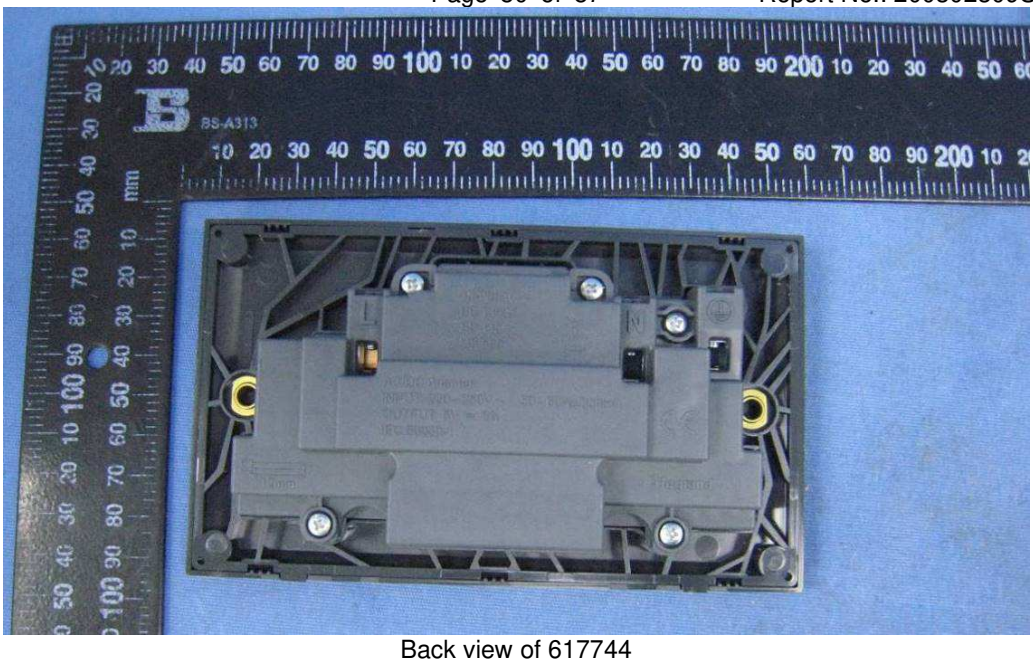


Back view of 617644

Inside view of 617644

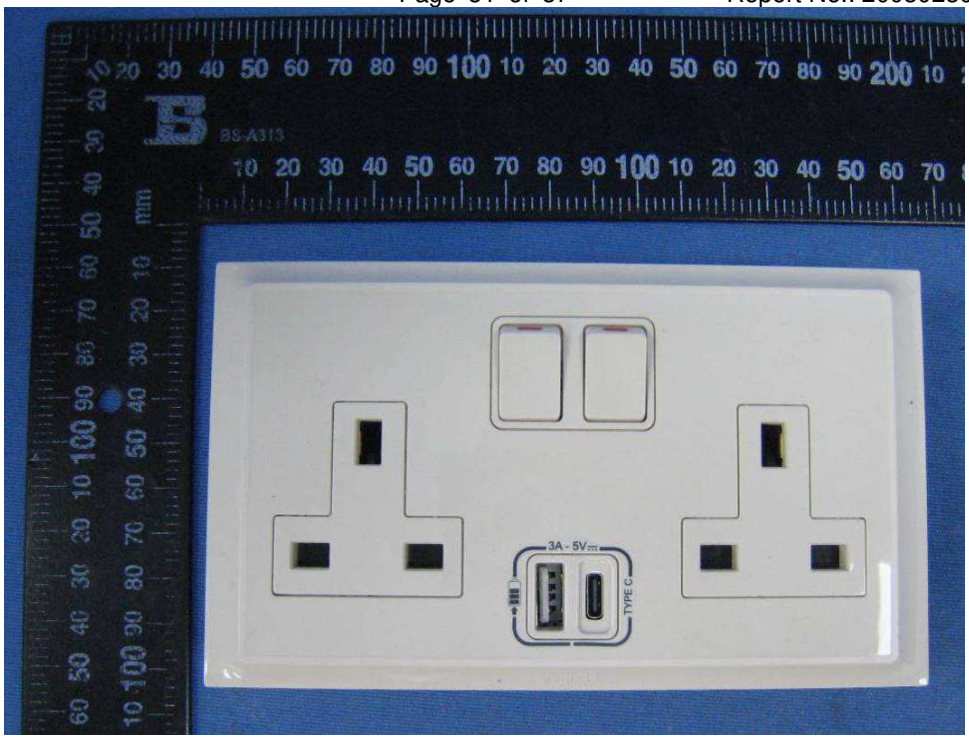


Front view of 617744

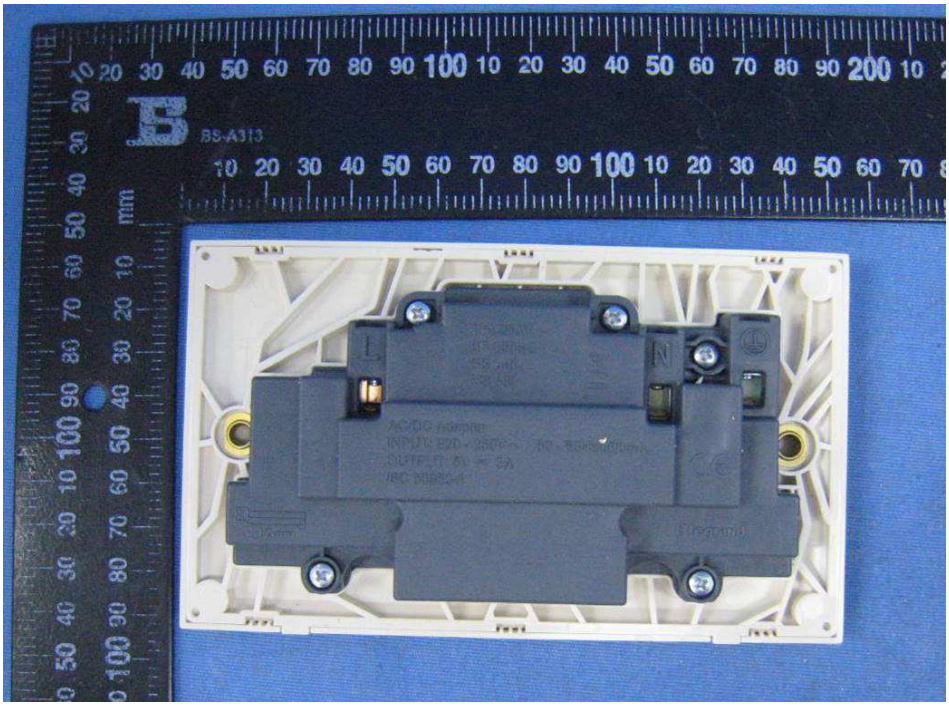


Back view of 617744

Inside view of 617744

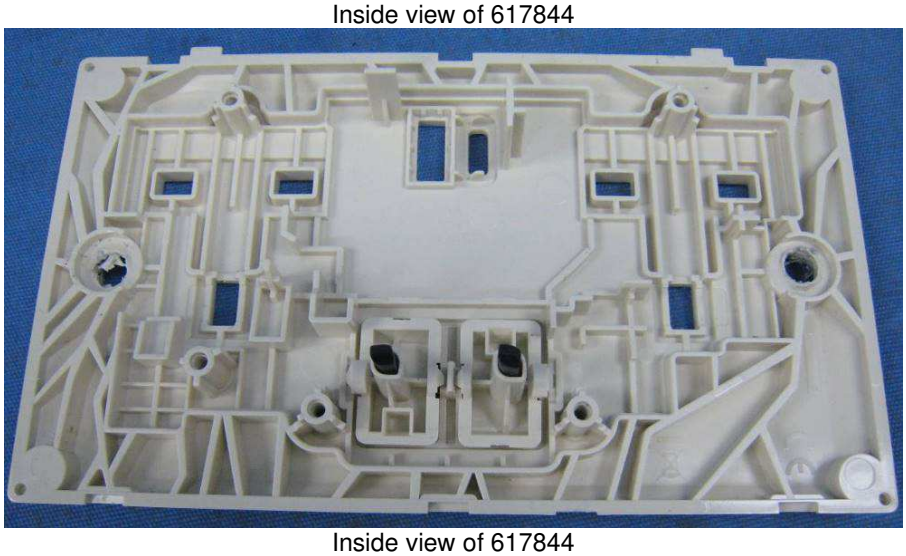


Front view of 617844

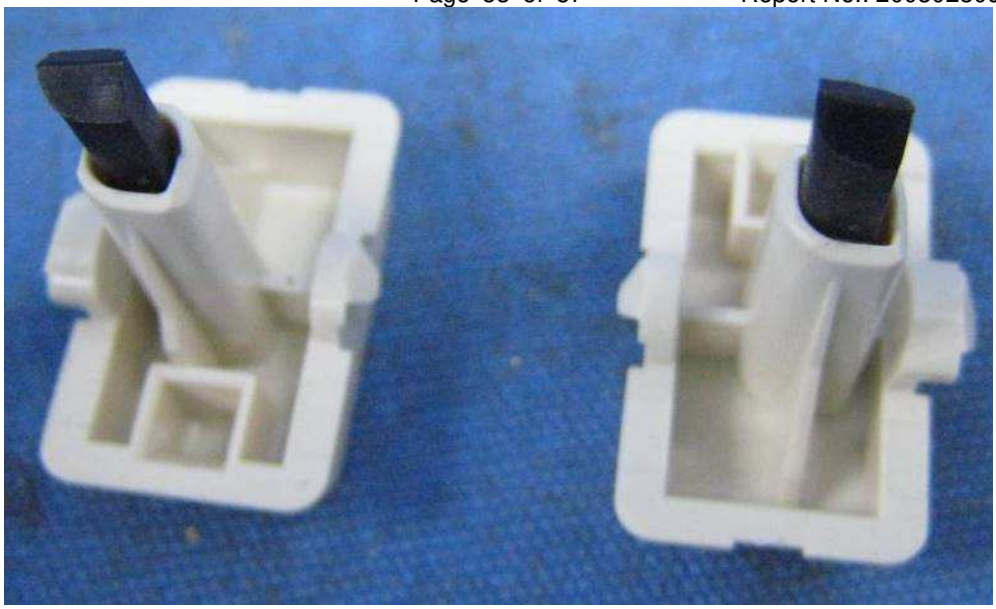


Back view of 617844

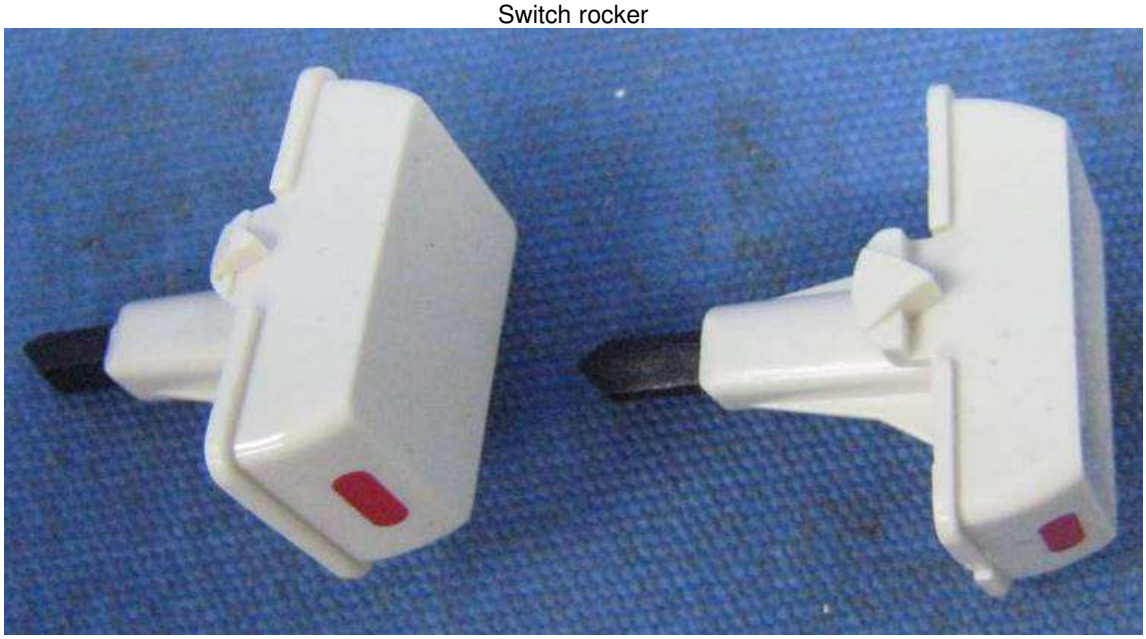
Inside view of 617844



Inside view of 617844



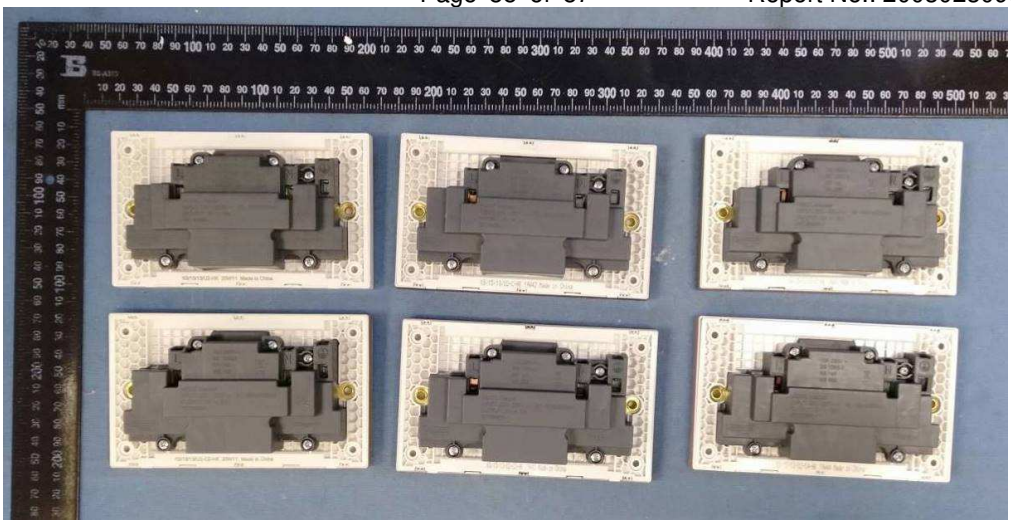
Switch rocker



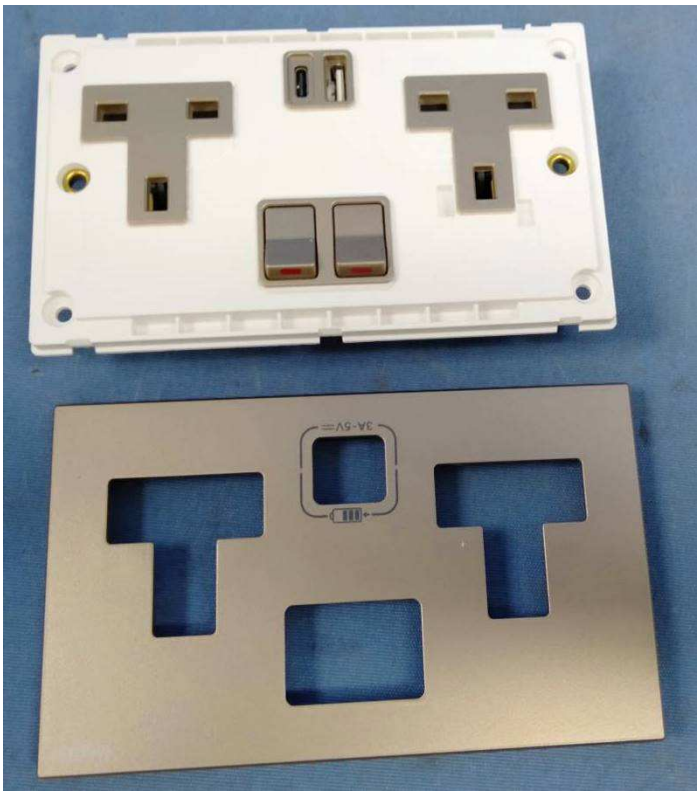
Switch rocker

Switch rocker

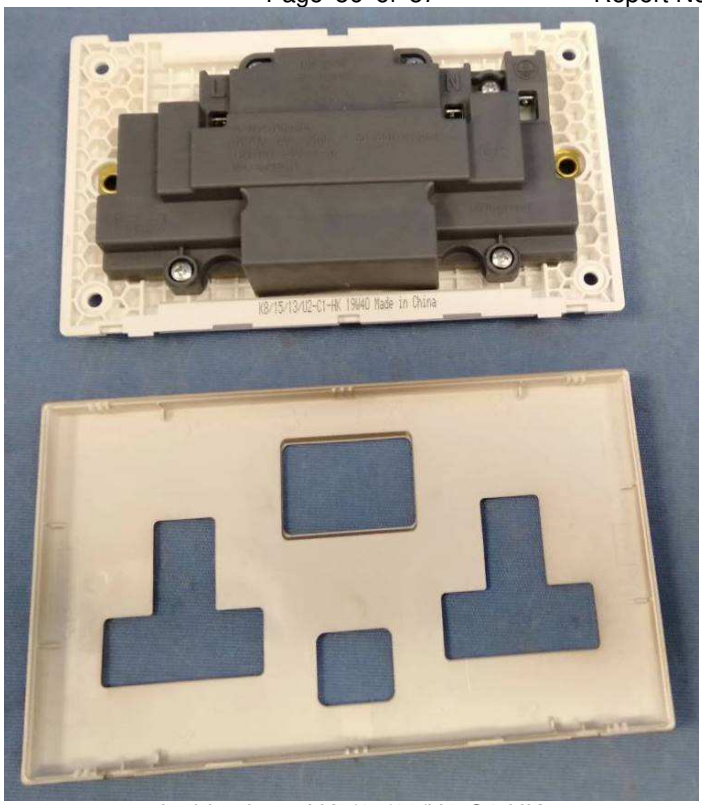
From left to right for first row: Front view of K8/15/13/U2-HK, K8/15/13/U2-C-HK, K8/15/13/U2-C1-HK
From left to right for second row: Front view of K8/15/13/U2-C2-HK, K8/15/13/U2-C3-HK, K8/15/13/U2-C4-HK



From left to right for first row: Front view of K8/15/13/U2-HK, K8/15/13/U2-C-HK, K8/15/13/U2-C1-HK
From left to right for second row: Front view of K8/15/13/U2-C2-HK, K8/15/13/U2-C3-HK, K8/15/13/U2-C4-HK

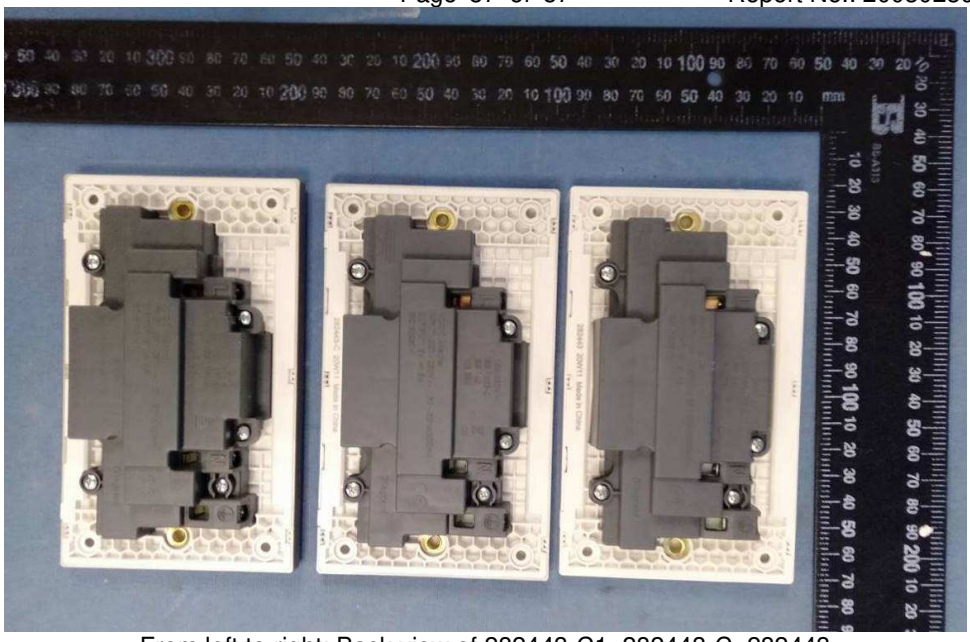


Inside view of K8/15/13/U2-C1-HK

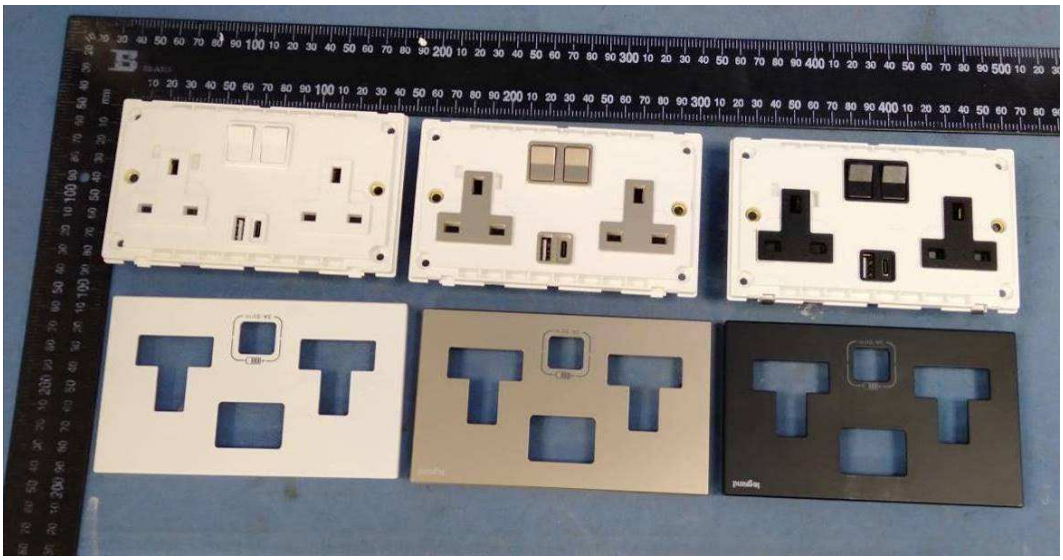


Inside view of K8/15/13/U2-C1-HK

From left to right: Front view of 282443-C1, 282443-C, 282443



From left to right: Back view of 282443-C1, 282443-C, 282443



From left to right: Inside view of 282443, 282443-C1, 282443-C