
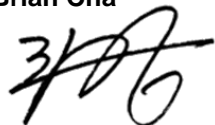




TEST REPORT

European Directive 2011/65/EU

Evaluation of RoHS Requirements for Electrical and Electronic Equipment

Report Reference No.....:	CPSE01449214
Date of issue.....:	2014-11-07
Applicant's name	Upstream Capital Management PTE. Ltd.
Address.....:	8 Marina Boulevard, #05-02 Marina Bay Financial Centre, Singapore 018981
Test item description:	Car door safety lock (Car Door Closer)
Trade Mark	Slamstop
Model/Type reference.....:	Slamstop1.0
Ratings	12 V d.c.
Manufacturer declared limits:	N.A.
Pb / Hg / Cr(VI).....:	
Cd.....:	
PBBs / PBDEs	
Test specifications:	
Directives.....:	2011/65/EU
Test Standard(s).....:	IEC 62321:2008 (ed.1.0) (See Page 4)
Non-standard test method.....:	N.A.
Evaluation Result	The equipment which was evaluated has fulfilled with requirement of 2011/65/EU Directive for the materials : Pb, Cd, Hg, Cr(VI), PBBs and PBDEs
Test Report Form No.:	2011/65/EU
TRF Originator.....:	TÜV SÜD Korea
Master TRF.....:	Dated 2012-08
<p>This publication may be reproduced in whole or in part for non-commercial purposes according to the request of applicant. Also it is not allowed to copy this report even partly without the allowance of publisher.</p> <p>Also this publication represent for the evaluation results of the issued test item only – any type of EEE, i.e. full product, module assembly, component or material including RoHS test results, process assessment results and quality system review regarding RoHS requirement.</p> <p>The evaluation results means only the tested item is complied with RoHS requirement according to the evaluation procedures which is described in this publication.</p>	
Prepared by : Todd Kim	Approved By : Brian Cha
	



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1. General Information / Normative references

ISO Certification Information N.A.

Certificate holder

Date of expiration

Issued by.....

Possible evaluation result verdicts:

Case for not applicable item..... : N.A.

Comply with the requirement : P (Pass or Ok)

Does not comply with the requirement..... : F (Fail or No)

Evaluation

Date of receipt of product/Material..... : 2014-10-30

Date (s) of evaluations : 2014-10-31 to 2014-11-05

Normative references

- ISO 9001:2008 – Quality management systems- Requirements
- ISO 14001:2004 – Environmental management systems – Requirements with guidance for use
- ISO/IEC 17025:2005 – General requirements for the competence of testing and calibration laboratories
- EN 50581:2012 – Technical documentation for the assessment of electrical and electronic products with respect to the restriction of hazardous substances.
- EN 62474:2012 – Material declaration for products of and for the electrotechnical industry (IEC 62474:2012)
- EN 62430:2009 – Environmentally conscious design for electrical and electronic products (IEC 62430:2009)
- IEC/TR 62476:2010 –Guidance for evaluation of products with respect to substance use restrictions in electrical and electronic products
- IEC/PAS 62596:2009 – Electrotechnical products – Determination of restricted substances – Sampling procedure – Guideline.

General product information:

- This test report is included Certificate (No.: ROHS 14 12 90717 001), It should be read in conjunction with the basic Certificate (No: ROHS 14 11 90142 002) dated 2014-11-27.
- No further testing was conducted on the sample product due to providing the already basic certificate No. ROHS 14 11 90142 002 (Test report No. CPSE01449214) evaluated.
- This test object is car door lock system that automatically closed by electric device.
- The item tested was conducted on sample product only submitted by manufacturer.
- Components:
 - Main electric drive, Control box, Wire with casing, Operating mechanism with retaining parts and fastening parts, Support bracket, Situation sensor with magnet.
- Rated input voltage: 12 V d.c.
- The item tested were complied with the requirements of EU Directive 2011/65/EU and its amending.
 - 1) Directive 2012/50/EU and 2012/51/EU of 10 October 2012.
 - 2) Delegated Directives 2014/1/EU to 2014/16/EU of 18 October 2013.
 - 3) Delegated Directives 2014/69/EU to 2014/76/EU of 13 March 2014.



Clause	Requirement – Test	Result – Remark	Verdict
2	RoHS Compliance based on test reports		
2.1	Review of Component's test reports according to BoM		P
	Remark(s):		
2.1.1	Does evaluated product is composed by components which are listed in BoM?	Checked	P
2.1.2	Does each component is complied with the requirement of employed directive or manufacturer declared limits ?		P
2.2	Review of verification test report according to material sampling.		P
	Remark(s): Tested by ETL Inc.* CARAT is the laboratory recognition program of TÜV SÜD Product Service GmbH.	CARAT Lab.	
2.2.1	If it was performed the item 2.1, did sampling was performed in appropriate?		P
2.2.2	if it was not performed the item 2.1, did it was fully considered the materials of component and does it was performed the sampling which is enough to represent the characteristics of population ?		N.A.
2.2.3	Is it complied with the requirements of employed directive or manufacturer declared limits for sample tested?		P
2.3	Requirements of test report		P
2.3.1	Is it included the information of manufacturer, sample, test lab or etc?		P
	Remark(s):		
2.3.2	Is it clearly specified the test object as the part of components or product?	Indexed by manufacturer	P
2.3.3	Is it described the information of directive or standards of test methods?		P
2.3.4	Is it described the results with accurately for interpretation, using or etc?		P
2.3.5	What about the validity of test equipment and information of calibration?		P
2.3.6	What is the validity of laboratory own methods?.....		N.A.
2.4	Other information		
	IEC 62321:2008 (ed 1.0)	Test Methods used	P
2.5	Attachment : Appendix I. Verification Test Results Appendix II. Equipment Photos		N.A.



Clause	Requirement – Test	Result – Remark	Verdict
3	Factory process assessment regarding RoHS Directive		N.A.
3.1	Factory Information		
	Name :		
	Address :		
3.2	Process assessment		
3.2.1	Is it possible to comprehend the process by flow-chart or work-procedure?		
3.2.2	Is it arranged the management procedure for process of objected substances?		
3.2.3	Does employee understand the factoring process and the procedure of control?		
3.2.4	Is it managed and placed the records of process for objected substances?		
3.2.5	Is it performed the regular check and the recording for each equipment?		
3.3	Management procedures of nonconformity		
	Remark(s):		
3.3.1	Is it arranged and operated the nonconformity?		
3.3.2	Is it kept the record control of the nonconformity?		
3.3.3	Is it performed the correctives and reported for the nonconforming results?		
3.3.4	Is it enforced the above items 3.3.1 to 3.3.3 to all supplier chain?		
3.4	Other information :		
3.5	Attachment		



Clause	Requirement – Test	Result – Remark	Verdict
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4.	Quality management system for RoHS Directive		-
4.1	Management requirements		N.A.
	Remark(s):		
4.1.1	Is it declared and included the RoHS requirements in policy of quality system by chief of management?		
4.1.2	Does it is operated relevant organization?		
4.1.3	Is it arranged the procedures of the RoHS requirement and operated it regarding purchasing of components or materials ?		
4.1.4	Is it equipped, distributed and operated the RoHS documents?		
4.1.5	Is it maintained the control of record in appropriate?		
4.1.6	Is it performed the education program for the employee/test engineer regarding RoHS requirements?		
4.2	Technical requirements if equipped with test equipment		
4.2.1	Personnel		
4.2.1.1	Is personnel appropriate for test including spot check in factory?		
4.2.1.2	Is it arranged the procedure of qualification of personnel?		
4.2.2	Equipment control		
4.2.2.1	Is it equipped appropriate facilities for analysis of hazardous substances?		
4.2.2.2	Is it performed the calibration in regular?		
4.2.3	Test result control		
4.2.3.1	Is it used the test procedure and test plan?		
4.2.3.2	Is it managed the test result according to specified procedure?		
4.2.3.3	Does it include the procedure for adapting the test result to quality system?		
4.3	Other information		
4.4	Attachment:		

Appendix I Verification Test Results

1. General

1.1 Employed standard: IEC 62321:2008 (ed.1.0)

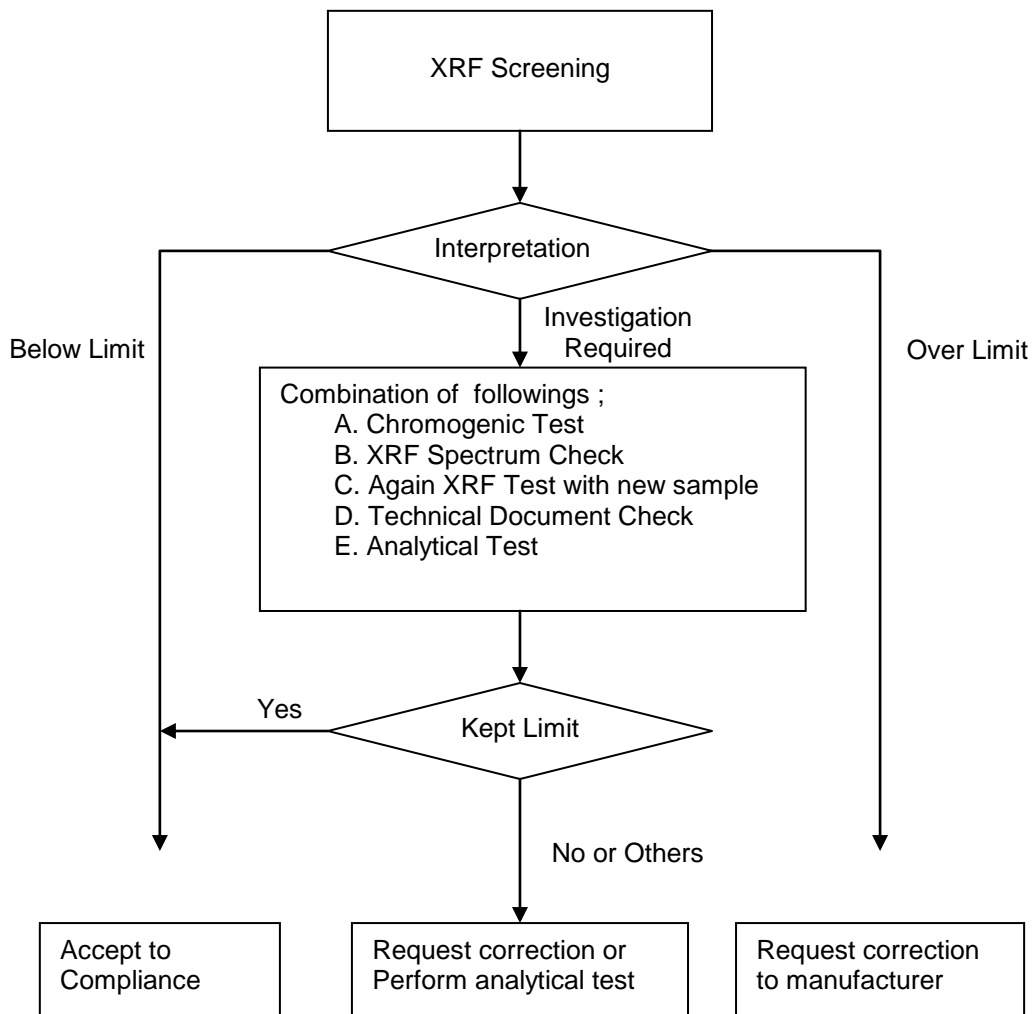
1.2 Applied sampling criteria

- All kind of components could be disassembled by using mechanical measures
- High risk components

2. Laboratory Information

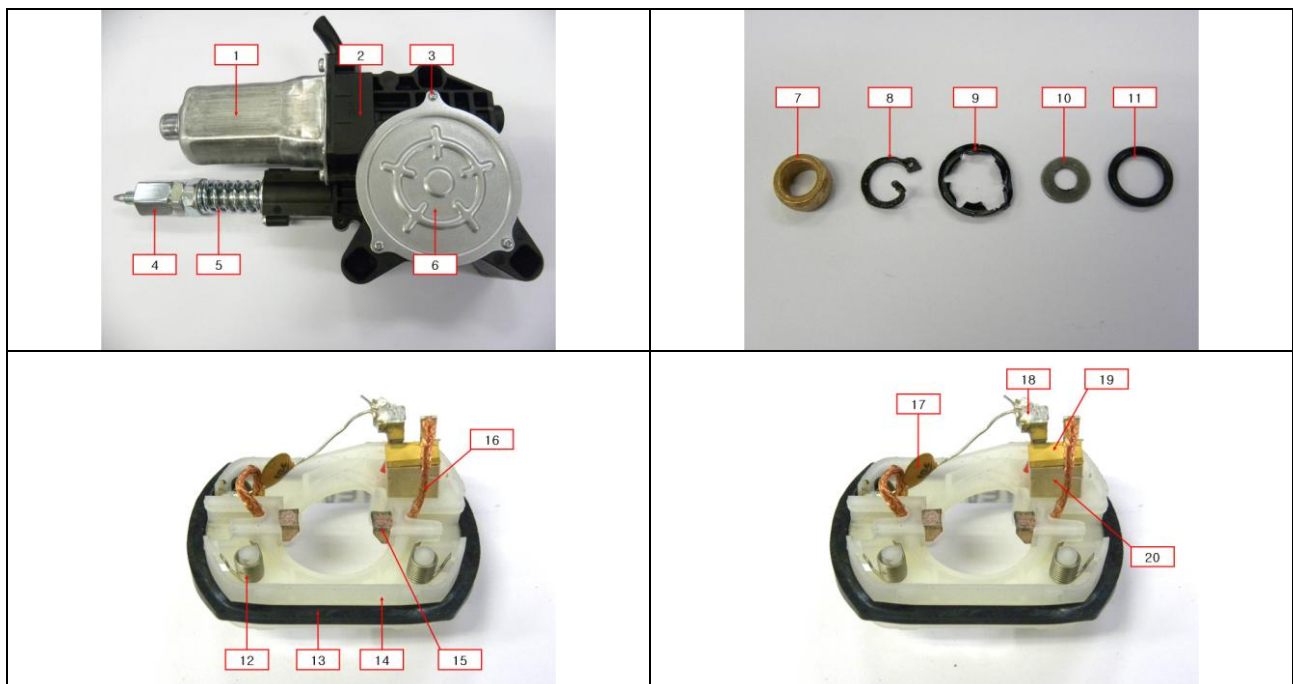
Name :	ETL Inc. (CARAT Laboratory) CARAT is a laboratory recognition program of TÜV SÜD Product Service GmbH.
Facilities used :	ED-XRF SEA-1000A / Seiko
Accredited :	From July, 2005

3. Verdict Procedure



4. Verification test results

Ref. No.	Part Name (Entity Description)	Supply	XRF Screening Results					Investigation Procedure	Verdict
			Cd	Pb	Hg	Br	Cr		
1	Electric drive motor housing	DAEWOONG	0	0	4087	N.A.	315	Hg - Type B	Pass
2	GEAR HOUSING (RH/LH)	MSJ	0	7	0	183	0	N.A.	Pass
3	TAPPING SCREW	DAESAN FASTENGER	0	0	3656	N.A.	1066	Hg - Type B, Cr - Type A	Pass
4	CAP NUT		0	0	8634	N.A.	1256	Hg - Type B, Cr - Type A	Pass
5	SPRING	SUNJIN SPRING	0	0	4404	N.A.	1351	Hg, Cr - Type B	Pass
6	HOUSING COVER	DAEWOONG	0	0	7863	N.A.	248	Hg - Type B	Pass
7	R-BUSH	SEONGHO SINTERED METAL	208	0	0	N.A.	0	Cd - Type B	Pass
8	C-TYPE STOP RING	SAM KWANG PRECISION INDUSTRIAL	0	25	0	N.A.	156	N.A.	Pass
9	RETAINER	DAOUK	0	84	0	N.A.	160	N.A.	Pass
10	SPINDLE WASHER	DAEWOONG	4	541	0	N.A.	2227	Cr - Type A	Pass
11	SPINDLE O-RING	DMR	0	6	0	0	0	N.A.	Pass
12	BRUSH SPRING (RH)	SUNJIN SPRING	3	147	0	N.A.	181130	Cr - Type A	Pass
13	PACKING	DMR	0	0	238	0	2	N.A.	Pass
14	BRUSH HOLDER BASE (RH/LH)	HANSUNG I.M.P	13	1	0	4	0	N.A.	Pass
15	CARBON BRUSH	AVO KOREA	0	0	0	N.A.	158	N.A.	Pass
16	Motor bushing lead wire		0	0	0	N.A.	20	N.A.	Pass
17	CONDENSER	E-TECH	167	2	0	11	6	Cd - Type B	Pass
18	Solder	SAM WHA	426	169	89	N.A.	0	Cd - Type B	Pass
19	CIRCUIT BREAKER	OTTER	14	0	0	131567	131	Br - Type E	Pass
20	CIRCUIT BREAKER		4	0	0	68	10	N.A.	Pass



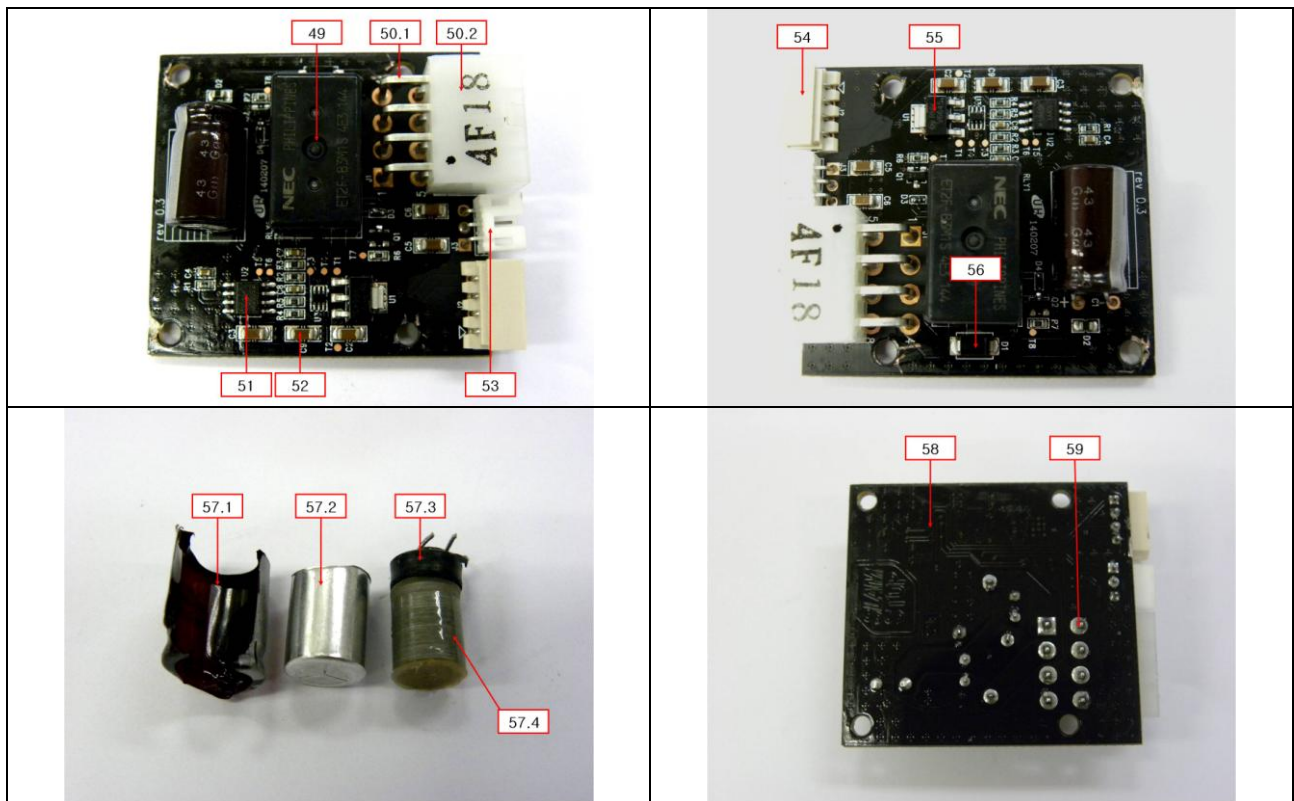
Ref. No.	Part Name (Entity Description)	Supply	XRF Screening Results					Investigation Procedure	Verdict
			Cd	Pb	Hg	Br	Cr		
21	MAGNET	AMC	15	80	0	N.A.	899	Cr - Type B	Pass
22	U-TYPE SPRING	Sunjin Spring	19	30	0	N.A.	0	N.A.	Pass
23	SCREW	DAESAN FASTENGER	5	0	8814	N.A.	2825	Hg - Type B, Cr - Type A	Pass
24	SHAFT	SEOWON	0	49	0	N.A.	0	N.A.	Pass
25	COMMUTATOR	PROASIA	0	0	0	N.A.	35	N.A.	Pass
26	ENAMEL COIL	SUNJIN ENC	14	0	0	N.A.	0	N.A.	Pass
27	STATOR CORE SHEET(Ø25)	MJ TECH	0	26	0	N.A.	1948	Cr - Type A	Pass
28	PUSHER	DAESAN FASTENGER	0	0	4451	N.A.	1766	Hg - Type B, Cr - Type A	Pass
29	END PIECE(LOWER)	GLTECH	0	5	3	10	0	N.A.	Pass
30	WORM WHEEL	HANDO	0	0	0	0	0	N.A.	Pass
31	SHOCK ABSORBER	DMR	0	5	134	0	2	N.A.	Pass
32	CLUTCH PLATE	DAEWOONG	0	0	12980	N.A.	520	Hg, Cr -Type B	Pass
33	Nd MAGNET COVER	HANDO	0	9	0	3	2	N.A.	Pass
34	Nd MAGNET_Ø4	AMC	12	149	0	N.A.	0	N.A.	Pass
35	DU FLANGE BUSH	SGO	88	1457	81	N.A.	273	Cd - Type B Pb-Exempted ANNEXIII-6(a)	Pass
36	ECCENTRIC	DAEWOONG	0	0	7371	N.A.	455	Hg - Type B	Pass
37	DRIVE SHAFT	Sekwang ENG	2	317	0	N.A.	0	N.A.	Pass
38	COVER O-RING	DMR	4	6	0	0	0	N.A.	Pass
39	BOSS BUSH	SEONGHO Sintered Metal	0	1	0	N.A.	119	N.A.	Pass
40	HALL-IC	MELEXIS	0	14	0	37	0	N.A.	Pass



Ref. No.	Part Name (Entity Description)	Supply	XRF Screening Results					Investigation Procedure	Verdict
			Cd	Pb	Hg	Br	Cr		
41	TIP CAM	JEIL DIECASTING	0	0	29838	N.A.	0	Hg - Type B	Pass
42	PLATE	DAEWOONG	0	0	29553	N.A.	0	Hg - Type B	Pass
43	FIXING	HANDO	0	57	0	N.A.	10359	Cr - Type A	Pass
44	COVER BUTTON		5	0	2	0	0	N.A.	Pass
45.1	Insulation - gray	GYUNGIL INDUSTRY	2	1	22	0	0	N.A.	Pass
45.2	Insulation - red		1	4	0	4	0	N.A.	Pass
45.3	Insulation - white		0	0	0	5	0	N.A.	Pass
45.4	Insulation - black		0	0	0	1	0	N.A.	Pass
45.5	Sheathe		0	0	0	132166	0	Br - Type D	Pass
45.6	Insulation-black		9	0	4	1	0	N.A.	Pass
45.7	Insulation - red		0	6	0	1	0	N.A.	Pass
45.8	Insulation - blue		0	6	0	0	0	N.A.	Pass
45.9	Insulation - brown		0	0	0	4	0	N.A.	Pass
45.10	wire		0	0	0	N.A.	80	N.A.	Pass
46	COVER	HANDO	0	1	0	1	0	N.A.	Pass
47	PACKING 1	DMR	2	19	0	0	0	N.A.	Pass
48	O-RING		7	8	0	0	0	N.A.	Pass



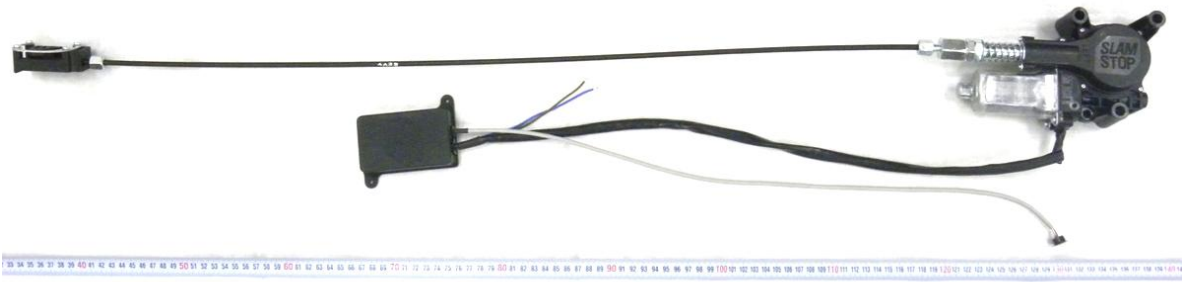
Ref. No.	Part Name (Entity Description)	Supply	XRF Screening Results					Investigation Procedure	Verdict
			Cd	Pb	Hg	Br	Cr		
49	Relay	NEC/TOKIN	6	0	0	80034	0	Br - Type D	Pass
50.1	Connector lead pin	HANLIM	218	0	632	N.A.	0	Cd - Type B	Pass
50.2	Connector molding		1	0	3	50	0	N.A.	Pass
51	MCU	Freescale	0	0	21	20	1	N.A.	Pass
52	Capacitor	SAMSUNG	30	0	0	19	10	N.A.	Pass
53	Connector	HANLIM	0	0	8	121	0	N.A.	Pass
54	Connector	MOLEX	61	0	0	103505	4	Br - Type D	Pass
55	Regulator	ST	0	0	4	9	1	N.A.	Pass
56	Diode	Vishay	13	34	0	8423	2	Br - Type D	Pass
57.1	Capacitor	SAMYOUNG	25	0	2	12	0	N.A.	Pass
57.2			11	6	4	0	0	N.A.	Pass
57.3			0	6	39	0	0	N.A.	Pass
57.4			2	0	0	0	0	N.A.	Pass
58	PCB	DOOSAN	1	0	0	35268	3	Br - Type D	Pass
59	Solder	SAMHWA	297	69	0	N.A.	1308	Cd, Cr -Type B	Pass



Ref. No.	Part Name (Entity Description)	Supply	XRF Screening Results					Investigation Procedure	Verdict
			Cd	Pb	Hg	Br	Cr		
60.1	Cable casing	DAEDONG SYSTEM	0	0	3	2	0	N.A.	Pass
60.2	Wire		0	117	0	N.A.	17	N.A.	Pass
60.3	Inner casing		1	0	7	0	2	N.A.	Pass
60.4	Inner wire		1	0	28120	N.A.	0	Hg - Type B	Pass
61	MOUNTING BOLT	DAESAN FASTENGER	0	0	15421	N.A.	1406	Hg, Cr -Type B	Pass
62	NUT M6		0	0	9948	N.A.	2680	Hg - Type B, Cr - Type A	Pass
63	Nd MAGNET_Ø7	AMC	0	1	4	0	315	N.A.	Pass
64	WASHER M10	DAESAN FASTENGER	0	0	7558	N.A.	774	Hg, Cr -Type B	Pass
65	THRUST NUT	MSJ	0	0	0	2	0	N.A.	Pass
66	NUT M10	DAESAN FASTENGER	12	0	8974	N.A.	1219	Hg, Cr -Type B	Pass
67	RIVET M10	INFASTECH KOREA	0	0	9101	N.A.	3383	Hg, Cr -Type B	Pass
68	GREASE	ECL	0	0	0	0	0	N.A.	Pass
69	Handle	DONGKUK	1	0	0	N.A.	1	Not applied to this RoHS directive.	Pass
70	BOX		0	40	0	N.A.	0		Pass
71	PE FORM		0	0	0	N.A.	3		Pass
72	PE FORM		43	0	0	N.A.	10		Pass
73	Template	DAEDONG MOVEEL SYSTEM	13	0	0	4	0	N.A.	Pass



Appendix II Photos of Product



[Whole shape]



[Electric drive]