
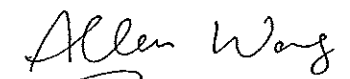
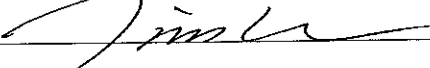




Test Report issued under the responsibility of:



<b>TEST REPORT</b> <b>IEC/EN 60947-3</b> <b>Low-voltage switchgear and controlgear</b> <b>Part 3: Switches, disconnectors, switch-disconnectors and fuse-combination units</b>	
<b>Report Reference No.</b> .....	SH12040006-012
<b>Date of issue</b> .....	April 27, 2012
<b>Total number of pages</b> .....	9
<b>CB Testing Laboratory</b> .....	Intertek Testing Services Shanghai
<b>Address</b> .....	Building No.86, 1198 Qinzhou Road (North), Shanghai 200233, China
<b>Applicant's name</b> .....	LSIS Co., Ltd.
<b>Address</b> .....	Beakbong-ro 95, Heung deok-gu, Cheongju-si, Chungcheongbuk-do, Korea
<b>Test specification:</b>	
<b>Standard</b> .....	<input checked="" type="checkbox"/> IEC 60947-3: 3 <sup>rd</sup> Edition (2008) in conjunction with IEC 60947-1: 5 <sup>th</sup> Edition (2007)
<b>Test procedure</b> .....	Type test
<b>Non-standard test method</b> .....	N/A
<b>Test Report Form No.</b> .....	IEC60947_3B
<b>Test Report Form(s) Originator</b> .....	OVE
<b>Master TRF</b> .....	Dated 2009-08
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If this Test Report Form is used by non-IECEE members, the IECEE/IEC logo and the reference to the CB Scheme procedure shall be removed.	
<b>This report is not valid as a CB Test Report unless signed by an approved CB Testing Laboratory and appended to a CB Test Certificate issued by an NCB in accordance with IECEE 02.</b>	
<b>Test item description</b> .....	Switch-disconnectors
<b>Trade Mark</b> .....	
<b>Manufacturer</b> .....	Shanghai Yongji Electrical Co., Ltd / No.2239 Jianshi South RD., Jinshan District, Shanghai
<b>Model/Type reference</b> .....	BKD
<b>Ratings</b> .....	230/400V~, 63A, 80A, 100A, 125A AC-22A

Testing procedure and testing location:	
<input checked="" type="checkbox"/> <b>CB Testing Laboratory:</b>	Intertek Testing Services Shanghai
Testing location/ address.....:	Building No.86, 1198 Qinzhou Road (North), Shanghai 200233, China
<input checked="" type="checkbox"/> <b>Associated CB Test Laboratory:</b>	Inspection Center of Products' Quality of Low Voltage Electric Apparatus in Zhejiang Province
Testing location/ address.....:	West Zhonghuan Road, Jiaxing City, Zhejiang Province, P.R.China
Tested by (name + signature).....:	Allen Wang 
Approved by (+ signature) .....	Jim Hua 
<input type="checkbox"/> Testing procedure: TMP	
Testing location/ address.....:	
Tested by (name + signature).....:	
Approved by (+ signature) .....	
<input type="checkbox"/> Testing procedure: WMT	
Testing location/ address.....:	
Tested by (name + signature).....:	
Witnessed by (+ signature).....:	
Approved by (+ signature) .....	
<input type="checkbox"/> Testing procedure: SMT	
Testing location/ address.....:	
Tested by (name + signature).....:	
Approved by (+ signature) .....	
Supervised by (+ signature).....:	
<input type="checkbox"/> Testing procedure: RMT	
Testing location/ address.....:	
Tested by (name + signature).....:	
Approved by (+ signature) .....	
Supervised by (+ signature).....:	

<b>Summary of testing:</b>		
<b>Clause</b>	<b>Tests performed (name of test and test clause):</b>	<b>Testing location</b>
5.2	Marking	CBTL
7.1	Construction	CBTL
8.3.3.1	Temperature-rise	ACTL
8.3.3.2	Dielectric properties	ACTL
8.3.3.3	Making and breaking capacity	ACTL
8.3.3.4	Dielectric verification	ACTL
8.3.3.5	Leakage current	ACTL
8.3.3.6	Temperature-rise verification	ACTL
8.3.3.7	Strength of actuator mechanism	ACTL
8.3.4.1	Operational performance test	ACTL
8.3.4.2	Dielectric verification	ACTL
8.3.4.3	Leakage current	ACTL
8.3.4.4	Temperature-rise verification	ACTL
8.3.5.1	Short-time withstand current	ACTL
8.3.5.2	Short-circuit making capacity	ACTL
8.3.5.3	Dielectric verification	ACTL
8.3.5.4	Leakage current	ACTL
8.3.5.5	Temperature-rise verification	ACTL
8.3.6.1	Fuse protected short-circuit withstand	N/A
8.3.6.3	Dielectric verification	N/A
8.3.6.4	Leakage current	N/A
8.3.6.5	Temperature-rise verification	N/A
8.3.7.1	Overload test	N/A
8.3.7.2	Dielectric verification	N/A
8.3.7.3	Leakage current	N/A
8.3.7.4	Temperature-rise verification	N/A
<b>Summary of compliance with National Differences:</b>		

**Copy of marking plate****Summary of testing:**

Number of tests for test procedure, according to clause 8.3.2.1.3, table 11, 13, 14, 15 and 16

Test report ref. No.	No. of poles	$I_e$ (A)	Test sequence and number of samples				
			I	II	III <sup>b)</sup>	IV <sup>c)</sup>	V <sup>d)</sup>
SH12040006-010	1P	125	1	1	1	-	-
	1P	63	-	-	1	-	-
SH12040006-011	2P	125	1	1	1	-	-
	2P	63	-	-	1	-	-
SH12040006-012 <sup>a)</sup>	3P	-	-	-	-	-	-
SH12040006-013	4P	125	1	1	1	-	-
	4P	63	-	-	1	-	-

**Notes:**

- a) The tests of three-pole switch are omitted when four-pole switch has been tested according to clause 8.3.2.1.3 of IEC 60 947-3
- b) Test sequence III is not mandatory if test sequence IV is carried out.
- c) Test sequence IV is not mandatory if test sequence III is carried out.
- d) Not required for switches, disconnectors and switch-disconnectors.

<b>Test item particulars</b> .....	
- method of operation .....	independent manual operation
- suitability for isolation .....	suitable / <del>not suitable</del>
- degree of protection .....	IP20
- number of poles .....	3
- kind of current.....	a.c.
- number of positions of the main contacts.....	2
Rated and limiting values, main circuit .....	
- rated operational voltage $U_e$ (V).....	230/400
- rated insulation voltage $U_i$ (V).....	600
- rated impulse withstand voltage $U_{imp}$ (kV).....	6
- conventional free air thermal current $I_{th}$ (A) .....	63A, 80A, 100A, 125
- conventional enclosed thermal current $I_{the}$ (A) .....	N/A
- rated operational current $I_e$ (A).....	63A, 80A, 100A, 125
- rated uninterrupted current $I_u$ (A) .....	63A, 80A, 100A, 125
- rated frequency (Hz) .....	50/60
- utilization category .....	AC-22A
Short-circuit characteristic.....	
- rated short-time withstand current $I_{cw}$ (kA).....	$12I_e, 1s$
- rated short-time making capacity $I_{cm}$ (A).....	$28,4I_e$
- rated conditional short-circuit current .....	N/A
Control circuits.....	N/A
Auxiliary circuits.....	N/A
Relays and releases.....	N/A
Co-ordination of short-circuit protective devices .....	N/A
- kind of protective device .....	N/A
<b>Possible test case verdicts:</b>	
- test case does not apply to the test object .....	N/A
- test object does meet the requirement.....	P (Pass)
- test object does not meet the requirement.....	F (Fail)
<b>Testing</b> .....	
Date of receipt of test item .....	April 08, 2012
Date (s) of performance of tests .....	From April 08, 2012 to April 20, 2012

**General remarks:**

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

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"(see Enclosure #)" refers to additional information appended to the report.

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

**Note: EN Group Differences together with National Differences and Special National Conditions, if any, are in the Appendix to the main body of this TRF.**

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

This test report is valid only being read together with the test reports of SH12040006-010, -011, -013.

**General product information:**

$U_e = 230/400V\sim(1P, 2P, 3P, 4P)$

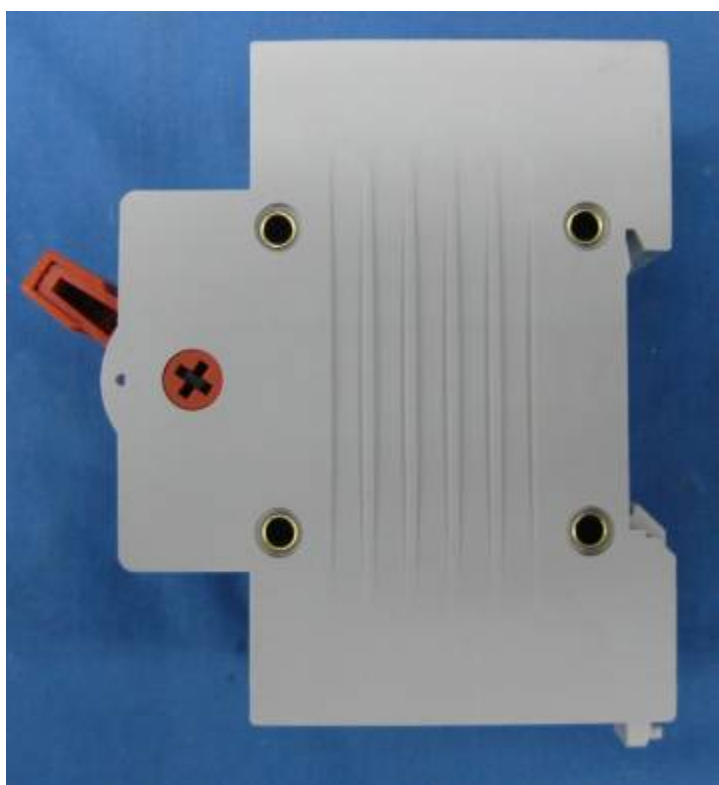
$I_e = 63A, 80A, 100A, 125A$

$I_{cw} = 12I_e / 1s, I_{cm} = 28,4I_e, U_i = 600V, U_{imp} = 6kV, Cat.: AC-22A$

Photos of sample:



Photos of sample:





Photos of sample:

