161100110161 (2016)(浙)质监验字0161号

中国认可
国际互认
检测
TESTING
CNAS L0116

检 测 报 告

TEST REPORT

报告编号 1716330108
REPORT NO.

产品名称 Latching Relay
NAME OF SAMPLE

委托单位 Bolta Electric (Shenzhen) Co.,Ltd
CUSTOMER

检测类别 Entrusted Test
TEST CATEGORY

浙江方圆检测集团股份有限公司
ZHEJIANG FANGYUAN TEST GROUP CO., LTD.
浙江省低压电器产品质量检验中心
Inspection Center of Products' Quality of Low Voltage Electric Apparatus in Zhejiang Province

浙江省低压电器产品质量检验中心

Inspection Center of Products' Quality of Low Voltage Electric Apparatus in Zhejiang Province

检 测 报 告

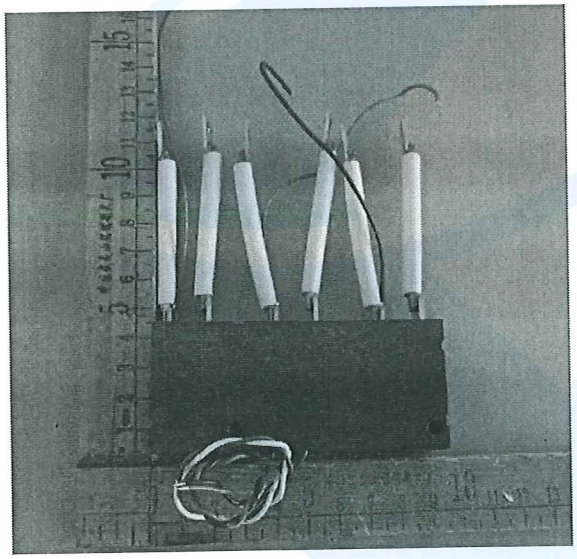
TEST REPORT

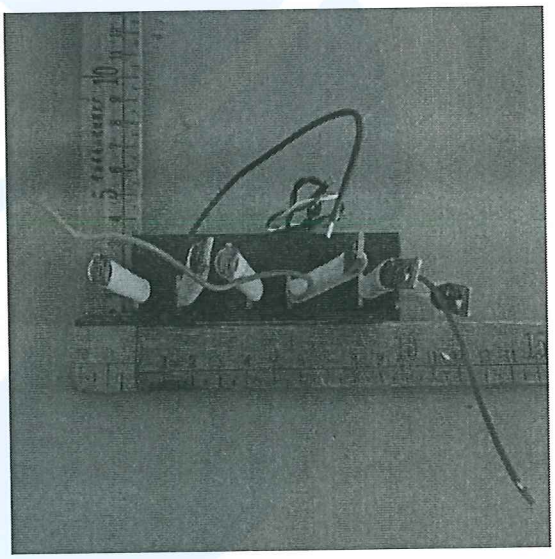
样品名称 Name of Sample	Latching Relay	检测类别 Test Category	Entrusted test
型号规格 Model 等 级 Grade	BDJ007-100A-009-3X /	商 标 Trademark	/
额定电流 Rated current	100A	额定电压 Rated voltage	AC250V
技术参数 Technical parameter	Us:9~20VDC UC3 3P	频 率 Frequency	50Hz
生产日期 Date of Manufacture	/	批号或编号 Serial No.	/
委托单位(客户)名 称 Customer	Bolta Electric (Shenzhen) Co.,Ltd	受检单位 Inspected Entity	/
地 址 Address	6F,No.150,East Zone, Guanglong Village, Nanshan District, Shenzhen City. Guangdong, China	生产单位 Manufacturer	Bolta Electric (Shenzhen) Co.,Ltd
抽样者 Sampling Organization	/	抽样基数 Number of Samples	/
抽样地点 Sample Location	/	抽样数量 Number of Sample(s) for Inspection	/
抽样日期 Sampling Date	/	到样数量 Receiving Number of Sample(s)	4 pcs
送样者 Sample(s) Deliverer	Bolta Electric (Shenzhen) Co.,Ltd	到样日期 Receiving Date of Sample(s)	March 28,2017
检测依据 Test Requirements	JB/T10923-2010 and the entrusted requirements (IEC62055-31:2005)		
样品描述、状态 Description and Condition of Sample(s)	Be fit for test		
检测日期 Test Date	From March 28,2017 To April 05,2017	检测地点 Test location	No. 400 Guangqiong Road, Jiaxing City
检测结论 Test Summary	The entrusted samples have been tested according to JB/T10923-2010 and the entrusted requirements (IEC62055-31:2005). The test results of every test item comply with the requirements. Test Seal Date of Approval: April 12,2017		
备 注 Remarks	/		

批 准: Approved by 审 核: Verified by 编 制: Complied by

检 测 报 告
TEST REPORT

样品外观及标识照片
（Photo and Nameplate of the Inspected Sample(s)）





检测报告的其它说明
（Other Explanation of the Test Report）

Test case verdicts:

Test case does not apply to the test object: N/A
Test item does meet the requirement : P(pass)
Test item does not meet the requirement : F(fail)

检 测 报 告
TEST REPORT

序号 Series Number	检测项目 Test Items	依据标准条款 Clause of standard	样品编号 Serial No. of samples	单项结论 Item Conclusion
1	Electrical endurance	JB/T10923-2010 6.2.5.1 IEC62055-31 C.3	1#	P
2	Minimum switched current	IEC62055-31 C.7		
3	Power consumption	JB/T10923-2010 6.2.2.3 IEC62055-31 7.3		
4	Dielectric properties	JB/T10923-2010 6.2.2.4 IEC62055-31 C.8		
5	Short-circuit current carrying capacity (Test 1)	JB/T10923-2010 6.2.4.4 IEC62055-31 C.6	2#	P
6	Minimum switched current	IEC62055-31 C.7		
7	Power consumption	JB/T10923-2010 6.2.2.3 IEC62055-31 7.3		
8	Dielectric properties	JB/T10923-2010 6.2.2.4 IEC62055-31 C.8		

Note.: The serial numbers of samples (1#、2#、3#…) in this page and in this text report stand for the serial numbers on the tested samples (1716330108- 1#、1716330108- 2#、1716330108- 3#…).

检 测 报 告
TEST REPORT

序号 Series Number	检测项目 Test Items	依据标准条款 Clause of standard	样品编号 Serial No. of samples	单项结论 Item Conclusion
9	Short-circuit current carrying capacity (Test 2)	JB/T10923-2010 6.2.4.4 IEC62055-31 C.6	3#	P
10	Minimum switched current	IEC62055-31 C.7		
11	Power consumption	JB/T10923-2010 6.2.2.3 IEC62055-31 7.3		
12	Dielectric properties	JB/T10923-2010 6.2.2.4 IEC62055-31 C.8		
13	Normal operation	IEC62055-31 C.2	4#	P
14	Line to load voltage surge withstand	JB T10923-2010 6.2.4.3 IEC62055-31 C.4		
15	Fault current making capacity	JB T10923-2010 6.2.4.4 IEC62055-31 C.5		
16	Minimum switched current	IEC62055-31 C.7		
17	Power consumption	JB/T10923-2010 6.2.2.3 IEC62055-31 7.3		
18	Dielectric properties	JB/T10923-2010 6.2.2.4 IEC62055-31 C.8		

Note.: The serial numbers of samples (1#、2#、3#…) in this page and in this text report stand for the serial numbers on the tested samples (1716330108- 1#、1716330108- 2#、1716330108- 3#…).

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TEST REPORT

Clause	Test items and test requirements	Result of measurement or observation	Conclusion
		1#	
JB/T10923-2010 6.2.5.1 IEC62055-31 C.3	Electrical endurance Make and break: a sequence Test voltage (r.m.s.): 250 $^{+5\%}$ (V) Test current (r.m.s.): 100 $^{+5\%}$ (A) cosφ: 1.00 $_{-0.05}$ Number of operating cycles: 5000 Make time: 10s Break time: 20s b sequence Test voltage (r.m.s.): 250 $^{+5\%}$ (V) Test current (r.m.s.): 100 $^{+5\%}$ (A) cosφ: 0.5 ± 0.05 Number of operating cycles: 5000 Make time: 10s Break time: 20s Conductor : 35 × 1 (mm^2 × m) Control voltage: DC12V Acceptance criteria: 1) the sample shall show no signs of malfunction, sticking of contacts or reluctance to latch; 2) the contacts shall open on the first attempt Serial No. of oscillograms:	 252 102 1.0 5000 10s 20s 252 103 0.51 5000 10s 20s 35 × 1 12 No signs Complied S170108901 ~ S170108906	P

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TEST REPORT

Clause	Test items and test requirements	Result of measurement or observation	Conclusion
		1#	
IEC62055-31 C.7	Minimum switched current Test voltage (r.m.s.): $250^{+5\%}$ (V) Test current (r.m.s.): $1^{+5\%}$ (A) cosφ: $1.0_{-0.05}$ Number of operating cycles: 10 Make time: 10s+5% Break time: 10s Conductor: 1 × 1 (mm^2 × m) Control voltage: DC12V Acceptance criteria: 1) Test current shall successfully conduct each time the contacts are in the closed position; 2) Test current shall successfully break each time the contacts are in the open position	252 1.02 1.0 10 10s 10s 1 × 1 12 Complied Complied	P
JB/T10923-2010 6.2.2.3 IEC62055-31 7.3	Power consumption Test current: 10A Conductor: 1.5 × 1 (mm^2×m) Measurement of power consumption: Test position: main circuit Incoming terminal - outgoing terminal Voltage-drop (mV) Power consumption (W) ⩽ 0.08%UeIn	10.2 1.5 × 1 A: 22.1 / 0.225 B: 23.8 / 0.243 C: 23.0 / 0.234	P

检 测 报 告

TEST REPORT

Clause	Test items and test requirements	Result of measurement or observation	Conclusion
	Dielectric properties	1#	
JB/T10923-2010 6.2.2.4 IEC62055-31 C.8	Dielectric strength		P
	1). Measuring insulation resistance		
	Test position:		
	In the open position:		
	Between the supply incoming terminal and the outgoing terminal:≥10 MΩ	> 500MΩ	
	In the closed position:		
	Between the supply incoming terminals connected together and the metal foil in contact with the outer surface of the enclosure:≥10 MΩ	> 500MΩ	
	2). Impulse withstand voltage test		
	Ambient temperature: ℃	18.5	
	Impulse voltage:		
	In the open position 1: 2000V	2000	
	In the closed position 2: 2000V	2000	
	Impulse voltage wave : 1.2/50μs		
	Interval: ≥1s	10	
	Test times:: 3 times for the positive and negative polarity each.		
	Applied position:		
	In the open position:		
	Between the supply incoming terminal and the outgoing terminal;	No unintentional disruptive discharges	
	In the closed position:		
	Between the supply incoming terminals connected together and the metal foil in contact with the outer surface of the enclosure;	No unintentional disruptive discharges	
	3) Power frequency withstand voltage test		
	Ambient temperature: ℃	18.5	
	Test voltage:		
	In the open position 1 1000V	1000	
	In the closed position 2 1000V	1000	
	Time of applying voltage: 1min	1	
	Applied position:		
	In the open position:		
	Between the supply incoming terminal and the outgoing terminal;	No flashover or puncture	
	In the closed position:		
	Between the supply incoming terminals connected together and the metal foil in contact with the outer surface of the enclosure;	No flashover or puncture	

检 测 报 告

TEST REPORT

Clause	Test items and test requirements	Result of measurement or observation	Conclusion
		2#	
JBT10923 -2010 6.2.4.4 IEC62055 -31 C.6	Performance under conditional short-circuit current		P
	Pre-operation of carrying		
	Test voltage (r.m.s.): 250 ± 5% (V)	252	
	Test current (r.m.s.): $100^{+5\%}$ (A)	102	
	cosφ: 1.0	1.0	
	Conductor: 35 × 1 (mm^2 × m)	35 × 1	
	Number of operating cycles: 3	3	
	Make time: 5s		
	Break time: 5s		
	The sample shall show no signs of malfunction, sticking or welding of contacts or reluctance to latch;	No signs	
	Serial No. of the oscillograms:	S170108907 ~ S170108909	
	Short-circuit current carrying capacity (Test 1)		
	Test voltage (r.m.s.): 250 ± 5% (V)	252	
	Test current (r.m.s.): $6^{+5\%}$ (kA)	6.07	
	cosφ: $0.70_{-0.05}$	0.68	
	Control voltage: DC12V	12	
	Conductor: 35 × 1 (mm^2 × m)	35 × 1	
	Electrical angle: 0°	0°	
	Make time: one half cycle		
	Test sequence: O-t-O-t-O		
	Interval: t ⩾ 1min	1	
	Screw: M4	M4	
	Tightening torque: 1.2N · m	1.2	
	Ip max (kA)	9.15	
	I^2t max (kA^2s)	449	
	Duration: max (ms)	11.5	
	Acceptance criteria:		
	(1) It is permissible that the contacts may weld or burn away;	No	
	(2) The sample shall show no signs of explosion or burning;	No signs	
	(3)The surroundings of the payment meter shall not be endangered;	No	
	Serial No. of the oscillogram of the prospective current:	Y170108001	
	Serial No. of the oscillograms:	S170108001 ~ S170108003	

检 测 报 告

TEST REPORT

Clause	Test items and test requirements	Result of measurement or observation			Conclusion
		2#			
IEC62055 -31 C.7	Minimum switched current Test voltage (r.m.s.): $250^{+5\%}$ (V) Test current (r.m.s.): $1^{+5\%}$ (A) cosφ: $1.0_{-0.05}$ Number of operating cycles: 10 Make time: 10s+5% Break time: 10s Conductor: 1 × 1 (mm^2 × m) Control voltage: DC12V Acceptance criteria: 1) Test current shall successfully conduct each time the contacts are in the closed position; 2) Test current shall successfully break each time the contacts are in the open position.	252 1.02 1.0 10 10s 10s 1 × 1 12 Complied Complied			P
JBT10923 -2010 6.2.2.3 IEC62055 -31 7.3	Power consumption Test current: 10A Conductor: 1.5 × 1 (mm^2×m) Measurement of power consumption: Test position: main circuit Incoming terminal -outgoing terminal	10.2 1.5 × 1			P
		A	B	C	
	Voltage-drop (mV) Power consumption (W) ⩽0.08%UeIn	24.8 0.253	26.3 0.268	25.1 0.256	

检 测 报 告

TEST REPORT

Clause	Test items and test requirements	Result of measurement or observation	Conclusion
	Dielectric properties	2#	
JB/T10923-2010 6.2.2.4 IEC62055-31 C.8	Dielectric strength		P
	1). Measuring insulation resistance		
	Test position:		
	In the open position:		
	Between the supply incoming terminal and the outgoing terminal:≥10 MΩ	> 500MΩ	
	In the closed position:		
	Between the supply incoming terminals connected together and the metal foil in contact with the outer surface of the enclosure:≥10 MΩ	> 500MΩ	
	2). Impulse withstand voltage test		
	Ambient temperature: ℃	18.5	
	Impulse voltage:		
	In the open position 1: 2000V	2000	
	In the closed position 2: 2000V	2000	
	Impulse voltage wave : 1.2/50μs		
	Interval: ≥1s	10	
	Test times:: 3 times for the positive and negative polarity each.		
	Applied position:		
	In the open position:		
	Between the supply incoming terminal and the outgoing terminal;	No unintentional disruptive discharges	
	In the closed position:		
	Between the supply incoming terminals connected together and the metal foil in contact with the outer surface of the enclosure;	No unintentional disruptive discharges	
	3) Power frequency withstand voltage test		
	Ambient temperature: ℃	18.5	
	Test voltage:		
	In the open position 1 1000V	1000	
	In the closed position 2 1000V	1000	
	Time of applying voltage: 1min	1	
	Applied position:		
	In the open position:		
	Between the supply incoming terminal and the outgoing terminal;	No flashover or puncture	
	In the closed position:		
	Between the supply incoming terminals connected together and the metal foil in contact with the outer surface of the enclosure;	No flashover or puncture	

检 测 报 告

TEST REPORT

Clause	Test items and test requirements	Result of measurement or observation	Conclusion
		3#	
JB/T10923-2010 6.2.4.4 IEC62055-31 C.6	Pre-operation of carrying		P
	Test voltage (r.m.s.): 250 ± 5% (V)	252	
	Test current (r.m.s.): $100^{+5\%}$ (A)	102	
	cosφ: $1.0_{-0.05}$	1.0	
	Conductor: 35 × 1 (mm^2 × m)	35 × 1	
	Number of operating cycles: 3	3	
	Make time: 5s		
	, Break time: 5s		
	The sample shall show no signs of malfunction, sticking or welding of contacts or reluctance to latch;	No signs	
	Serial No. of the oscillograms:	S170108910 ~ S170108912	
	Short-circuit current carrying capacity (Test 2)		
	Test voltage (r.m.s.): 250 ± 5% (V)	252	
	Test current (r.m.s.): $3^{+5\%}$ (kA)	3.05	
	cosφ: $0.90_{-0.05}$	0.88	
	Control voltage: DC12V	12	
	Conductor: 35 × 1 (mm^2 × m)	35 × 1	
	Electrical angle: 0°	0°	
	Test sequence: O-t-O-t-O		
	Make time: one half cycle		
	Interval: t ⩾ 1min	1	
	Screw: M4	M4	
	Tightening torque: 1.2N · m	1.2	
	Ip max (kA)	4.33	
	I^2t max (kA^2s)	96.7	
	Duration: max (ms)	10.7	
	Acceptance criteria:		
	1) There shall be no signs of sticking or welding of contacts;	No signs	
	2) There shall be no signs of burning or smoking of the enclosure and the conductors;	No signs	
	3) The surroundings of the payment meter shall not be endangered;	No	
	Cooling the sample for more than 5 min after the test, the sample shall operate normally when applying the control voltage.	Complied	
	Serial No. of the oscillogram of the prospective current:	Y170108002	
	Serial No. of the oscillograms:	S170108004 ~ S170108006	

检 测 报 告

TEST REPORT

Clause	Test items and test requirements	Result of measurement or observation	Conclusion
		3#	
IEC62055-31 C.7	Minimum switched current		P
	Test voltage (r.m.s.): $250^{+5\%}$ (V)	252	
	Test current (r.m.s.): $1^{+5\%}$ (A)	1.02	
	cosφ: $1.0_{-0.05}$	1.0	
	Number of operating cycles: 10	10	
	Make time: 10s+5%	10s	
	Break time: 10s	10s	
	Conductor: 1 × 1 (mm^2 × m)	1 × 1	
	Control voltage: DC12V	12	
	Acceptance criteria:		
	1) Test current shall successfully conduct each time the contacts are in the closed position;	Complied	
	2) Test current shall successfully break each time the contacts are in the open position	Complied	
JB/T10923-2010 6.2.2.3 IEC62055-31 7.3	Power consumption		P
	Test current: 10A	10.2	
	Conductor: 1.5 × 1 (mm^2×m)	1.5 × 1	
	Measurement of power consumption:		
	Test position: main circuit		
	Incoming terminal - outgoing terminal	A / B / C	
	Voltage-drop (mV)	23.9 / 25.4 / 25.8	
	Power consumption (W) ⩽0.08%UeIn	0.244 / 0.259 / 0.263	

检 测 报 告

TEST REPORT

Clause	Test items and test requirements	Result of measurement or observation	Conclusion
	Dielectric properties	3#	
JB/T10923-2010 6.2.2.4 IEC62055-31 C.8	Dielectric strength		P
	1). Measuring insulation resistance		
	Test position:		
	In the open position:		
	Between the supply incoming terminal and the outgoing terminal:≥10 MΩ	> 500MΩ	
	In the closed position:		
	Between the supply incoming terminals connected together and the metal foil in contact with the outer surface of the enclosure:≥10 MΩ	> 500MΩ	
	2). Impulse withstand voltage test		
	Ambient temperature: ℃	18.5	
	Impulse voltage:		
	In the open position 1: 2000V	2000	
	In the closed position 2: 2000V	2000	
	Impulse voltage wave : 1.2/50μs		
	Interval: ≥1s	10	
	Test times:: 3 times for the positive and negative polarity each.		
	Applied position:		
	In the open position:		
	Between the supply incoming terminal and the outgoing terminal;	No unintentional disruptive discharges	
	In the closed position:		
	Between the supply incoming terminals connected together and the metal foil in contact with the outer surface of the enclosure;	No unintentional disruptive discharges	
	3) Power frequency withstand voltage test		
	Ambient temperature: ℃	18.5	
	Test voltage:		
	In the open position 1 1000V	1000	
	In the closed position 2 1000V	1000	
	Time of applying voltage: 1min	1	
	Applied position:		
	In the open position:		
	Between the supply incoming terminal and the outgoing terminal;	No flashover or puncture	
	In the closed position:		
	Between the supply incoming terminals connected together and the metal foil in contact with the outer surface of the enclosure;	No flashover or puncture	

检 测 报 告

TEST REPORT

Clause	Test items and test requirements	Result of measurement or observation	Conclusion
		4#	
IEC62055 -31 C.2	Normal operation		P
	Test voltage (r.m.s.): $250^{+5\%}$ (V)	252	
	Test current (r.m.s.): $100^{+5\%}$ (A)	102	
	cosφ: $1.0_{-0.05}$	1.0	
	Number of operating cycles: 3	3	
	Conductor: 35 × 1 (mm^2 × m)	35 × 1	
	Control voltage: DC12V×80%	9.6	
	The sample shall operate normally.	operate normally	
	Serial No. of the oscillograms:	S170108913 ~ S170108915	

检 测 报 告

TEST REPORT

Clause	Test items and test requirements	Result of measurement or observation	Conclusion
		4#	
JBT10923-2010 6.2.4.3 IEC62055-31 C.4	Line to load voltage surge withstand Ambient temperature: +25℃ ± 5℃ Impulse voltage wave: 1.2/50 μ s Test voltage: 20 kV Interval: 60s Test times: Positive and negative poles: 5 times each Applied position: Between the main circuit and the control circuit.	19.1 20.1 60 No unintentional disruptive discharges	P

检 测 报 告

TEST REPORT

Clause	Test items and test requirements	Result of measurement or observation	Conclusion
		4#	
JBT10923 -2010 6.2.4.4 IEC62055 -31 C.5	Fault current making capacity		P
	Test voltage (r.m.s.): 250 ± 5% (V)	252	
	Test current (r.m.s.): $3^{+5\%}$ (kA)	3.05	
	cosφ: $0.90_{-0.05}$	0.88	
	Control voltage: DC12V	12	
	Conductor: 35 × 1 ($mm^2 \times m$)	35 × 1	
	Test sequence: "CO" 3 times	3	
	Interval: ⩾ 1min	1	
	Screw: M4	M4	
	Tightening torque: 1.2N · m	1.2	
	Duration: max (ms)	9.99	
	Arcing time: max (ms)	3.72	
	Ip max (kA)	3.86	
	I^2t max (kA^2s)	50.3	
	Acceptance criteria:		
	1) There shall be no signs of sticking or welding of contacts;	No signs	
	2) There shall be no signs of burning or smoking of the enclosure and the conductors;	No signs	
	3) The surroundings of the payment meter shall not be endangered;	No	
	Serial No. of the oscillogram of the prospective current:	Y170108002	
	Serial No. of the oscillograms:	S170108007 ~ S170108009	

检 测 报 告

TEST REPORT

Clause	Test items and test requirements	Result of measurement or observation			Conclusion
		4#			
IEC62055 -31 C.7	Minimum switched current Test voltage (r.m.s.): $250^{+5\%}$ (V) Test current (r.m.s.): $1^{+5\%}$ (A) cosφ: $1.0_{-0.05}$ Number of operating cycles: 10 Make time: 10s+5% Break time: 10s Conductor: 1 × 1 (mm^2 × m) Control voltage: DC12V Acceptance criteria: 1) Test current shall successfully conduct each time the contacts are in the closed position; 2) Test current shall successfully break each time the contacts are in the open position.	252 1.02 1.0 10 10s 10s 1 × 1 12 Complied Complied			P
JBT10923 -2010 6.2.2.3 IEC62055 -31 7.3	Power consumption Test current: 10A Conductor: 1.5 × 1 (mm^2×m) Measurement of power consumption: Test position: main circuit Incoming terminal -outgoing terminal Voltage-drop (mV) Power consumption (W) ⩽0.08%UeIn	10.2 1.5 × 1 A 27.4 0.279	B 29.1 0.297	C 28.3 0.289	P

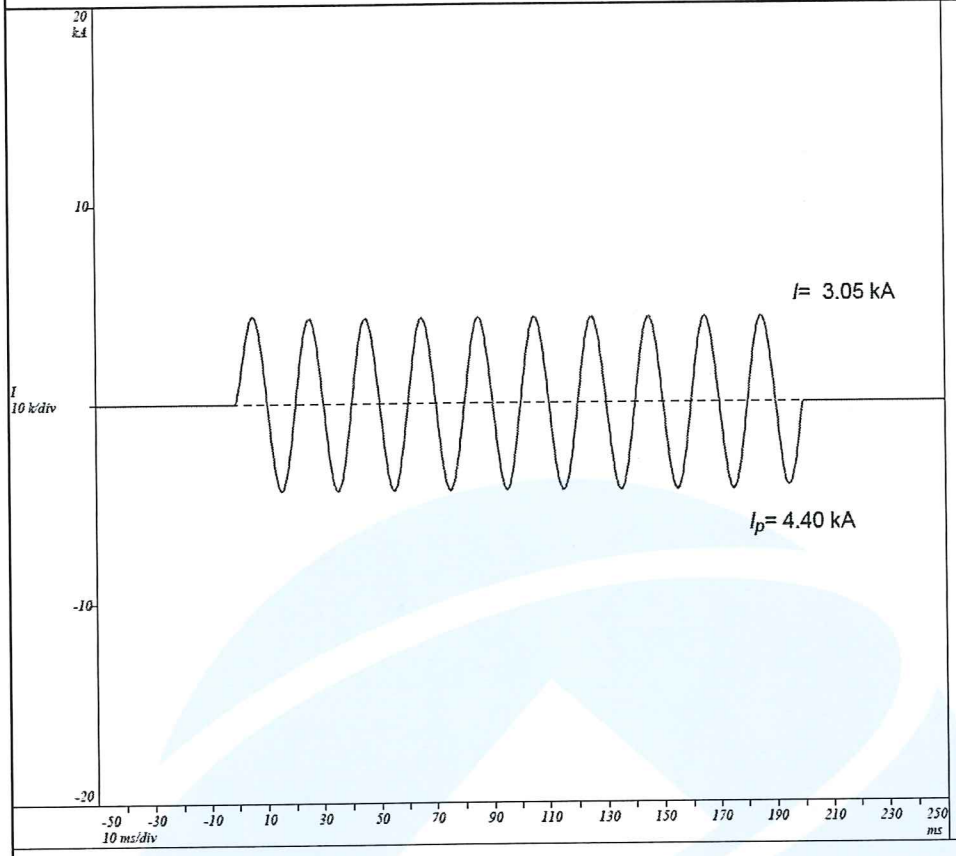
检 测 报 告

TEST REPORT

Clause	Test items and test requirements	Result of measurement or observation	Conclusion
	Dielectric properties	4#	
JB/T10923-2010 6.2.2.4 IEC62055-31 C.8	Dielectric strength		P
	1). Measuring insulation resistance		
	Test position:		
	In the open position:		
	Between the supply incoming terminal and the outgoing terminal:≥10 MΩ	> 500MΩ	
	In the closed position:		
	Between the supply incoming terminals connected together and the metal foil in contact with the outer surface of the enclosure:≥10 MΩ	> 500MΩ	
	2). Impulse withstand voltage test		
	Ambient temperature: ℃	18.5	
	Impulse voltage:		
	In the open position 1: 2000V	2000	
	In the closed position 2: 2000V	2000	
	Impulse voltage wave : 1.2/50μs		
	Interval: ≥1s	10	
	Test times:: 3 times for the positive and negative polarity each.		
	Applied position:		
	In the open position:		
	Between the supply incoming terminal and the outgoing terminal;	No unintentional disruptive discharges	
	In the closed position:		
	Between the supply incoming terminals connected together and the metal foil in contact with the outer surface of the enclosure;	No unintentional disruptive discharges	
	3) Power frequency withstand voltage test		
	Ambient temperature: ℃	18.5	
	Test voltage:		
	In the open position 1 1000V	1000	
	In the closed position 2 1000V	1000	
	Time of applying voltage: 1min	1	
	Applied position:		
	In the open position:		
	Between the supply incoming terminal and the outgoing terminal;	No flashover or puncture	
	In the closed position:		
	Between the supply incoming terminals connected together and the metal foil in contact with the outer surface of the enclosure;	No flashover or puncture	

预 期 电 流 示 波 图

1716330108

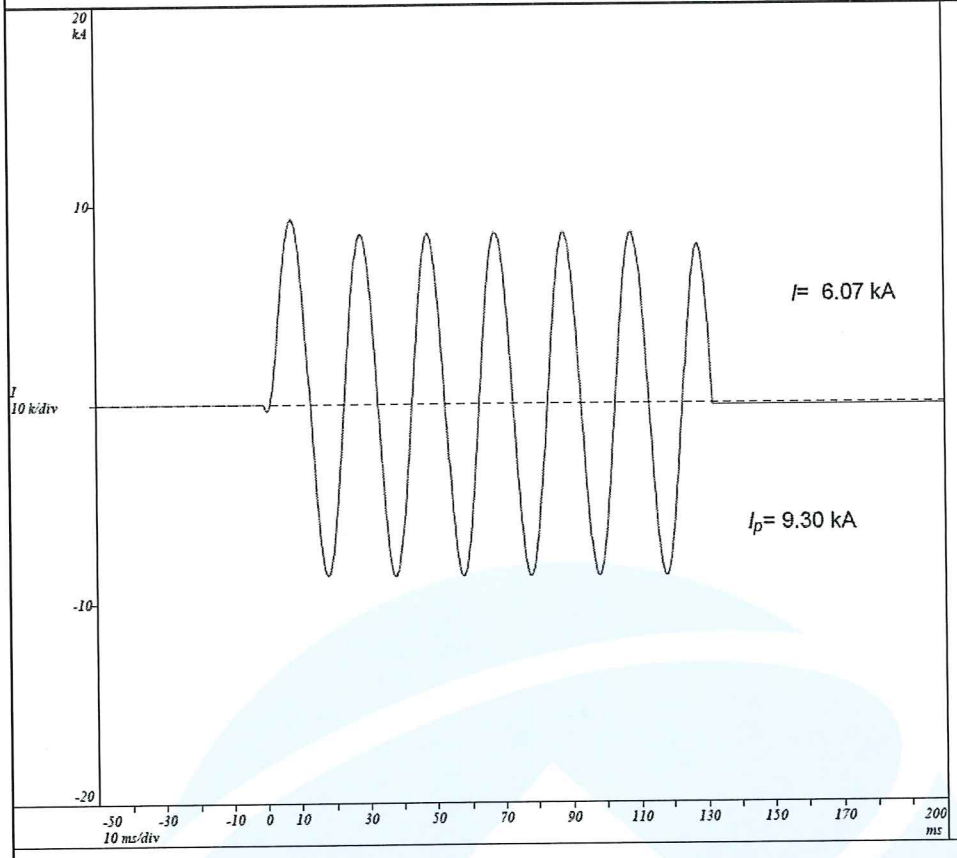


预期电流
U = 252.V
I = 3.05 kA
Ip = 4.40 kA
cosφ = 0.88

Y170108002

预 期 电 流 示 波 图

1716330108

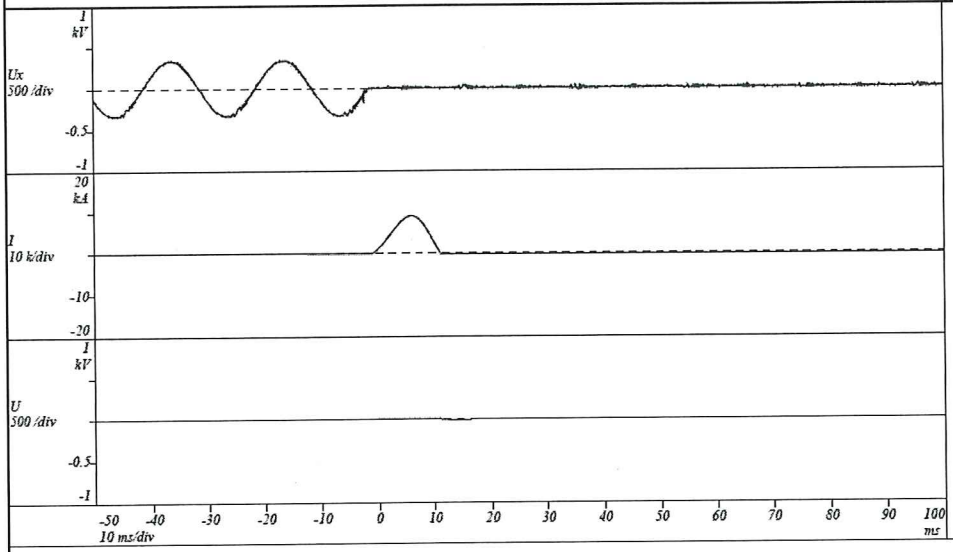


预期电流示波图
U = 252.V
I = 6.07 kA
Ip = 9.30 kA
cosφ = 0.68

S170108001

试 验 示 波 图

1716330108

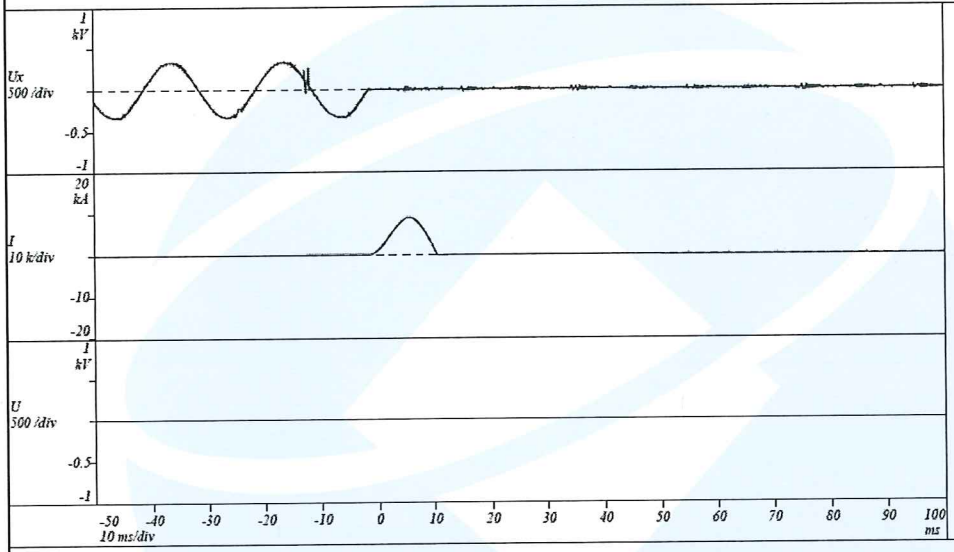


U_e : 250V
I_n : 100A

U = 252.V
I = 6.07 kA
cosφ= 0.68

2#
O1
合闸角:0°
I_p = 9.13 kA
I^2t= 438. kA^2s
通断时间: 11.5 ms

S170108001

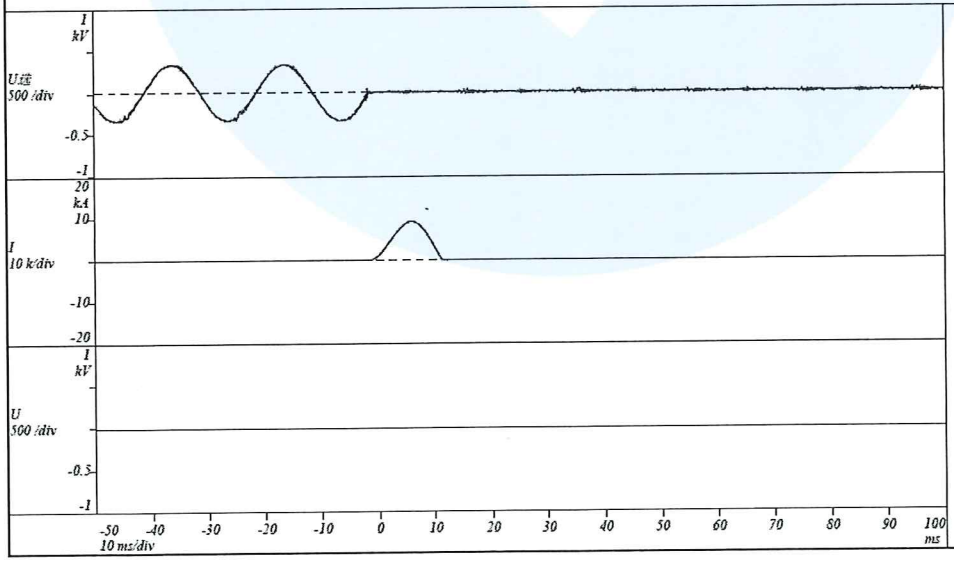


U_e : 250V
I_n : 100A

U = 252.V
I = 6.07 kA
cosφ= 0.68

2#
O2
合闸角: 0°
Ip = 9.02 kA
I^2t= 402. kA^2s
通断时间: 10.7 ms

S170108002



U_e : 250V
I_n : 100A

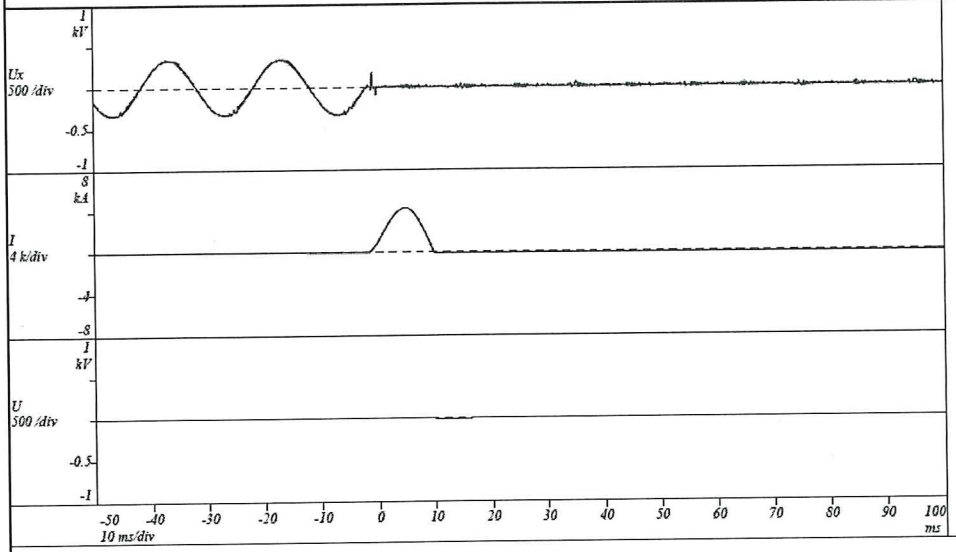
U = 252.V
I = 6.07 kA
cosφ= 0.68

2#
O3
合闸角: 0°
I_p = 9.15 kA
I^2t= 449. kA^2s
通断时间: 11.4 ms

S170108003

试 验 示 波 图

1716330108

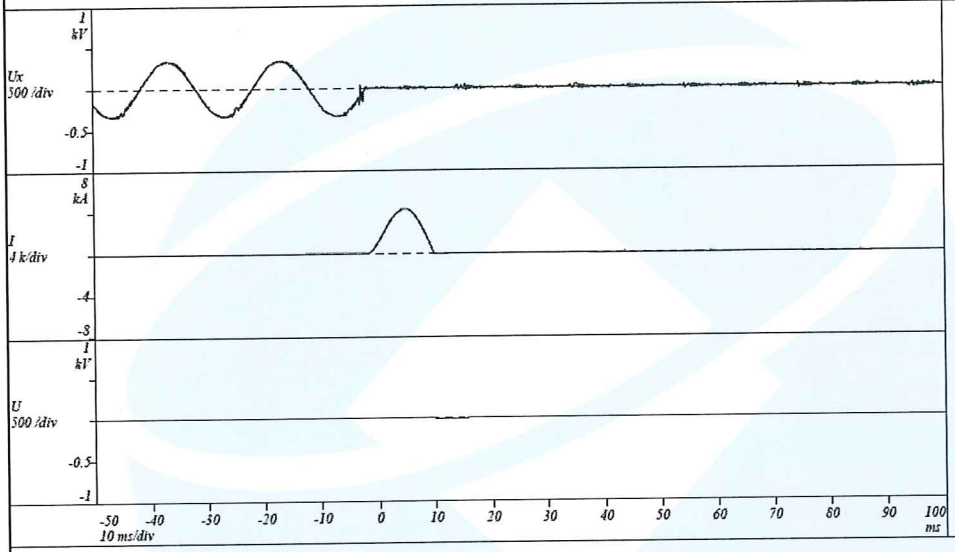


U_e : 250V
I_n : 100A

U = 252.V
I = 3.05 kA
cosφ= 0.88

3#
O1
合闸角:0°
I_p = 4.32 kA
I^2t= 95.6 kA^{2}s
通断时间: 10 7 ms

S170108004

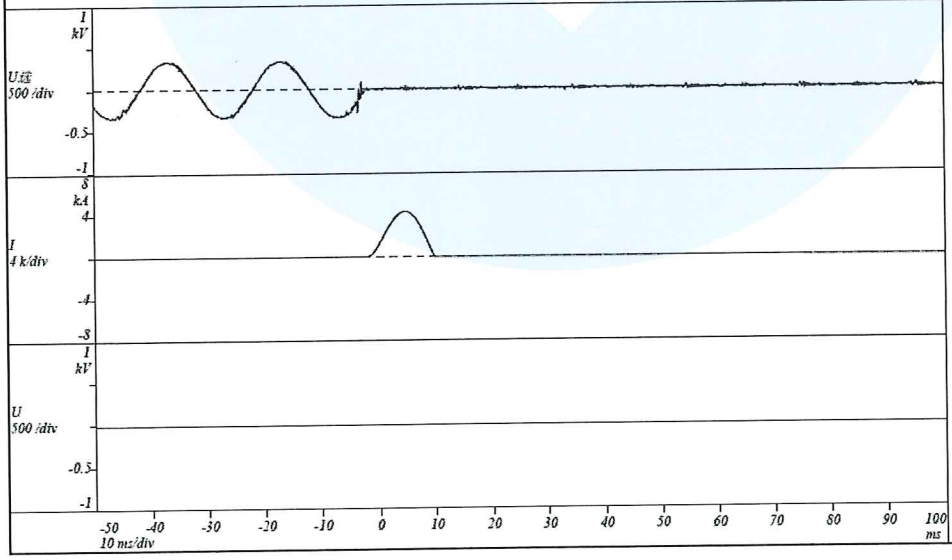


U_e : 250V
I_n : 100A

U = 252.V
I = 3.05 kA
cosφ= 0.88

3#
O2
合闸角: 0°
Ip = 4.32 kA
I^2t= 96.2 kA^{2}s
通断时间: 10.5 ms

S170108005



U_e : 250V
I_n : 100A

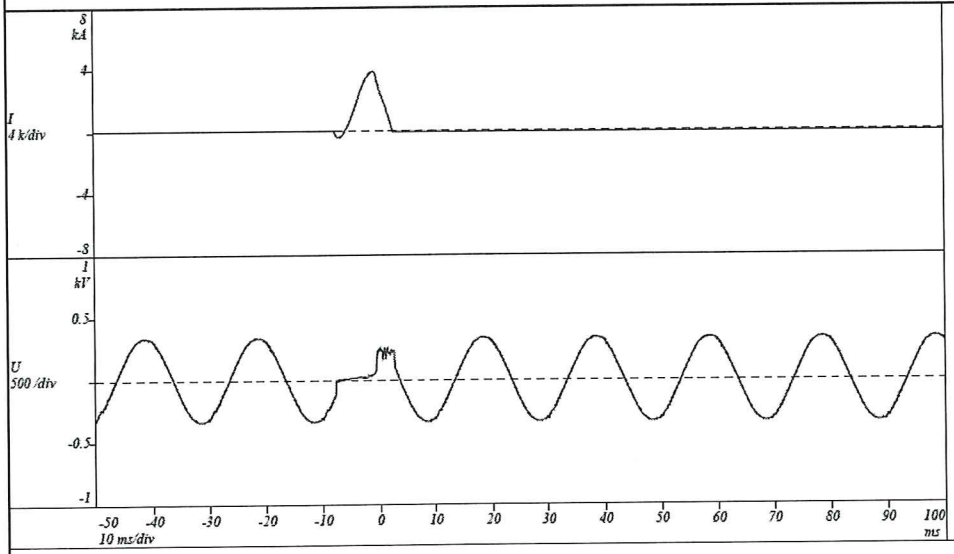
U = 252.V
I = 3.05 kA
cosφ= 0.88

3#
O3
合闸角: 0°
I_p = 4.33 kA
I^2t= 96.7 kA^{2}s
通断时间: 10.6 ms

S170108006

试 验 示 波 图

1716330108



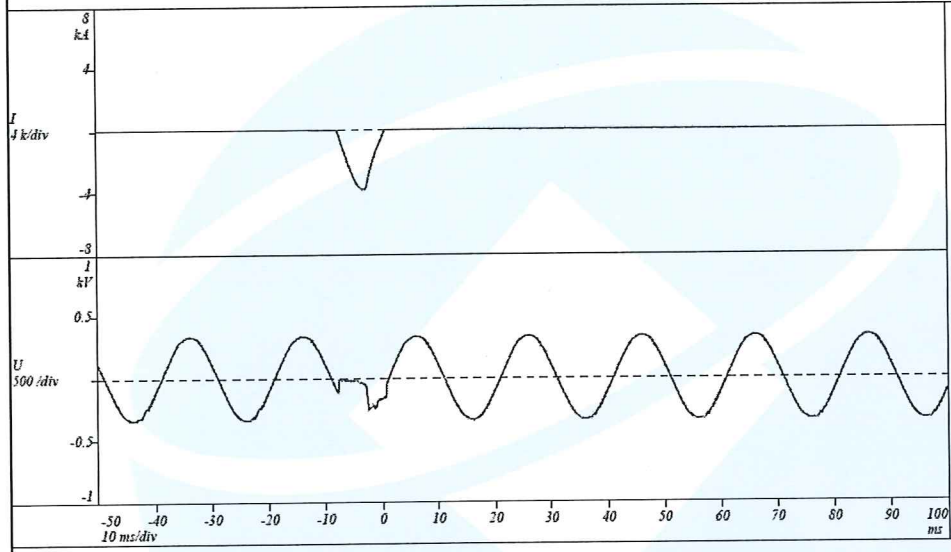
U_e : 250V
I_n : 100A

U = 252.V
I = 3.05kA
cosφ= 0.88

4#
CO1

I_p = 3.86 kA
I^2t= 50.3 kA^2s
通断时间: 9.99 ms
燃弧时间: 3.17 ms

S170108007



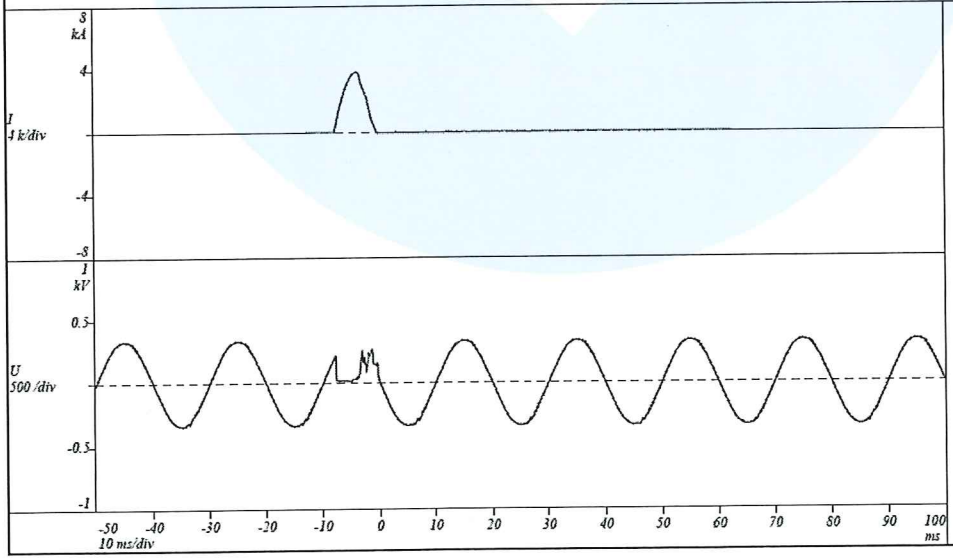
U_e : 250V
I_n : 100A

U = 252.V
I = 3.05kA
cosφ= 0.88

4#
CO2

Ip = 3.82 kA
I^2t= 50.2 kA^2s
通断时间: 7.90 ms
燃弧时间: 3.72 ms

S170108008



U_e : 250V
I_n : 100A

U = 252.V
I = 3.05kA
cosφ= 0.88

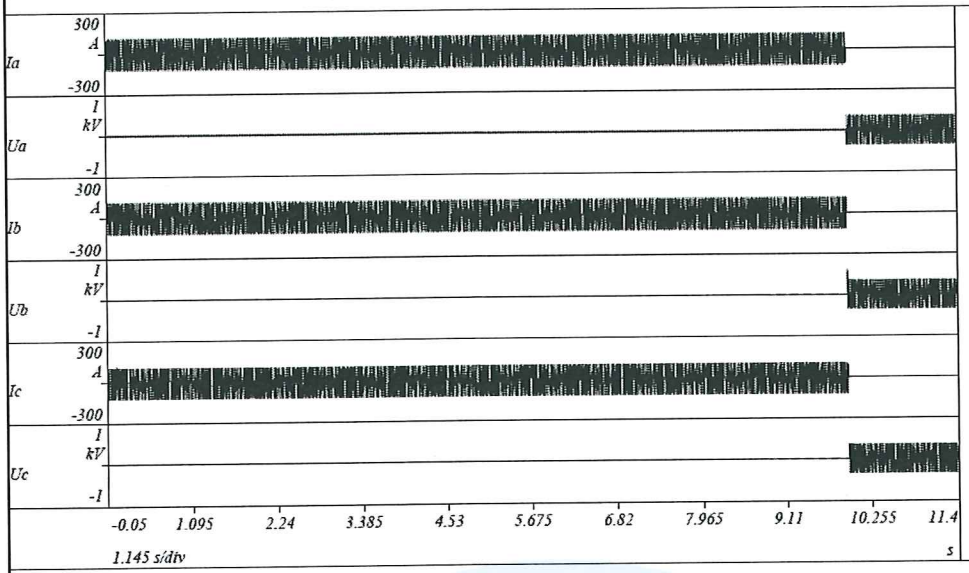
4#
CO3

I_p = 3.80 kA
I^2t= 48.6 kA^2s
通断时间: 7.06 ms
燃弧时间: 3.01 ms

S170108009

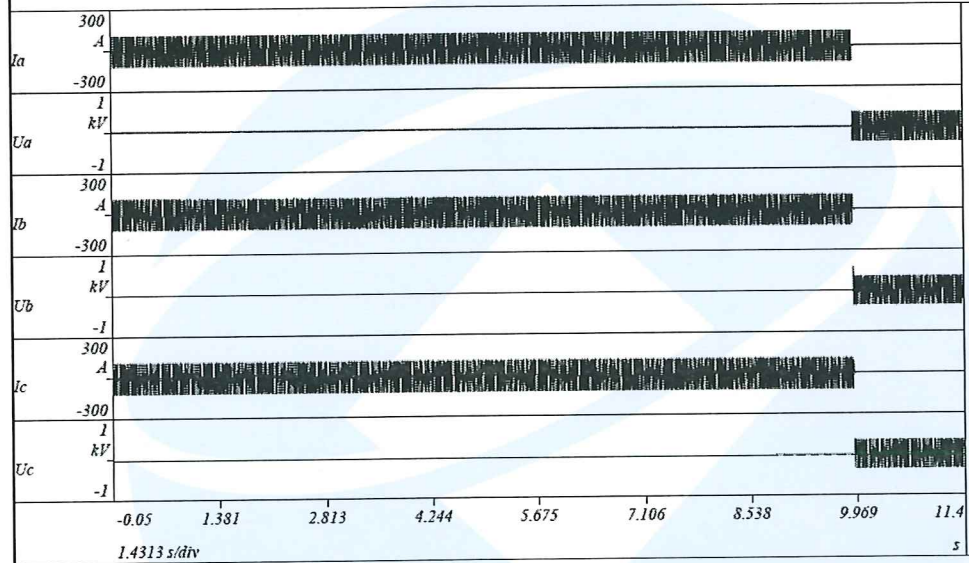
试 验 示 波 图

1716330108



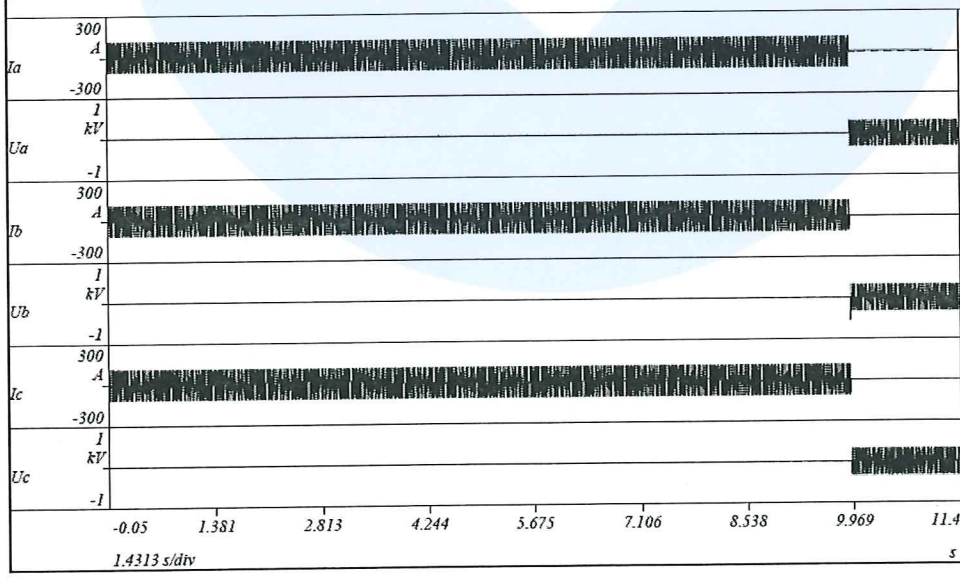
250 V
100 A
U = 252 V
I = 103 A
cosφ= 0.51
1#
NO. 1
$I_{p(a)}$= 175. A
$I_{p(b)}$= 173. A
$I_{p(c)}$= 173. A

通断时间: 10.0 s
燃弧时间: 4.53 ms
S170108904



250 V
100 A
U = 252 V
I = 103 A
cosφ= 0.51
1#
NO. 2500
$I_{p(a)}$= 174. A
$I_{p(b)}$= 173. A
$I_{p(c)}$= 173. A

通断时间: 10.0 s
燃弧时间: 4.42 ms
S170108905

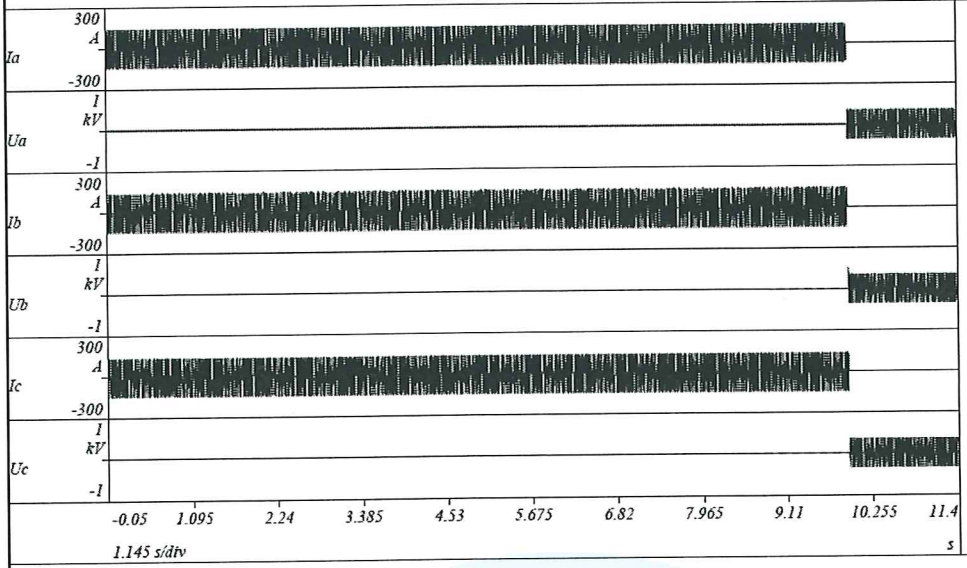


250 V
100 A
U = 252 V
I = 103 A
cosφ= 0.51
1#
NO. 5000
$I_{p(a)}$= 175. A
$I_{p(b)}$= 173. A
$I_{p(c)}$= 174. A

通断时间: 10.0 s
燃弧时间: 4.06 ms
S170108906

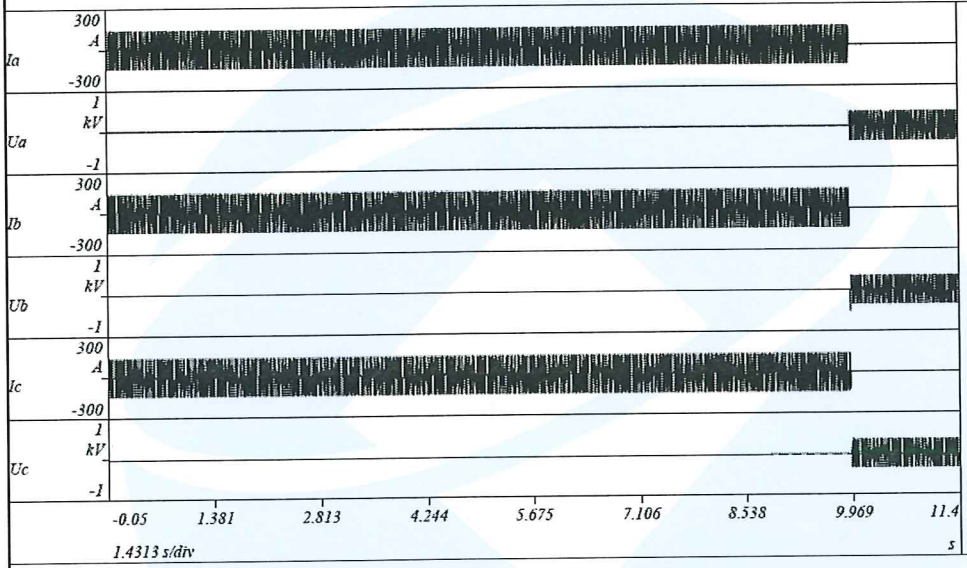
试 验 示 波 图

1716330108



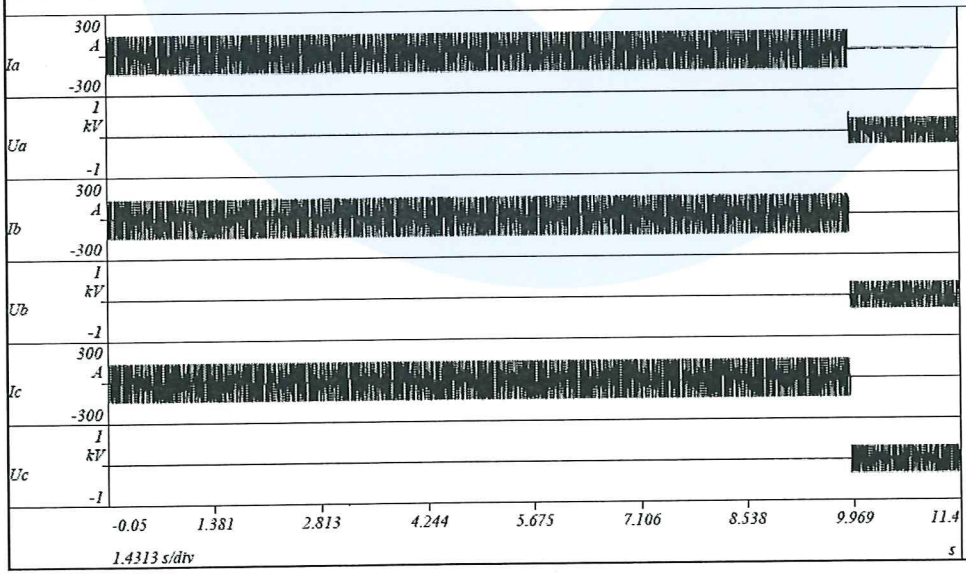
250 V
100 A
U = 252 V
I = 102 A
cosφ= 1.0
1#
NO. 1
$I_{p(a)}$= 145. A
$I_{p(b)}$= 144. A
$I_{p(c)}$= 146. A

通断时间: 10.0 s
燃弧时间: 4.36 ms
S170108901



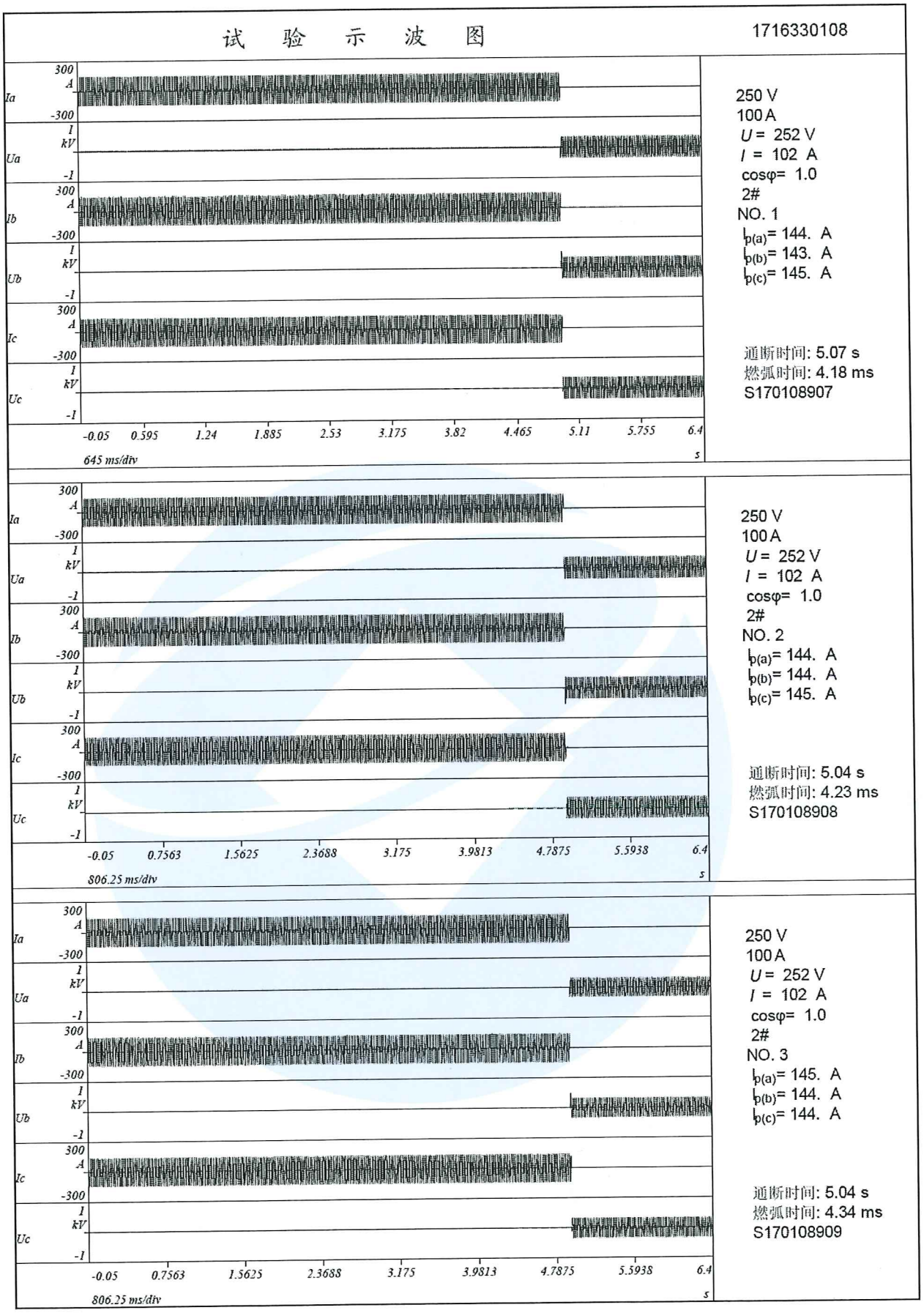
250 V
100 A
U = 252 V
I = 102 A
cosφ= 1.0
1#
NO. 2500
$I_{p(a)}$= 145. A
$I_{p(b)}$= 144. A
$I_{p(c)}$= 144. A

通断时间: 10.0 s
燃弧时间: 3.65 ms
S170108902



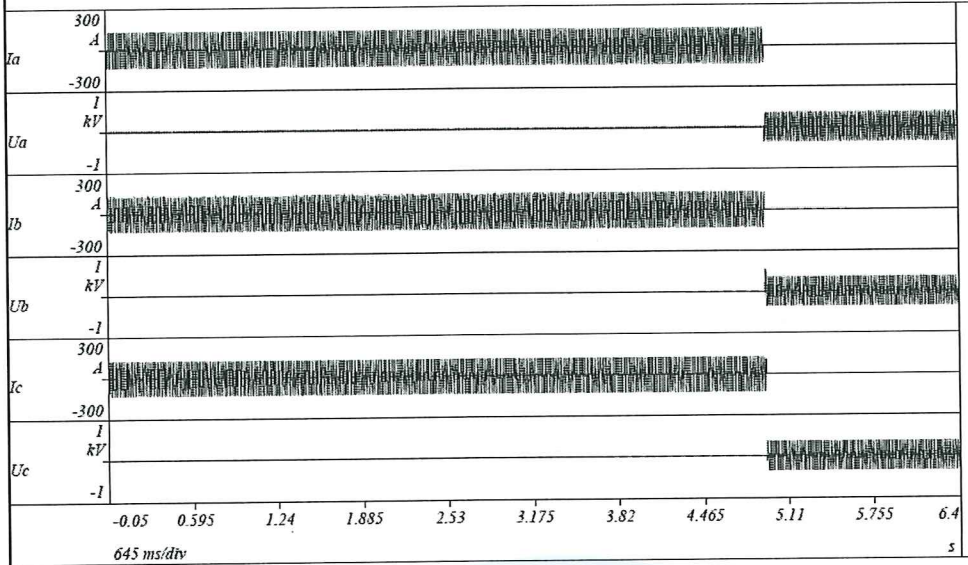
250 V
100 A
U = 252 V
I = 102 A
cosφ= 1.0
1#
NO. 5000
$I_{p(a)}$= 144. A
$I_{p(b)}$= 146. A
$I_{p(c)}$= 144. A

通断时间: 10.0 s
燃弧时间: 3.84 ms
S170108903


试 验 示 波 图
1716330108
Ia
Ua
Ib
Ub
Ic
Uc
300
A
-300
1
kV
-1
-0.05
0.595
1.24
1.885
2.53
3.175
3.82
4.465
5.11
5.755
6.4
s
645 ms/div
250 V
100 A
U = 252 V
I = 102 A
cosφ= 1.0
2#
NO. 1
Ip(a)= 144. A
Ip(b)= 143. A
Ip(c)= 145. A
通断时间: 5.07 s
燃弧时间: 4.18 ms
S170108907
-0.05
0.7563
1.5625
2.3688
3.175
3.9813
4.7875
5.5938
6.4
806.25 ms/div
250 V
100 A
U = 252 V
I = 102 A
cosφ= 1.0
2#
NO. 2
Ip(a)= 144. A
Ip(b)= 144. A
Ip(c)= 145. A
通断时间: 5.04 s
燃弧时间: 4.23 ms
S170108908
250 V
100 A
U = 252 V
I = 102 A
cosφ= 1.0
2#
NO. 3
Ip(a)= 145. A
Ip(b)= 144. A
Ip(c)= 144. A
通断时间: 5.04 s
燃弧时间: 4.34 ms
S170108909

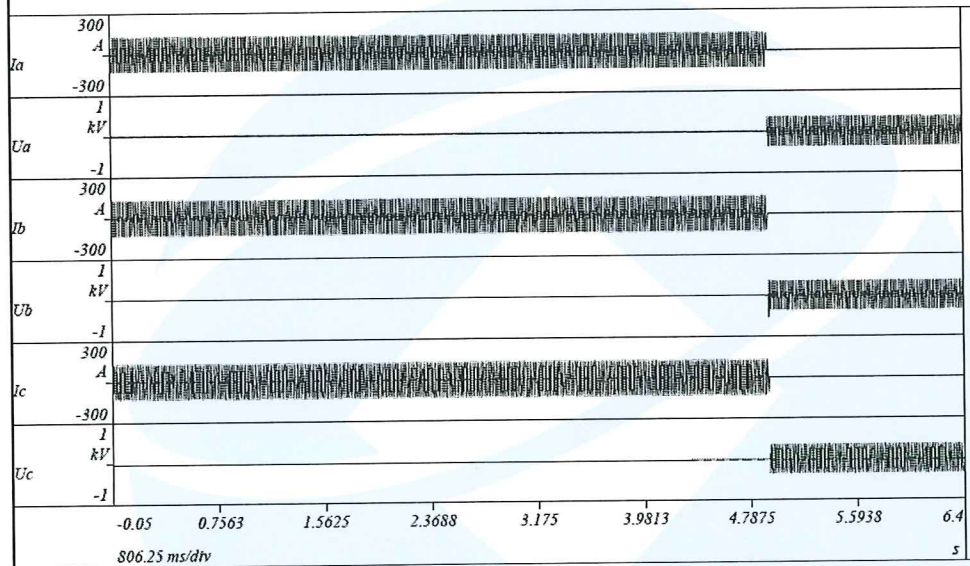
试 验 示 波 图

1716330108



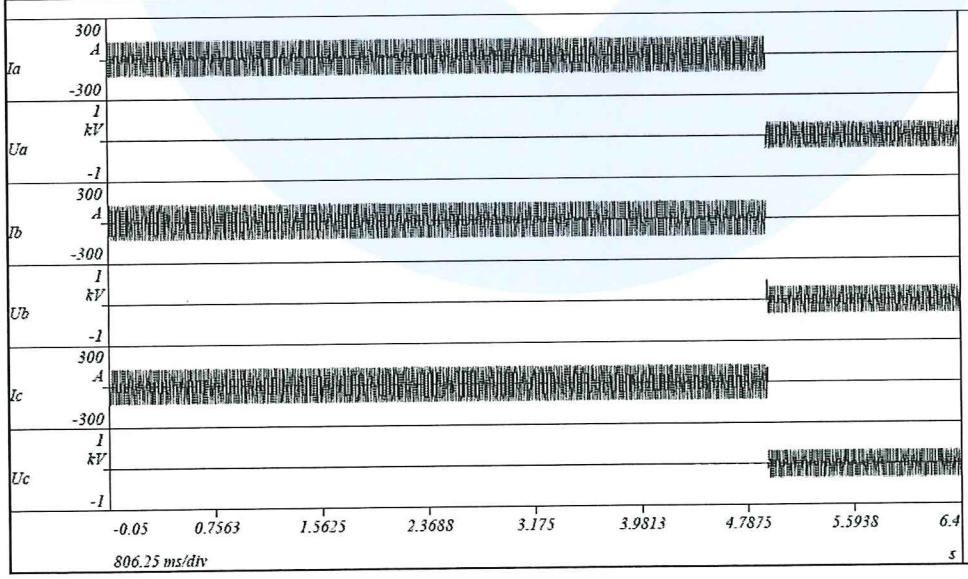
250 V
100 A
U = 252 V
I = 102 A
cosφ= 1.0
3#
NO. 1
$I_{p(a)}$= 144. A
$I_{p(b)}$= 145. A
$I_{p(c)}$= 145. A

通断时间: 5.05 s
燃弧时间: 4.18 ms
S170108910



250 V
100 A
U = 252 V
I = 102 A
cosφ= 1.0
3#
NO. 2
$I_{p(a)}$= 144. A
$I_{p(b)}$= 145. A
$I_{p(c)}$= 144. A

通断时间: 5.04 s
燃弧时间: 4.25 ms
S170108911

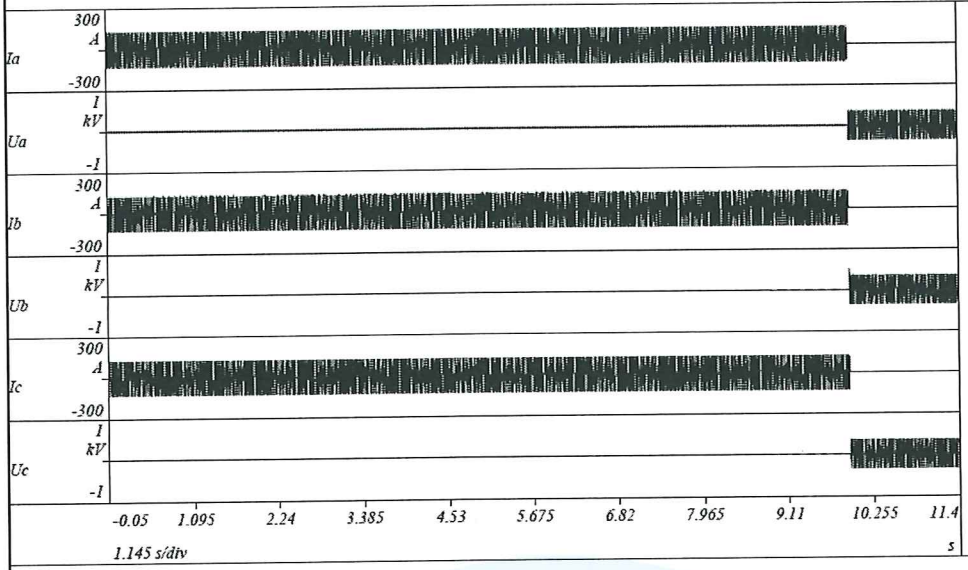


250 V
100 A
U = 252 V
I = 102 A
cosφ= 1.0
3#
NO. 3
$I_{p(a)}$= 143. A
$I_{p(b)}$= 144. A
$I_{p(c)}$= 145. A

通断时间: 5.07 s
燃弧时间: 4.57 ms
S170108912

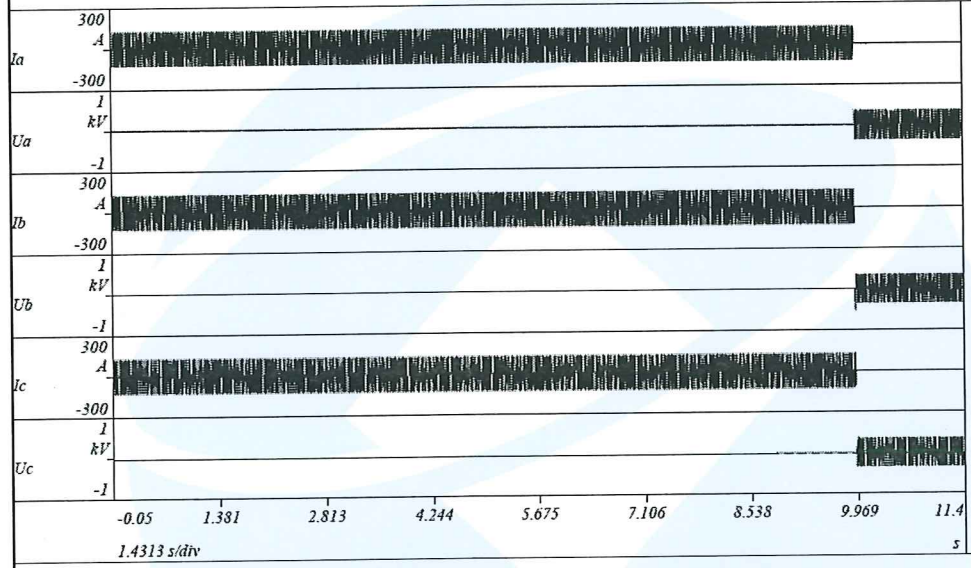
试 验 示 波 图

1716330108



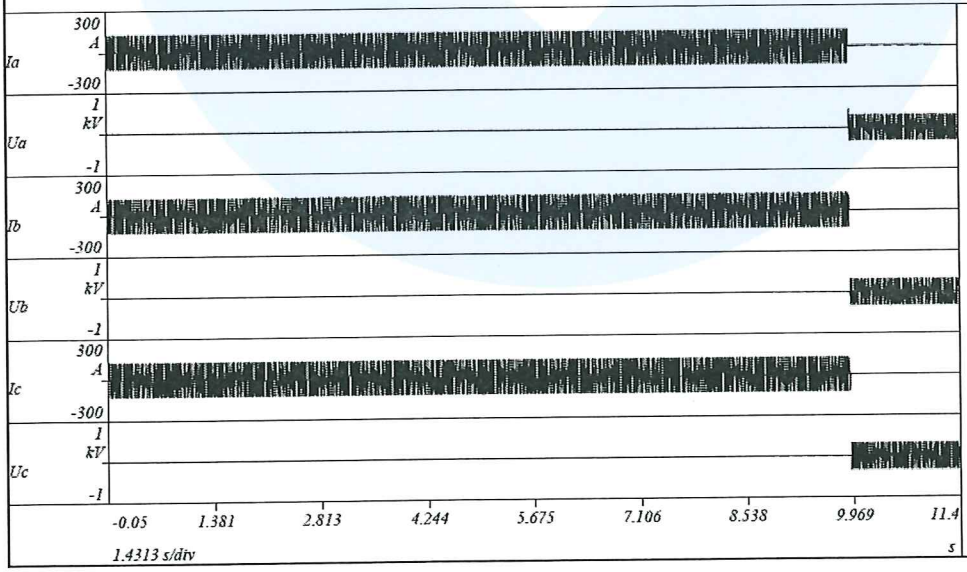
250 V
100A
U = 252 V
I = 102 A
cosφ= 1.0
4#
NO. 1
$I_{p(a)}$= 144. A
$I_{p(b)}$= 145. A
$I_{p(c)}$= 144. A

通断时间: 10.0 s
燃弧时间: 4.28 ms
S170108913



250 V
100A
U = 252 V
I = 102 A
cosφ= 1.0
4#
NO. 2
$I_{p(a)}$= 145. A
$I_{p(b)}$= 145. A
$I_{p(c)}$= 143. A

通断时间: 10.0 s
燃弧时间: 3.76 ms
S170108914



250 V
100 A
U = 252 V
I = 102 A
cosφ= 1.0
4#
NO. 3
$I_{p(a)}$= 145. A
$I_{p(b)}$= 144. A
$I_{p(c)}$= 144. A

通断时间: 10.0 s
燃弧时间: 4.18 ms
S170108915

主要试验仪器设备清单

MAIN TEST APPARATUS LIST

Serial No.	Name	Type	Serial No. of equipment	Used for the test (√)
1	Data collection system	SYNERGY	8583CA12A	√
2	Torque screwdriver	RTD500CN	8086DB05B	√
3	Counter	DHC9J-J	8431DB09B	√
4	Milliammeter	D26-mA	8057CB86A	√
5	Synthetic control equipment	350A	8300CA07A	√
6	Stabilized temperature chamber	GW20	8302DA07A	√
7	Double-digital electric meter	GDM-8245	8427CB09A	√
8	Temperature and humidity recorder	ZDR-F20	8339CB08A	√
9	Power frequency withstand voltage device	NC-II	8049DB96A	√
10	Megohmmeter	ZC25B-3	8012CB93B	√
11	Impulse withstand voltage device	GC-18	8344DA08A	√
12	Temperature and humidity recorder	DSR-TH	8700CB14B	√
13	Electronic stopwatch	ST4610-2	8088CB07B	√
14	Temperature and humidity recorder	ZDR-F20	8421CB09A	√
15	400kA impulse voltage generator	400kV	8475DA11A	√
16	Temperature and humidity recorder	ZDR-F20	8338CB08A	√
17	Data collection system	Saturn	8711CA15A	√
18	1000X high voltage probe	P6015A	8591CA12A	√
19	Digital oscillograph	TDS2012C	8590CA12A	√
20	Data logger for Temperature and Humidity	DSR-TH	8697CB14B	√

TEST REPORT END