

# Test Report

Name of products: MCCB

Type: BA5735-250, BA57  $\Phi$  35-250


Applicant: WENZHOU HUAJIA ELECTRICAL EQUIPMENT Co., LTD

Kind of test: Commission test

DEKRA Testing Services (Zhejiang) Co., Ltd



## Test Report

Project No.	3306914	Trade mark	HUA JIA	
Name of Product	MCCB	Type	BA5735-250, BA57Φ35-250	
Rated parameters	In = 250 A, Ue = 400 Vac, Icu = 28kA		Pole number	3P
Applicant	Name	WENZHOU HUAJIA ELECTRICAL EQUIPMENT CO.,LTD		
	Address	No.311, LATITUDE FIFTEEN ROAD, YUEQING ECONOMIC DEVELOPMENT ZONE, YUEQING ZHEJIANG, CHINA, 325600		
Manufacturer	Name	WENZHOU HUAJIA ELECTRICAL EQUIPMENT CO.,LTD		
	Address	No.311, LATITUDE FIFTEEN ROAD, YUEQING ECONOMIC DEVELOPMENT ZONE, YUEQING ZHEJIANG, CHINA, 325600		
Quantity of samples	3 PCS	Contact Person	Huang Guangfa	Date of sample available 2014-08-27
Testing Location (if different from DEKRA Lab)	Testing Lab	/		
	Address	/		
Test requirements	GB 14048.2-2008 and testing service agreement:3306914			
Test duration	From 2014-08-27 to 2014-08-27			
Test result	Provide data		Issue date	2014-08-28
Remarks	1#: BA5735-250; 2# and 3#: BA57Φ35-250			
Tested by	<i>Carle</i>	Reviewed by	<i>Lesta</i>	Approved by 



## Product Description

1. Name and type of product:

MCCB

BA5735-250, BA57Φ35-250

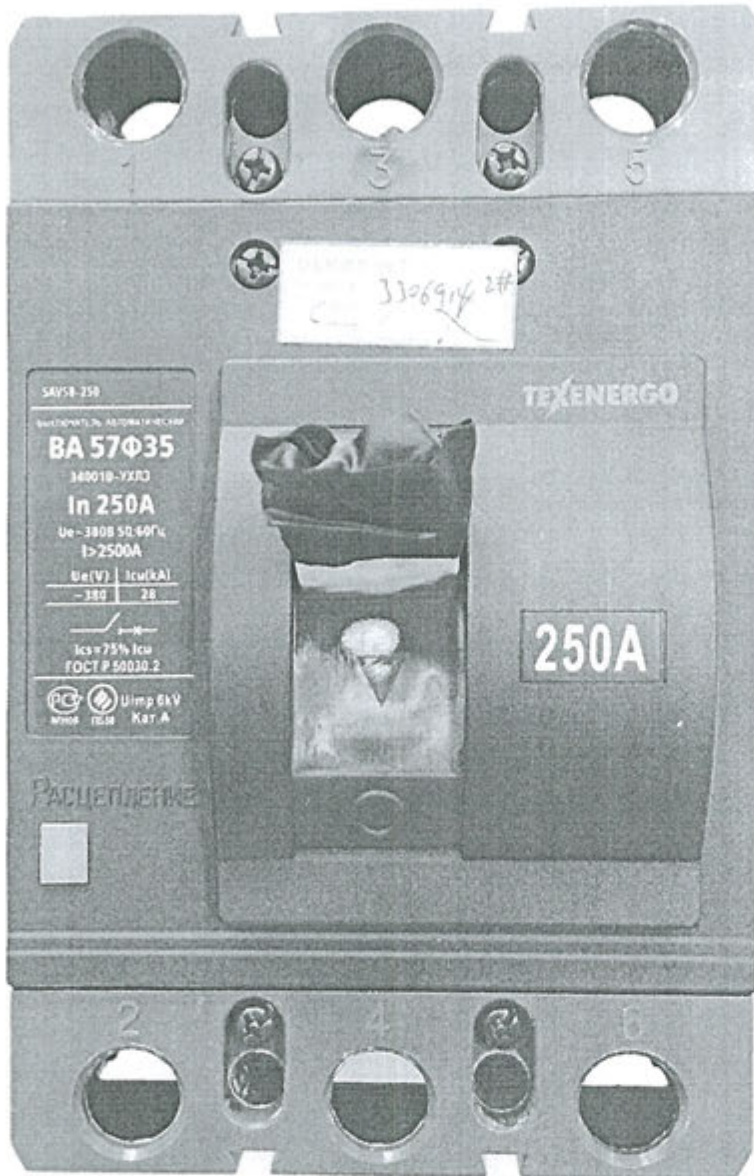
2. Primary technical parameters:

$I_n = 250A$ ,  $I_{cu} = 28 \text{ kA @ } 400 \text{ Vac, } 3P$

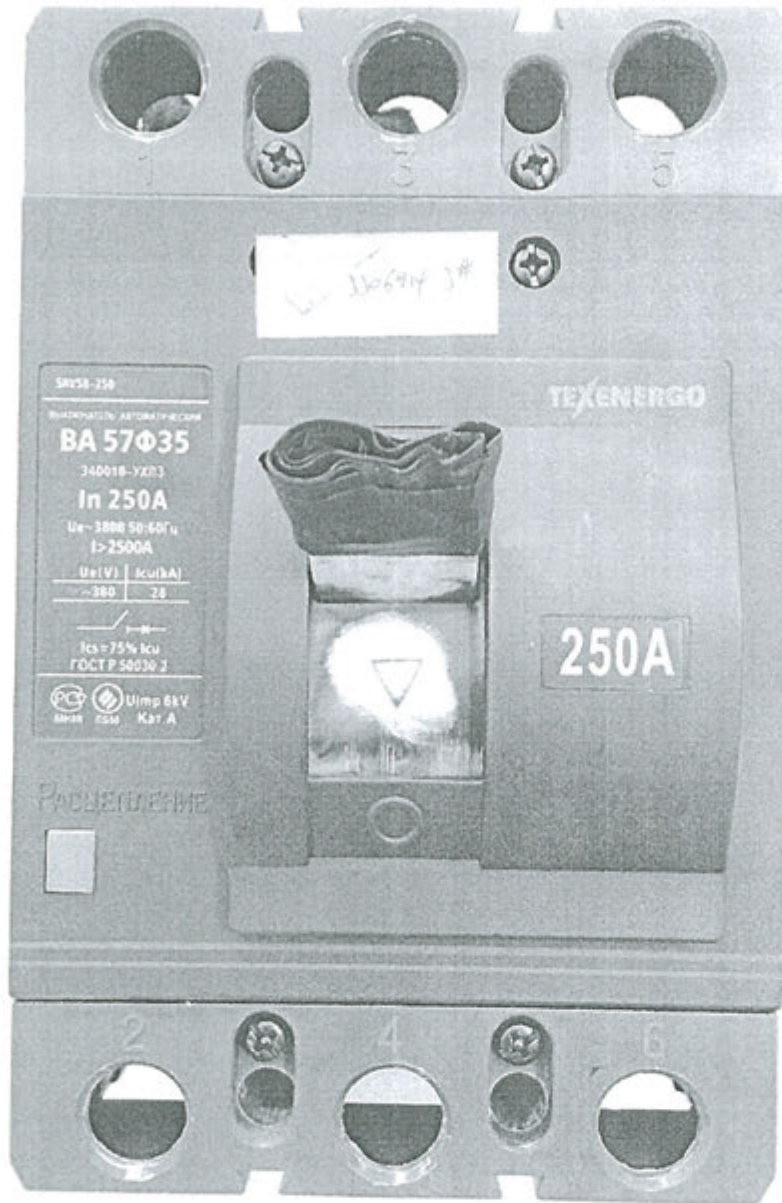
3. Photograph of the product:

3.1 Copy of the marking plate:

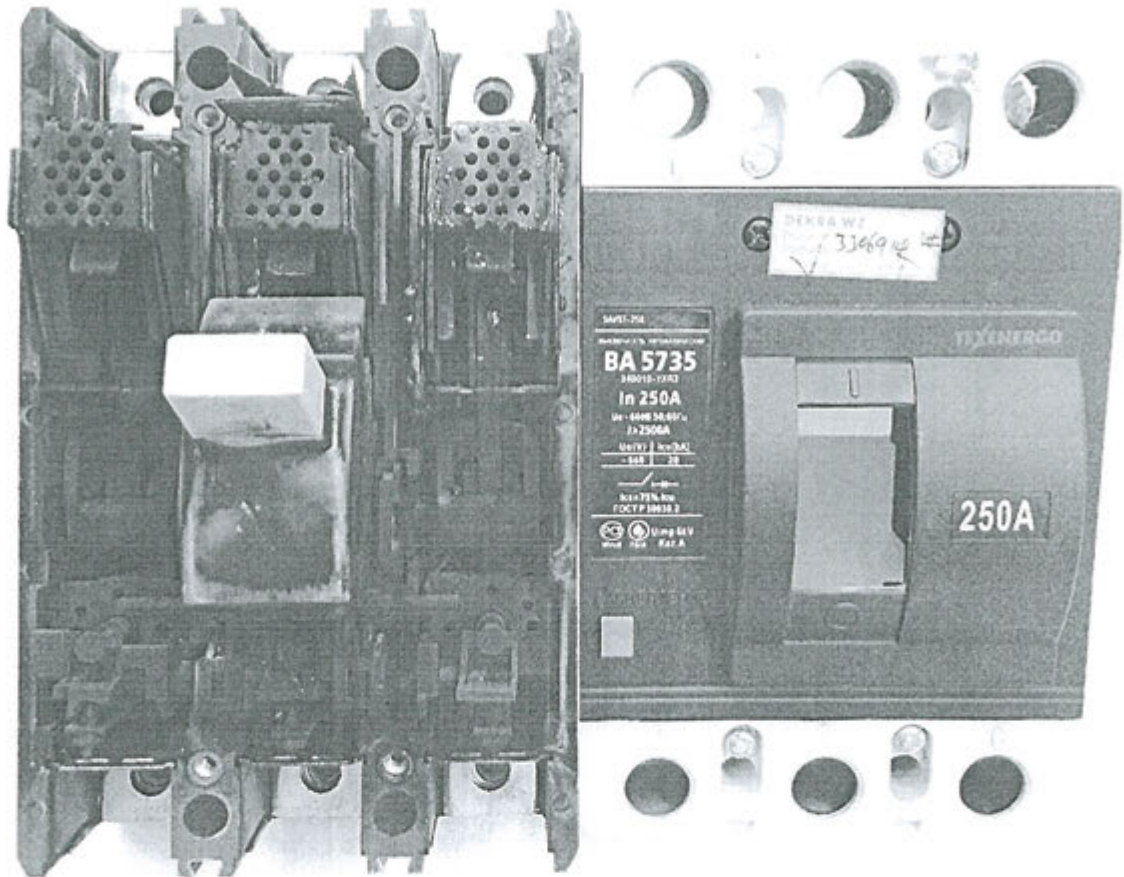


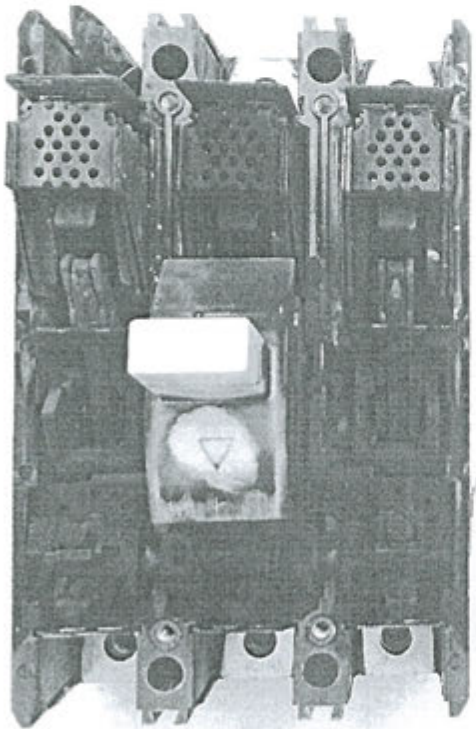
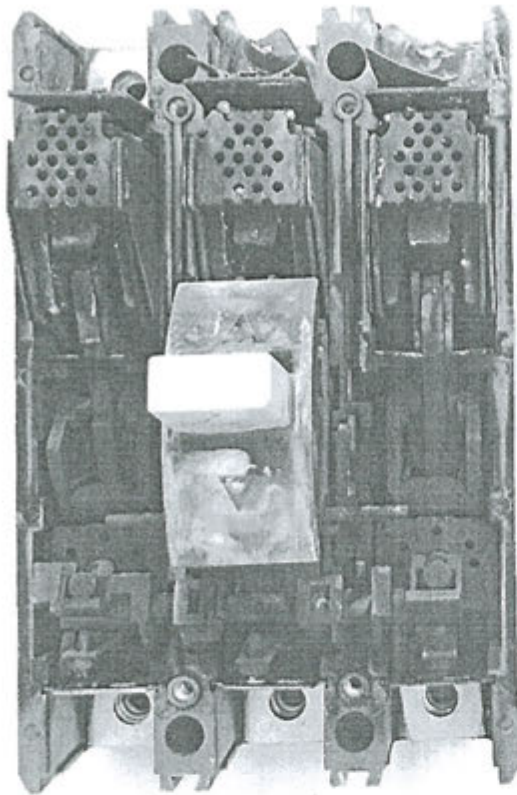






3.2 Copy of shape of the products:





4. Test remarks

/

5. General remark:

The meaning for all the symbols used in this report:

'P': Test object does meet the standards and/or applicant's requirement;

'F': Test object does not meet standards and/or applicant's requirement;

'/': For description: not applicable or the information is not required or not provided by the applicant;

For test verdict: test case does not apply to the test object or just part of items conducted in the specified test program;

'-': Test case is not conducted as some tests in the sequence have failed already.





Clause	Requirement - test	Results-Remarks	Verdict
8.3.5.2	Test of rated ultimate short-circuit breaking capacity		Provide
	Type designation or serial number	BA5735-250 / 3P	data
	Sample no:	#01	
	Rated current: In (A)	250 A	
	Rated operational voltage: Ue (V)	400 Vac	
	Rated ultimate short-circuit breaking capacity: (kA)	28 kA	
	The test sequence of operations is O – t - CO		
	Test made in free air:		
	Circuit is earthed at: (load-star- or supply-star point)	load-star point	
	Conductor cross-sectional area (mm <sup>2</sup> ) :	120 mm <sup>2</sup>	
	- test voltage U/Ue = 1,05 (V)	423,5 Vac	
	- r.m.s. test current A: (kA)	28,3 kA	
	power factor/time constant :0,20~0,25	0,24	
	- peak test current (kA <sub>max</sub> ) :	56,1 kA	
	Test sequence "O"		
	- max. let-through current: (kA <sub>peak</sub> )	25,8 kA	
	- Joule integral I <sup>2</sup> dt (kA <sup>2</sup> s) .....L1:	1,68 MA <sup>2</sup> s	
	.....L2:	2,83 MA <sup>2</sup> s	
	.....L3:	324,3 kA <sup>2</sup> s	
	Pause, t: (min)	3	
	Test sequence "CO"		
	- max. let-through current: (kA <sub>peak</sub> )	25,5 kA	
	- Joule integral I <sup>2</sup> dt (kA <sup>2</sup> s) .....L1:	668,1 kA <sup>2</sup> s	
	.....L2:	1,52 MA <sup>2</sup> s	
	.....L3:	2,86 MA <sup>2</sup> s	

Clause	Requirement - test	Results-Remarks	Verdict
	Melting of the fusible element	--	
	Holes in the PE-sheet for test sequence "O"	--	
	Cracks observed	--	

Clause	Requirement - test	Results-Remarks	Verdict
8.3.5.2	Test of rated ultimate short-circuit breaking capacity		Provide
	Type designation or serial number	BA57Φ35-250 / 3P	data
	Sample no:	#02	
	Rated current: In (A)	250 A	
	Rated operational voltage: Ue (V)	400 Vac	
	Rated ultimate short-circuit breaking capacity: (kA)	28 kA	
	The test sequence of operations is O – t - CO		
	Test made in free air:		
	Circuit is earthed at: (load-star- or supply-star point)	load-star point	
	Conductor cross-sectional area (mm <sup>2</sup> ) :	120 mm <sup>2</sup>	
	- test voltage U/Ue = 1,05 (V)	423,5 Vac	
	- r.m.s. test current A: (kA)	28,3 kA	
	power factor/time constant :0,20~0,25	0,24	
	- peak test current (kA <sub>max</sub> ) :	56,1 kA	
	Test sequence "O"		
	- max. let-through current: (kA <sub>peak</sub> )	25,6 kA	
	- Joule integral I <sup>2</sup> dt (kA <sup>2</sup> s) .....L1:	1,64 MA <sup>2</sup> s	
	.....L2:	2,79 MA <sup>2</sup> s	
	.....L3:	330,4 kA <sup>2</sup> s	
	Pause, t: (min)	3	
	Test sequence "CO"		
	- max. let-through current: (kA <sub>peak</sub> )	23,8 kA	
	- Joule integral I <sup>2</sup> dt (kA <sup>2</sup> s) .....L1:	1,82 MA <sup>2</sup> s	
	.....L2:	930,5 KA <sup>2</sup> s	
	.....L3:	2,67 MA <sup>2</sup> s	
	Melting of the fusible element	--	



Clause	Requirement - test	Results-Remarks	Verdict
	Holes in the PE-sheet for test sequence "O"	--	
	Cracks observed	--	

Clause	Requirement - test	Results-Remarks	Verdict
8.3.5.2	Test of rated ultimate short-circuit breaking capacity		Provide
	Type designation or serial number	BA57Φ35-250 / 3P	data
	Sample no:	#03	
	Rated current: In (A)	250 A	
	Rated operational voltage: Ue (V)	400 Vac	
	Rated ultimate short-circuit breaking capacity: (kA)	28 kA	
	The test sequence of operations is O – t - CO		
	Test made in free air:		
	Circuit is earthed at: (load-star- or supply-star point)	load-star point	
	Conductor cross-sectional area (mm <sup>2</sup> ) :	120 mm <sup>2</sup>	
	- test voltage U/Ue = 1,05 (V)	423,5 Vac	
	- r.m.s. test current A: (kA)	28,3 kA	
	power factor/time constant :0,20~0,25	0,24	
	- peak test current (kA <sub>max</sub> ) :	56,1 kA	
	Test sequence "O"		
	- max. let-through current: (kA <sub>peak</sub> )	25,9 kA	
	- Joule integral I <sup>2</sup> dt (kA <sup>2</sup> s) .....L1:	1,50 MA <sup>2</sup> s	
	.....L2:	3,12 MA <sup>2</sup> s	
	.....L3:	791,4 kA <sup>2</sup> s	
	Pause, t: (min)	3	
	Test sequence "CO"		
	- max. let-through current: (kA <sub>peak</sub> )	19,8 kA	
	- Joule integral I <sup>2</sup> dt (kA <sup>2</sup> s) .....L1:	1,71 MA <sup>2</sup> s	
	.....L2:	907,5 KA <sup>2</sup> s	
	.....L3:	1,01 MA <sup>2</sup> s	
	Melting of the fusible element	--	

Clause	Requirement - test	Results-Remarks	Verdict
	Holes in the PE-sheet for test sequence "O"	--	
	Cracks observed	--	

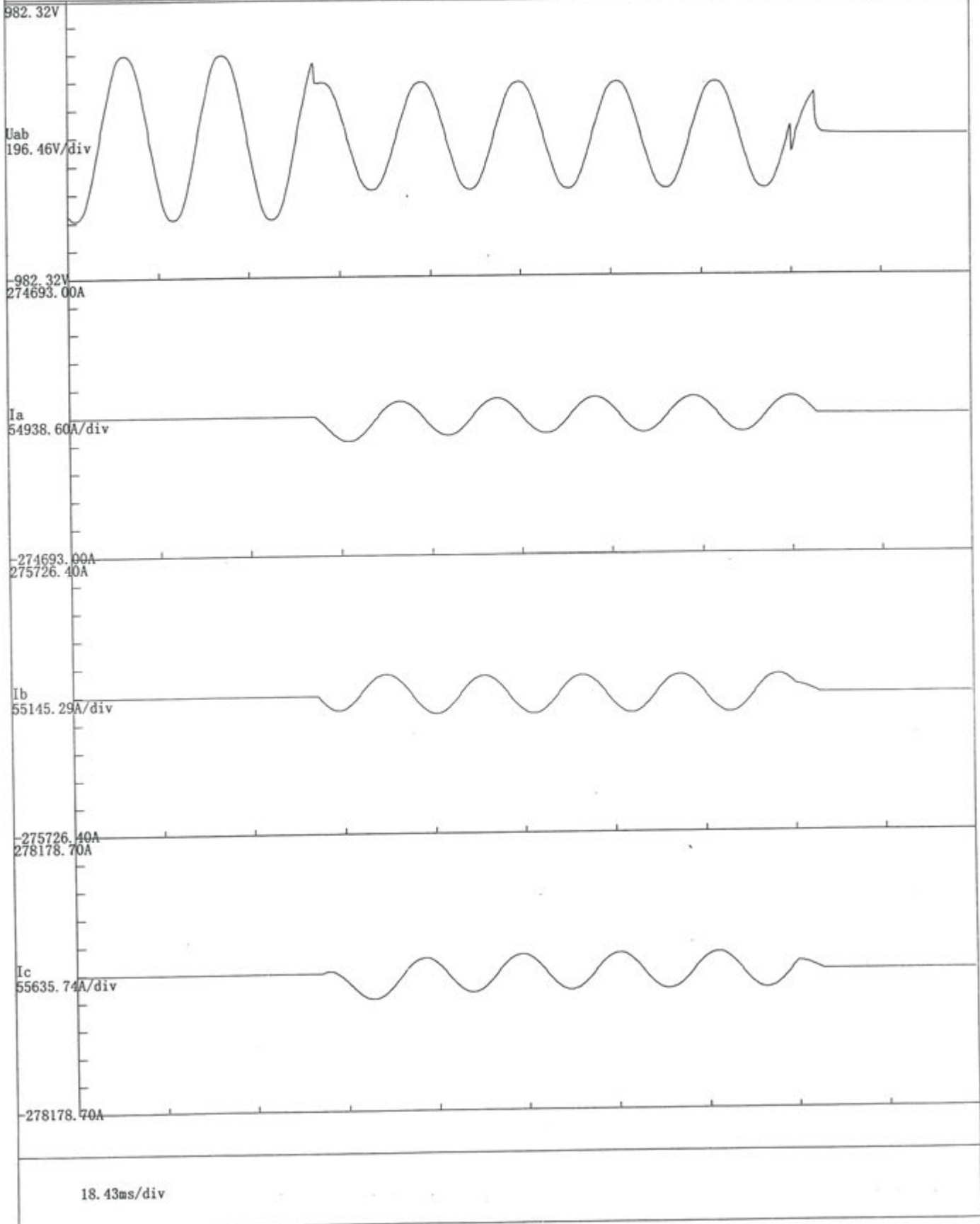
Uab三相预期波

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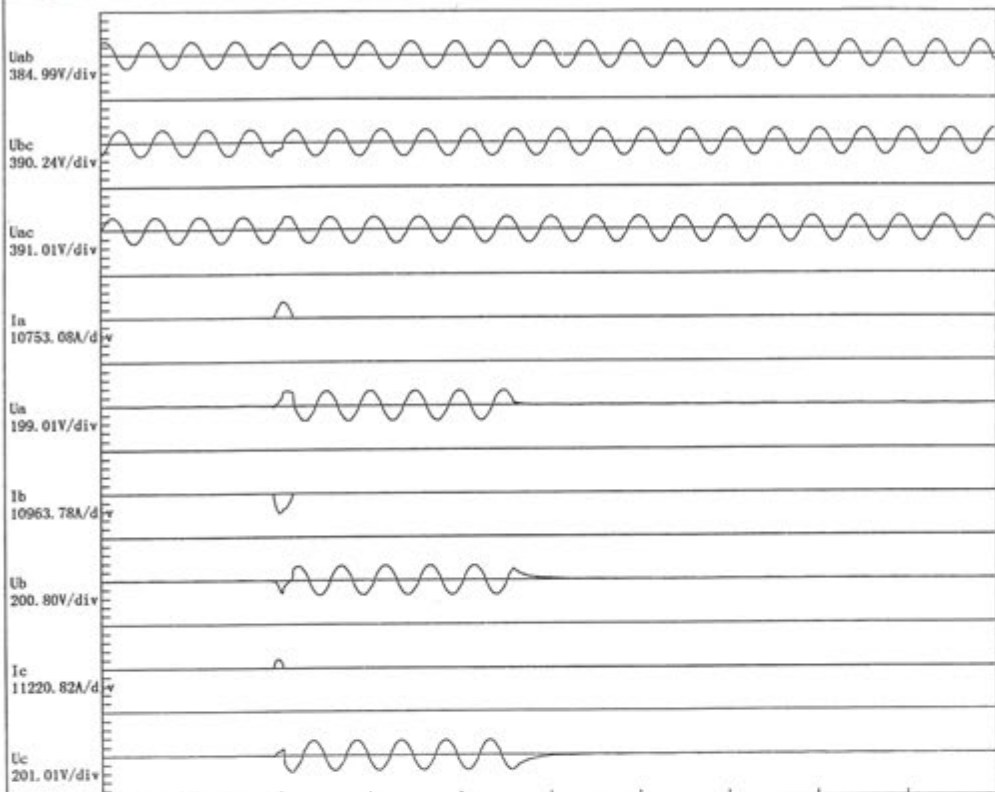
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cos  $\phi$  = 0.24

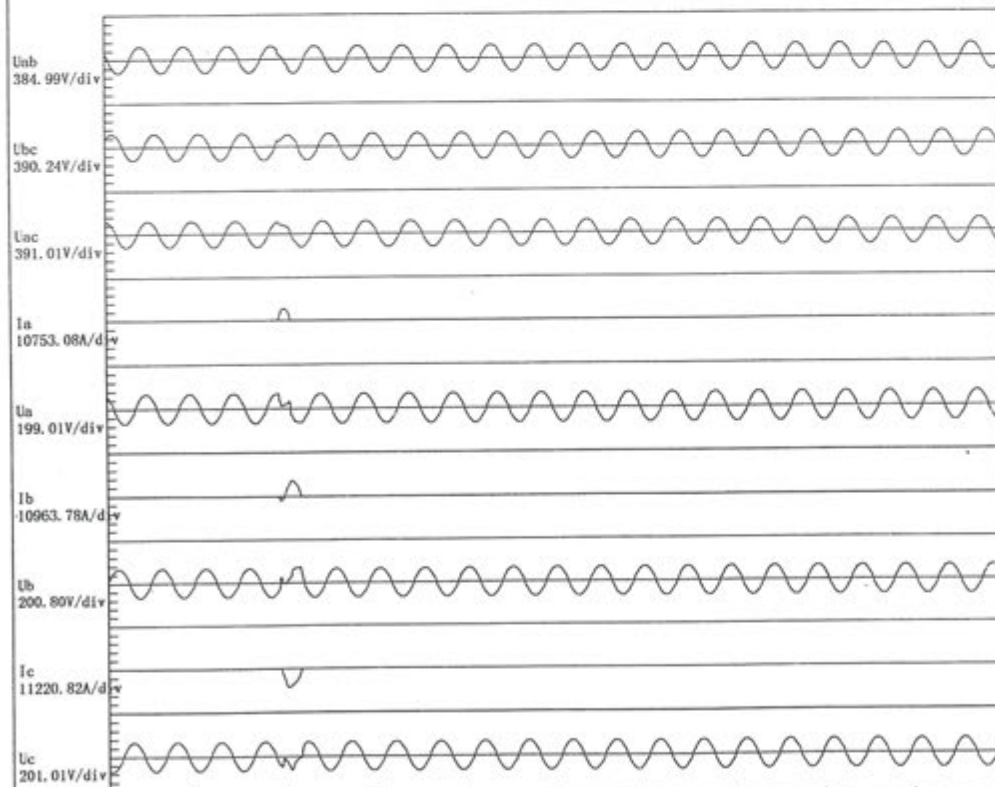






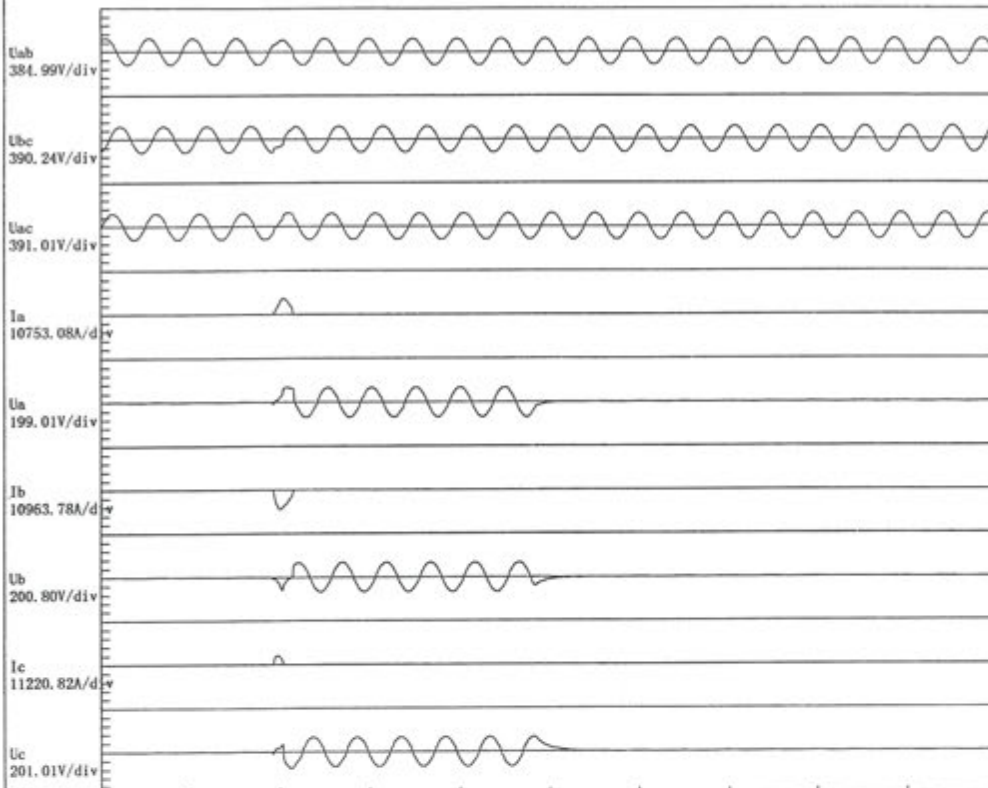
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 Ip=25,776.7A  
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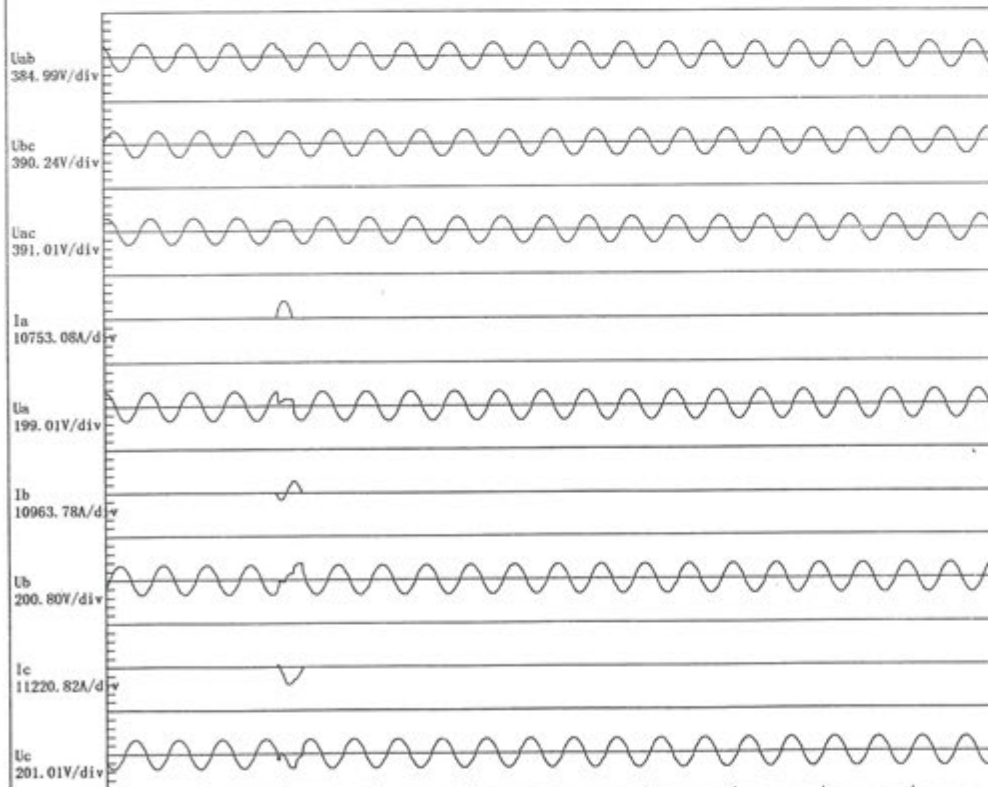
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 Ta=9.3ms  
 Ip=25,531.7A  
 A相焦耳积分=668,075.5A<sup>2</sup>S  
 B相焦耳积分=1,523,419.0A<sup>2</sup>S  
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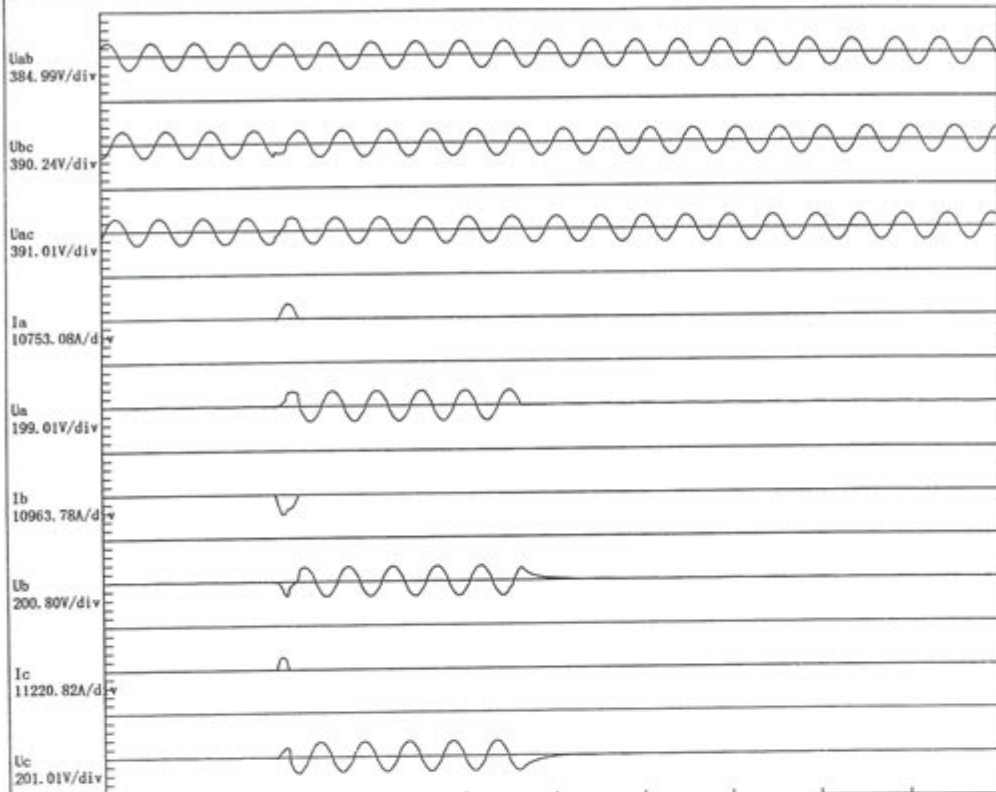
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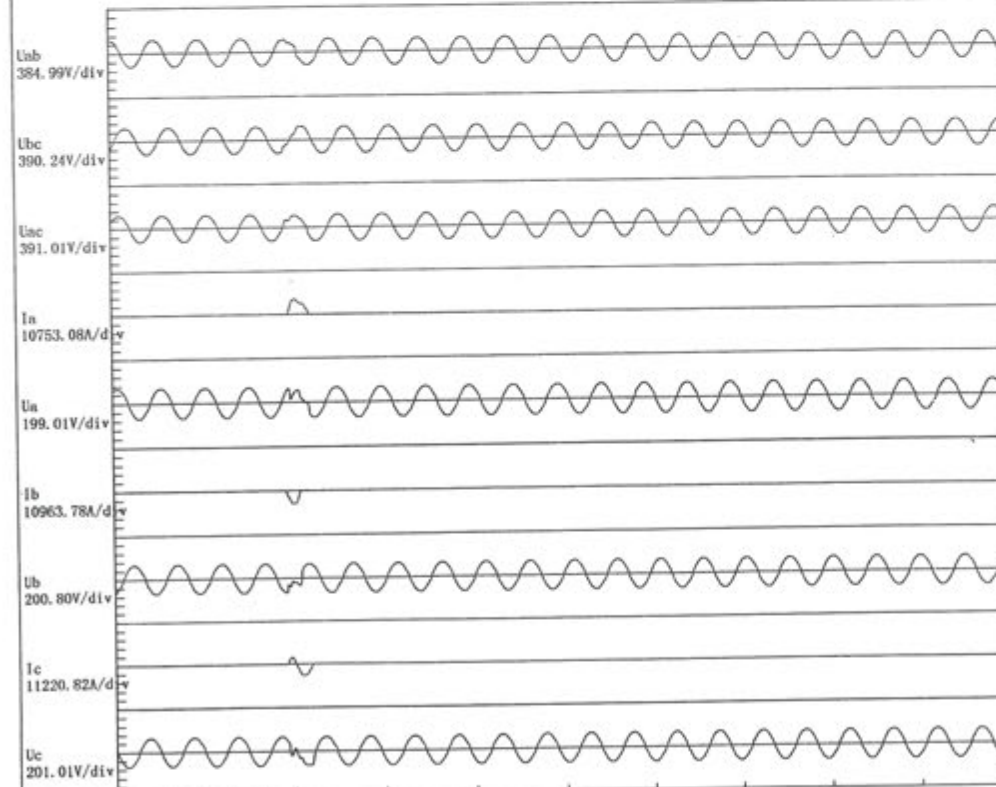
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 Ip=23,778.5A  
 A相焦耳积分=1,819,864.0A<sup>2</sup>S  
 B相焦耳积分=930,515.9A<sup>2</sup>S  
 C相焦耳积分=2,666,850.0A<sup>2</sup>S

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 B相焦耳积分=3,117,860.0A<sup>2</sup>S  
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