

# Test Report

Name of products: \_\_\_\_\_ Contactor \_\_\_\_\_

Type: \_\_\_\_\_ PM12-63 \_\_\_\_\_



Applicant: \_\_\_\_\_ WENZHOU HUAJIA ELECTRICAL EQUIPMENT Co., LTD \_\_\_\_\_

Kind of test: \_\_\_\_\_ Commission Test \_\_\_\_\_

DEKRA Testing Services (Zhejiang) Co., Ltd.

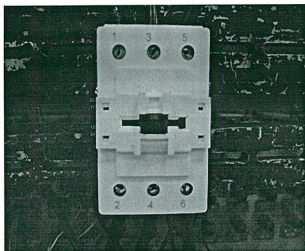


## Test Report

Project No.	3307224	Trade mark	/		
Name of Product	Contactor	Type	PM12-63		
Rated parameters	Ue = 400 Vac, In = 63 A , AC-3		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	2	Contact person	Huang Guangfa	Date of sample available	2014-11-11
Testing Location (if different from DEKRA Lab)	Testing Lab	/			
	Address	/			
Test requirements	IEC 60947-4-1:2009 and Commission Testing Agreement : 3307224				
Test duration	2014-11-13 to 2014-11-16				
Test result	Pass		Issue date	2014.11.18	
Remarks	The samples comply with the related clauses 9.3.3.6				
Tested by		Reviewed by		Approved by	Louis

## Product Description

1. Name and type of product:  
Contactor PM12-63
2. Primary technical parameters:  
Ue = 400 Vac, In = 63 A , AC-3 , 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
9.3.3.6	Operational performance capability	1#	2#	P
	utilization category	AC-3		
	rated operational voltage Ue (V)	400 V		
	rated operational current Ie (A)	63 A		
	Test voltage: 1.05 Ue	422.1 V		
	Test current: 2.0 Ie	127.69 A		
	cosφ = 0.45 ± 0.05	0.44		
	Off-time: 20 (s)	20 s		
	Number of operating cycles: 6000 (times)	6000		
	Calibration oscillogram No.:	3307224-001		
	Test oscillogram No.:3307224-	1-YD001F 1-YD002M 1-YD003E	2-YD001F 2-YD002M 2-YD003E	
	Behaviour and condition during and after the test:	Meet the requirements		
	- no permanent arcing			
	- no flash-over between poles			
	- no blowing of the fusible element in the earth circuit			
	- no welding of the contacts			
8.3.3.4	Dielectric verification			
	test voltage (2 Ui), min 1000 V for 5 s. (V) ...:	1000 V, 5 s		
	i) Between all terminals of the main circuit connected together	No flashover or breakdown		
	ii) Between each pole and the other poles connected together and to the enclosure or mounting plate, with the contacts in all normal positions of operation.			

# 三相预期波

示波图号:3307224-001

$U=422.1V$

$I=127.69A/i_p=278.44A$

$\cos\phi=0.44$

539.19A

Ia  
107.84A/div

-539.19A  
637.70A

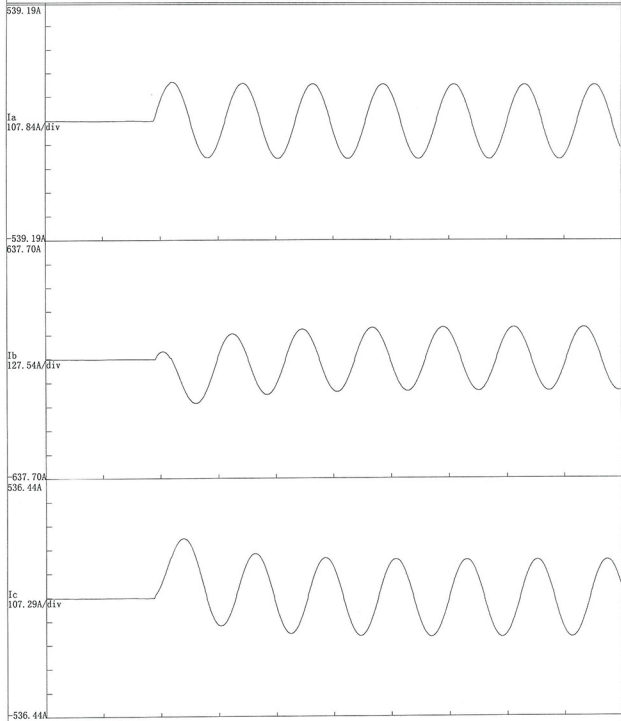
Ib  
127.54A/div

-637.70A  
536.44A

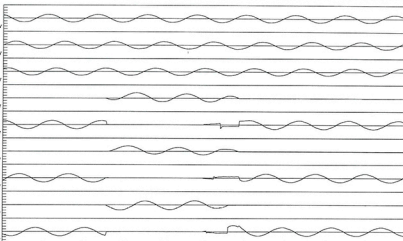
Ic  
107.29A/div

-536.44A

16.382ms/div



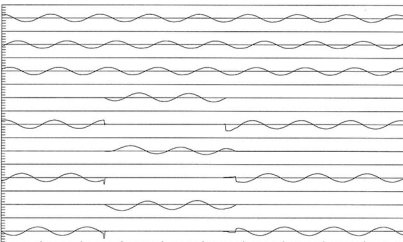
Uab  
384.99V/div  
Ubc  
390.24V/div  
Uac  
391.01V/div  
Ia  
107.84A/div  
Ib  
127.54A/div  
Ic  
107.29A/div  
Uc  
301.01V/div



示波图号:3307224-1-YD001F  
产品名称:  
型号规格:  
试验方式:  
试品编号3307224-1#  
U=424.1V  
T=53.9ms  
Ta=14.5ms  
Ip=271.2A  
A相焦耳积分=772.4A<sup>2</sup>S  
B相焦耳积分=967.6A<sup>2</sup>S  
C相焦耳积分=814.9A<sup>2</sup>S

16.382ms/div

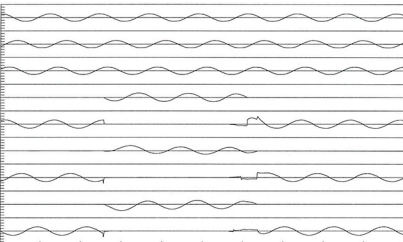
Uab  
384.99V/div  
Ubc  
390.24V/div  
Uac  
391.01V/div  
Ia  
107.84A/div  
Ib  
127.54A/div  
Ic  
107.29A/div  
Uc  
301.01V/div



示波图号:3307224-1-YD002M  
产品名称:  
型号规格:  
试验方式:  
试品编号3307224-1#  
U=425.3V  
T=52.9ms  
Ta=4.5ms  
Ip=261.9A  
A相焦耳积分=741.9A<sup>2</sup>S  
B相焦耳积分=933.8A<sup>2</sup>S  
C相焦耳积分=1,086.1A<sup>2</sup>S

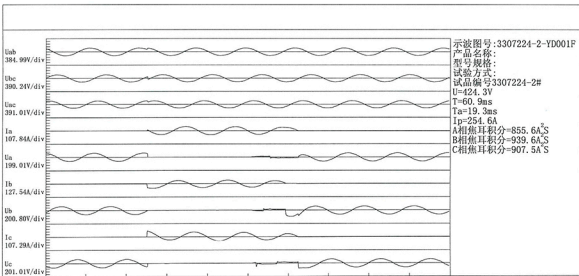
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Uab  
384.99V/div  
Ubc  
390.24V/div  
Uac  
391.01V/div  
Ia  
107.84A/div  
Ib  
127.54A/div  
Ic  
107.29A/div  
Uc  
301.01V/div

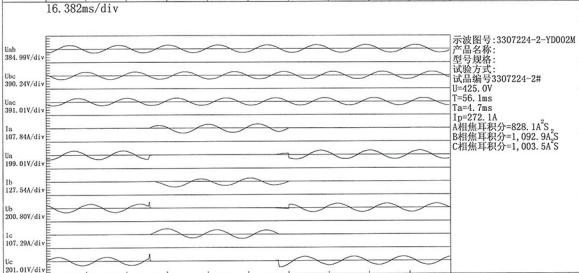


示波图号:3307224-1-YD003E  
产品名称:  
型号规格:  
试验方式:  
试品编号3307224-1#  
U=425.3V  
T=61.9ms  
Ta=10.5ms  
Ip=265.9A  
A相焦耳积分=859.0A<sup>2</sup>S  
B相焦耳积分=1,038.6A<sup>2</sup>S  
C相焦耳积分=1,159.7A<sup>2</sup>S

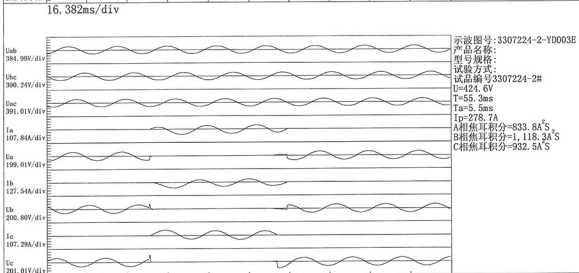
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16.382ms/div



16.382ms/div



16.382ms/div