

Test lab

## CERTIFICATE of QUALITY TEST




according to DIN 55 350 - 18 - 4.3.4.

Test report - No. 8997.06 / 12

Client	<b>Siemens AG</b> <b>IC SG EA PRO D 6 2</b> Wernerwerkdammm 5 13629 Berlin	
Equipment under test	<b>Protection Relay 7SK80</b> MLFB 1 specimen	<sup>1</sup> / <sub>3</sub> of 19" for panel flush mounting 7SK8022-5EB90-1HD0/CC L0R BF1112087202
Purpose	<b>Environmental test of the corrosive resistance</b> This test is capable of verifying the usability of electronics in G3 environments according to the ANSI/ISA-71.04-1985 environmental conditions for process and measurement and control systems: airborne contaminants.	
Test program	<b>Corrosive gas 4 components</b> according to IEC 68-2-60 and according to the demands of the client	
Test duration	21 days and 7 days and 6 days	
Test period	13 January to 16 February 2012	
Pictures	see appendix 1	
Realization	see test Report No 1888-0131211 _6_ Rev 2, Test Lab Beck-Messtechnik / 28.03.2012 in appendix 2	
Test result	<b>After the corrosive test no neither corrosion phenomena nor deposits were detected at the specimen.</b> <b>An visual evaluation was done after 504 h, after 672 h and after 816 h.</b> <b>The further evaluation will be done by the client.</b>	

Berlin, 28 March 2012



  
 Dipl.-Ing. R. Lein  
 head of test lab / test manager

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 Ust-ID-Nr.: DE 137 190 620  
 Geschäftsführer:  
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 Dipl.-Ing. Joachim Boje,  
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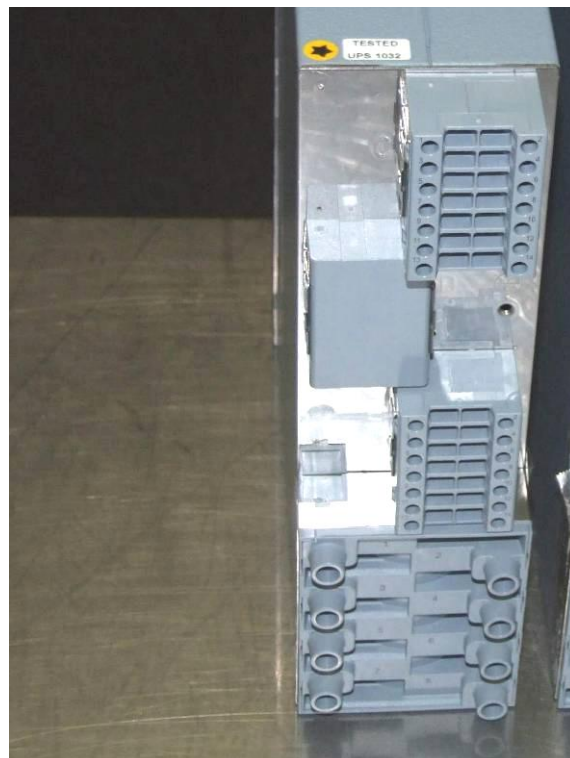
Berliner Volksbank  
 (BLZ 100 900 00) 830 184 1028  
 Commerzbank AG  
 (BLZ 100 800 00) 04 004 292 00



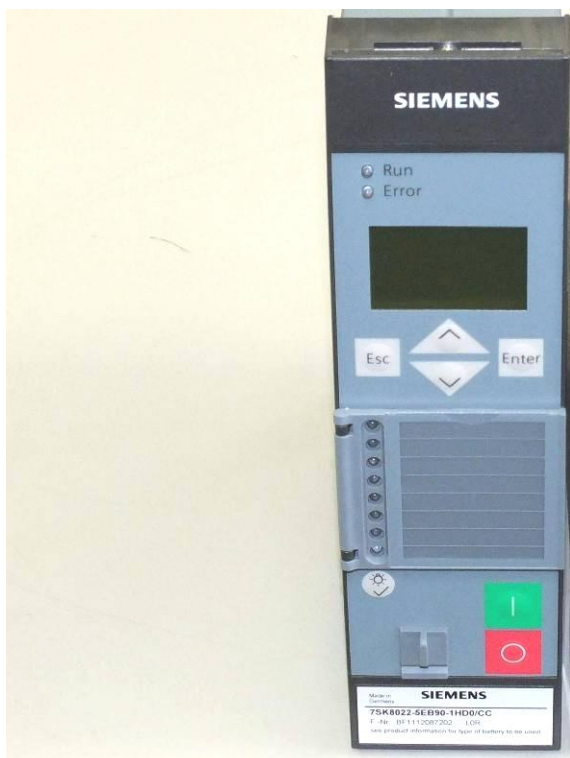
**Pictures**



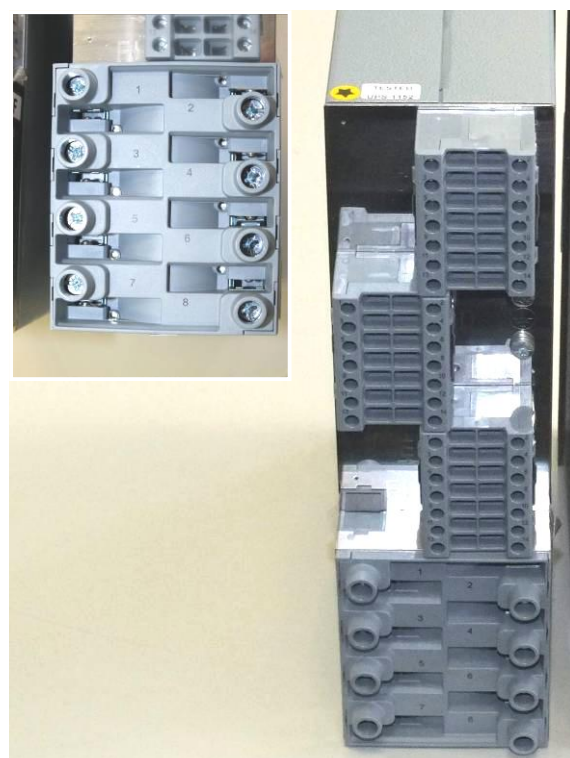
**picture 1**  
**Protection Relay 7SK80**  
*before the corrosive test Ke*



**picture 2**  
**Protection Relay 7SK80**  
*before the corrosive test Ke*



**picture 3**  
**Protection Relay 7SK80**  
*without visible corrosion phenomena or deposits*  
*after the corrosive test Ke*



**picture 4**  
**Protection Relay 7SK80**  
*without visible corrosion phenomena or deposits*  
*after the corrosive test Ke*



# Test report

## 1888-0131211\_6\_Rev2

Customer: AUCOTEAM GmbH  
Prüflabor  
Storkower Str. 115a  
  
10407 Berlin

Quotation No: 1888-0131211

Test method: Corrosive atmosphere according to  
DIN EN 60068-2-60 M4 (09/1996) and  
IEC 68-2-60 (1995)

Date:	28.03.2012		
Laboratory head:	Schweiker	Owner:	Beck
Name:		Name:	



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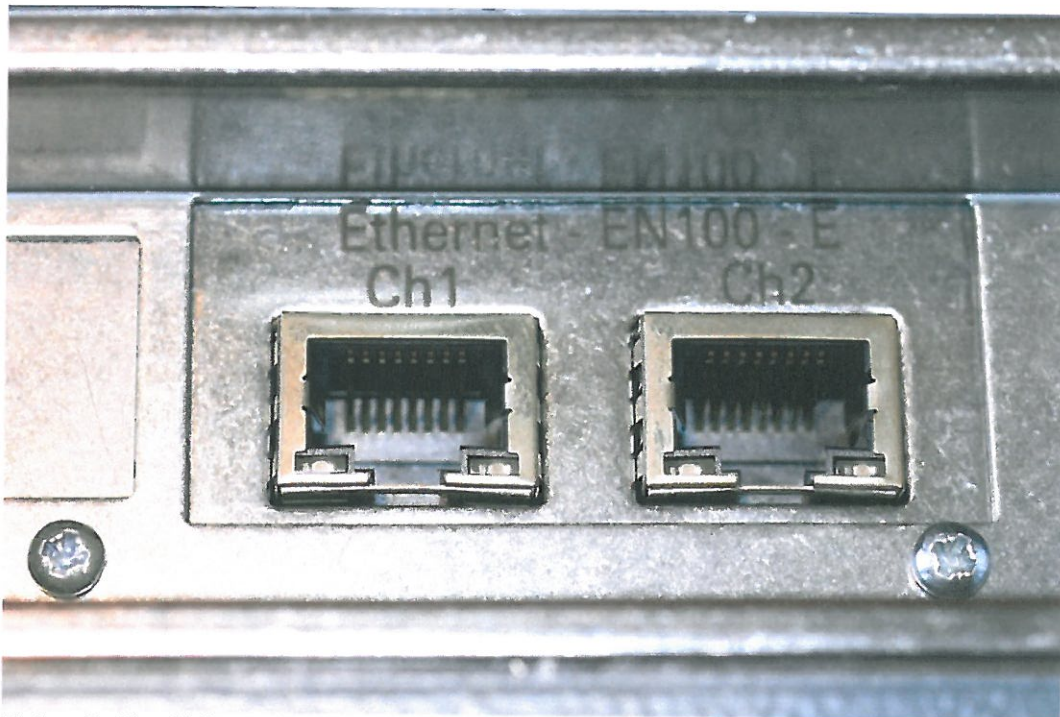
Test:	Corrosive atmosphere according to DIN EN 60068-2-60 M4 (09/1996) and IEC 68-2-60 (1995)	
Test objects:	1 part, electronic component  7SK8022-5EB90-1HD0-L0R	
Testing purpose:	Resistance to corrosive atmosphere	
Test specification/realisation:	Corrosive atmosphere according to DIN EN 60068-2-60 M4 (09/1996) and IEC 68-2-60 (1995)  This test is capable of verifying the usability of electronics in G3 environments according to the ANSI/ISA-71.04-1985 environmental conditions for process and measurement and control systems: airborne contaminants.	
	Duration:	816h (see below at test period)
	Interim evaluations at 504h and 672h (optical evaluation)	
	Humidity:	75% r.h.
	Temperature:	25°C
	Mode of operation:	
	H <sub>2</sub> S:	10 ±5 ppb
	NO <sub>2</sub> :	200 ±20 ppb
	CL <sub>2</sub> :	10 ±5 ppb
	SO <sub>2</sub> :	200± 20 ppb
	Operation:	passive
General laboratory conditions:	Temperature:	23,4°C -/+ 1,5K
	Humidity:	33% r.F. -/+ 4%
Test equipment:	Equipment for industrial corrosive gas, Inv. 00015	
Test period:	Period 1	13.01.2012 – 03.02.2012 (21d)
	Period 2	03.02.2012 – 10.02.2012 (7d)
	Period 3	10.02.2012 – 16.02.2012 (6d)
	At the end of the test (672h) it was found that the corrosivity of the chamber was too low. Therefore, the test was extended for 6 days (period 3).	
Situation of the test objects:	At the beginning of the test, the test object had no optical abnormality.	
Test result:	At the interim evaluations (504h and 672h) no optical abnormalities were detected. At the end (after 816h) also no optical abnormalities or any damages were detected.	
Special features:	Immediately after the test the test object was sent to the customer.	
Rating:	The rating will be done by the customer.	

The test result only relates to the test objects.  
Copying only with acceptance of the test laboratory.

Images of the test samples:

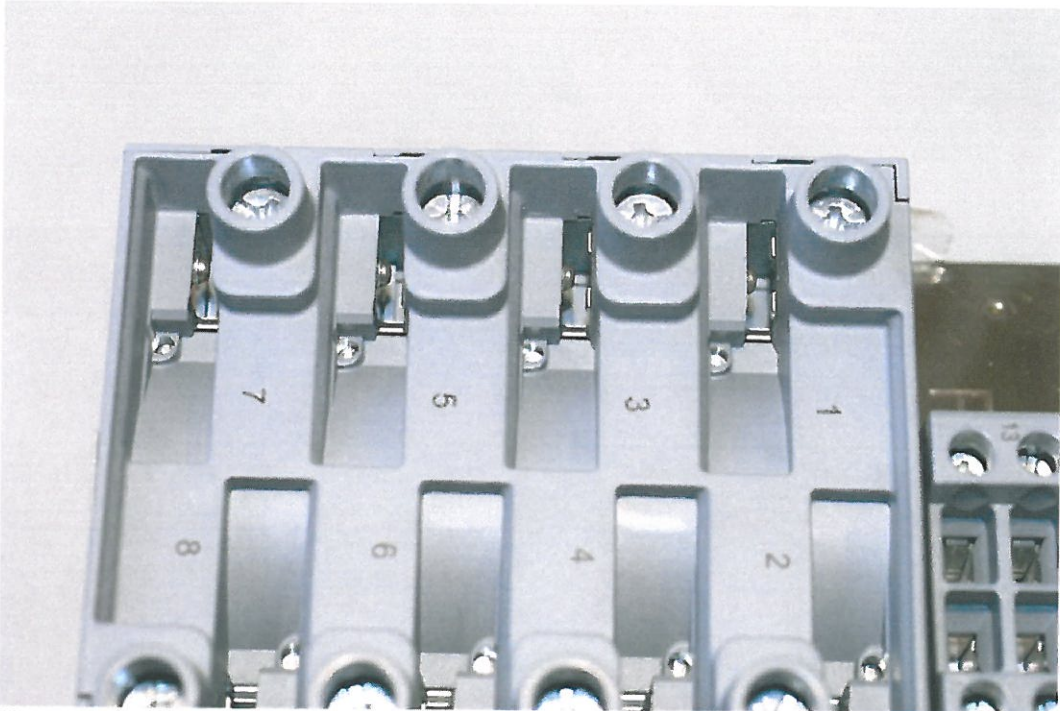


Picture 1: Installation of the test samples at the start of the test

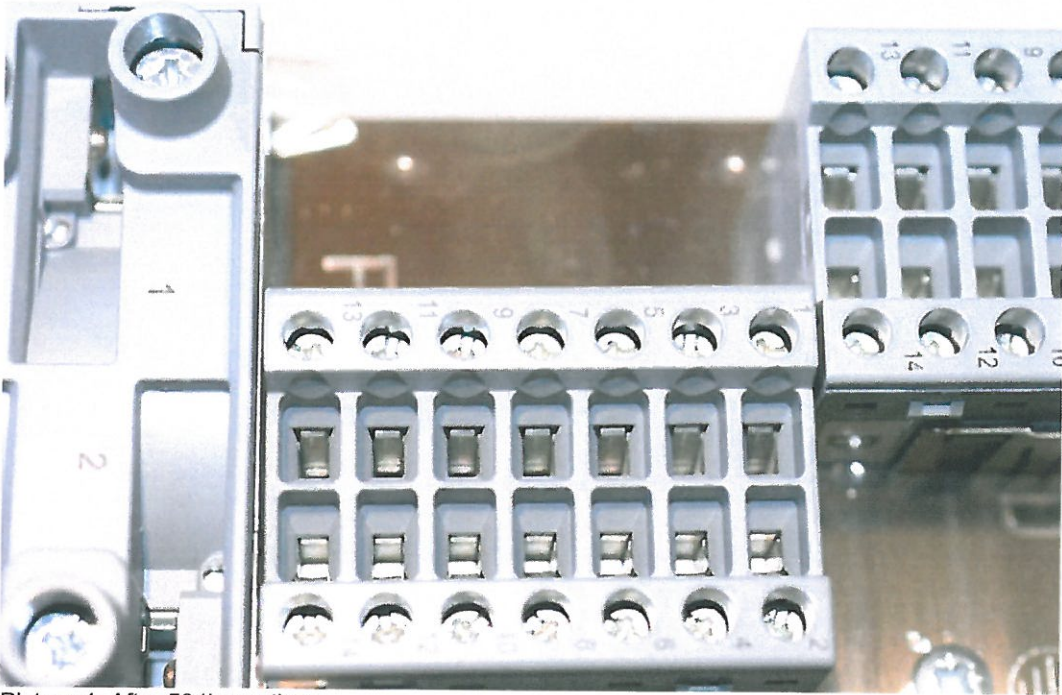


Picture 2: After 504h run-time

The test result only relates to the test objects.  
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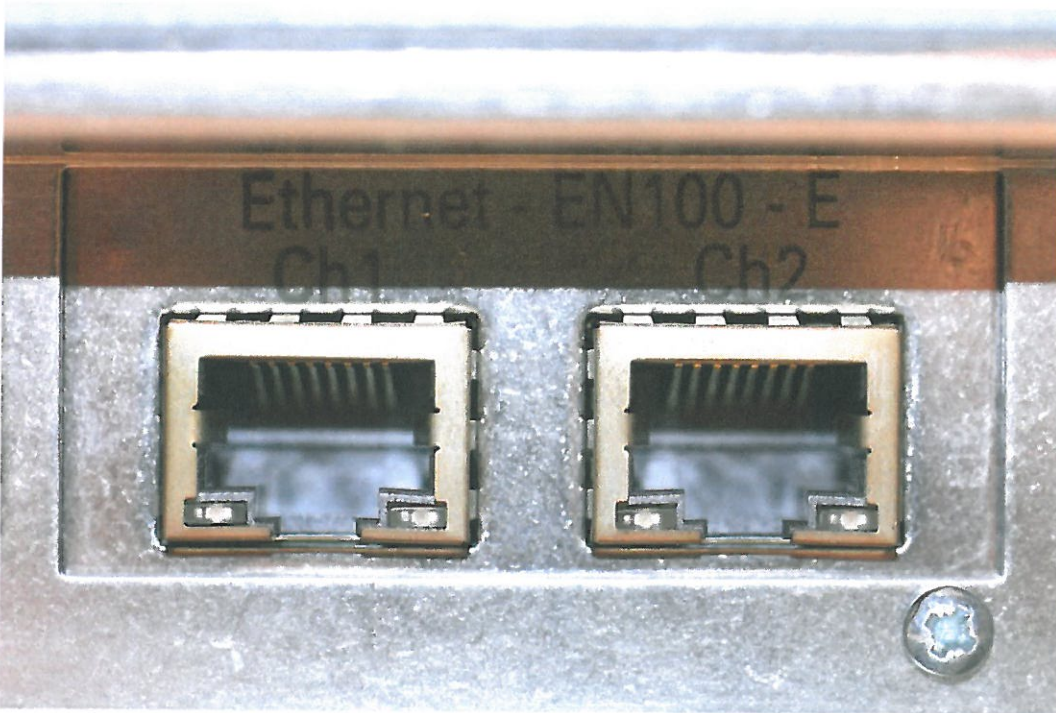


Picture 3: After 504h run-time

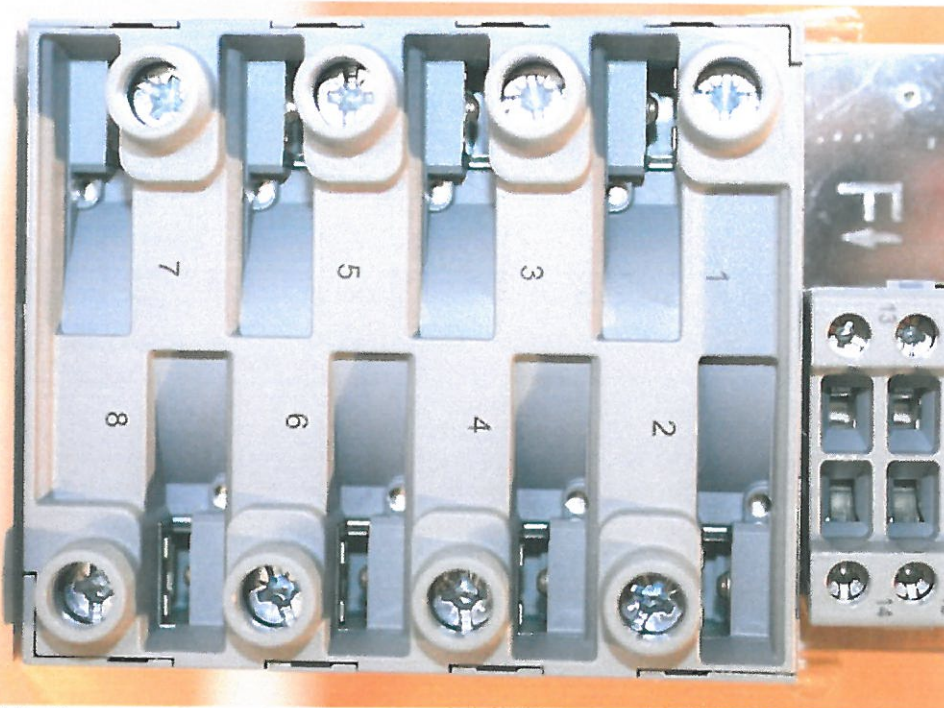


Picture 4: After 504h run-time

The test result only relates to the test objects.  
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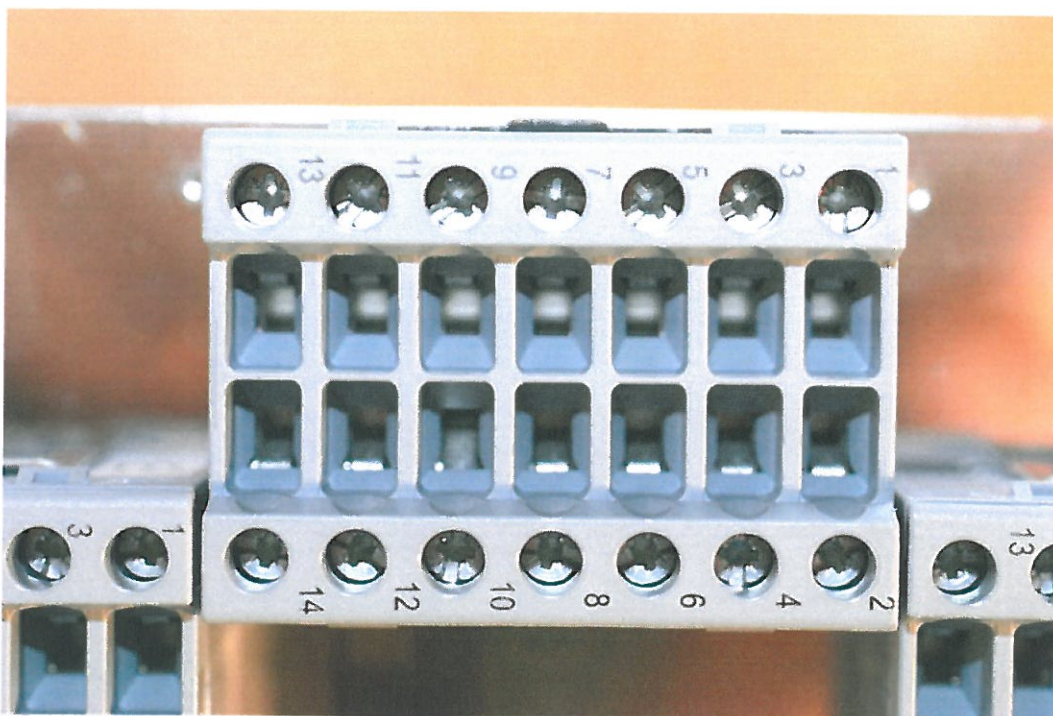


Picture 5: After the test



Picture 6: After the test

The test result only relates to the test objects.  
Copying only with acceptance of the test laboratory.



Picture 7: After the test