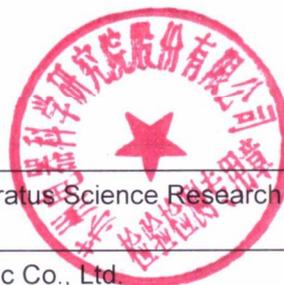
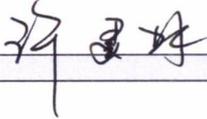


Test Report issued under the responsibility of:



TEST REPORT EN IEC 60947-4-1 Low voltage switchgear and controlgear Part 4: Contactors and motor-starters Section 1 - Electromechanical contactors and motor-starters	
Report Number	03601-A-22D0157-S-A
Date of issue	2023-04-03
Total number of pages	135 pages
Name of Testing Laboratory preparing the Report	Suzhou Electrical Apparatus Science Research Institute Co., Ltd. (EETI)
Applicant's name	Zhejiang Tengen Electric Co., Ltd.
Address	Sulv Industrial Area, Liushi Town, Yueqing City, Zhejiang Province, P.R.China
Test specification:	
Standard	EN IEC60947-4-1:2019
Test procedure	CCA Scheme
Non-standard test method	N/A
Test Report Form No.	EN IEC 60947_4_1D
Test Report Form(s) Originator	DEKRA Certification B.V.
Master TRF	Dated 2019-05-14
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Test Item description	AC Contactor	
Trade Mark	TENGEN	
Manufacturer	Zhejiang Tengen Electric Co., Ltd. Sulv Industrial Area, Liushi Town, Yueqing City, Zhejiang Province, P.R.China	
Model/Type reference	See page 5	
Ratings	See page 5	
Responsible Testing Laboratory (as applicable), testing procedure and testing location(s):		
<input checked="" type="checkbox"/>	Testing Laboratory:	Suzhou Electrical Apparatus Science Research Institute Co., Ltd. (EETI)
Testing location/ address		No.7 Yonghe Street, Binhe Road, New District, Suzhou, China
Tested by (name, function, signature)		Fang Gang (Team leader) 
Approved by (name, function, signature) ..		Xu Jianlin (Supervisor) 
<input type="checkbox"/>	Testing procedure: CTF Stage 1:	
Testing location/ address		
Tested by (name, function, signature)		
Approved by (name, function, signature) ..		
<input type="checkbox"/>	Testing procedure: CTF Stage 2:	
Testing location/ address		
Tested by (name + signature)		
Witnessed by (name, function, signature) .		
Approved by (name, function, signature) ..		
<input type="checkbox"/>	Testing procedure: CTF Stage 3:	
<input type="checkbox"/>	Testing procedure: CTF Stage 4:	
Testing location/ address		
Tested by (name, function, signature)		
Witnessed by (name, function, signature) .		
Approved by (name, function, signature) ..		
Supervised by (name, function, signature) :		

List of Attachments (including a total number of pages in each attachment):	
Attachment 1: photos of the product (page 5, 133~135)	
Summary of testing:	
Tests performed (name of test and test clause):	Sample specifications:
<p>Test sequence I:</p> <ul style="list-style-type: none"> - Temperature rise (Clause 9.3.3.3) #01#02#03 - Operating limits (Clause 9.3.3.2) #03~#18 - Test of dielectric properties (Clause 9.3.3.4) #03 - Coil power consumption(Clause 9.3.3.2.1.2) #01#03#04#23#24 - Pole impedance(Clause 9.3.3.2.1.3) #23 <p>Test sequence II: #19~#30</p> <ul style="list-style-type: none"> - Making and breaking capacity (Clause 9.3.3.5) - Operational performance capability (Clause 9.3.3.6) <p>Test sequence III:</p> <ul style="list-style-type: none"> - Test at the prospective current "r" (Clause 9.3.4.2.2) #31 - Test at the rated conditional short-circuit current "Iq" (Clause 9.3.4.2.3) #32 <p>Test sequence IV</p> <ul style="list-style-type: none"> - Overload current withstand capability of contactors (Clause 9.3.5) #33#34#35 <p>Test sequence V: #36#37</p> <ul style="list-style-type: none"> -Verification of mechanical properties of terminals (8.2.4) -Verification of degree of protection (Annex C) <p>EN60947-1: #01#03</p> <p>Clearances and creepage distances (Clause 8.1.4)</p> <p>Comparative tracking index (Clause 8.1.4)</p> <p>Resistance to abnormal heat and fire (Clause 8.2.1.1.1)</p> <p>For auxiliary circuits, please refer to report 03601-A-22D0157-S-B #38#39#40#41</p> <p>Remark: This test report is based on test report 03601-A-22B0876-S issued on 2022-11-25, all the test results are copied from the test report(except CTI test).</p>	<p>TGC1-3811x Us: 415V 50/60Hz:#01#23#24</p> <p>TGC1-3211x Us: 415V 50/60Hz: #02#21#22</p> <p>TGC1-2511x Us: 415V 50/60Hz: #03#19#20#31#32</p> <p>TGC1-2511x Us: AC24V 50Hz: #04</p> <p>TGC1-2511x Us: AC36V 50Hz: #05</p> <p>TGC1-2511x Us: AC48V 50Hz: #06</p> <p>TGC1-2511x Us: AC110V 50Hz: #07</p> <p>TGC1-2511x Us: AC220V 50Hz: #08</p> <p>TGC1-2511x Us: AC380V 50Hz: #09</p> <p>TGC1-2511x Us: AC400V 50Hz: #10</p> <p>TGC1-2511x Us: AC415V 50Hz: #11</p> <p>TGC1-2511x Us: AC24V 50/60Hz: #12</p> <p>TGC1-2511x Us: AC36V 50/60Hz: #13</p> <p>TGC1-2511x Us: AC48V 50/60Hz: #14</p> <p>TGC1-2511x Us: AC110V 50/60Hz: #15</p> <p>TGC1-2511x Us: AC220V 50/60Hz: #16</p> <p>TGC1-2511x Us: AC380V 50/60Hz: #17</p> <p>TGC1-2511x Us: AC400V 50/60Hz: #18</p> <p>TGC1-2511xN Us: 415V 50/60Hz: #25#26</p> <p>TGC1-3211xN Us: 415V 50/60Hz: #27#28</p> <p>TGC1-3811xN Us: 415V 50/60Hz: #29#30</p> <p>TGC1-2511: Us: AC24V(50Hz): #33</p> <p>TGC1-3211: Us: AC110V(50/60Hz): #34</p> <p>TGCG-3811: Us: AC220V(50Hz): #35#40#41</p> <p>TGC1-3211: Us: AC415V(50/60Hz) : #36</p> <p>TGC1-2511: Us: AC415V(50Hz): #37</p> <p>TGC1-3211: Us: AC48V(50/60Hz): #38</p> <p>TGC1-3211: Us: AC36V(50/60Hz) : #39</p>
Testing location:	
Suzhou Electrical Apparatus Science Research Institute Co., Ltd. (EETI) No.7 Yonghe Street, Binhe Road, New District, Suzhou, China	