



TEST REPORT EN 60947-2 Low-voltage switchgear and controlgear - Part 2: Circuit-breakers	
Report Number. :	03601-A-21D0100-S
Date of issue :	2022-01-07
Total number of pages	155 pages
Name of Testing Laboratory preparing the Report	Suzhou Electrical Apparatus Science Research Institute Co., Ltd. (EETI)
Applicant's name	Zhejiang Tengen Smart Electrics Co., Ltd.
Address	No. 2777 West Zhongshan Road, Xiuzhou District, Jiaxing, Zhejiang Province, P.R.China.
Test specification: Standard : EN 60947-2:2017/A1:2020 Test procedure..... : CCA Scheme Non-standard test method..... : N/A	
Test Report Form No..... :	EN 60947_2J
Test Report Form(s) Originator.... :	DEKRA Certification B.V.
Master TRF	Dated 2020-03-31
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Test item description	Moulded Case Circuit-Breaker	
Trade Mark(s)	Tengen	
Manufacturer	Zhejiang Tengen Smart Electrics Co., Ltd. No. 2777 West Zhongshan Road, Xiuzhou District, Jiaxing, Zhejiang Province, P.R.China.	
Model/Type reference	TGM1NE-800M,TGM1NE-800H,TGMKE-800M,TGMKE-800H, TGMGE-800M,TGMGE-800H,TGMHE-800M,TGMHE-800H	
Ratings	See page 10	
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) 方刚
Approved by (name, function, signature) ..		Xu Jianlin(Supervisor) 许建林
<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 5,155)	
Summary of testing: In case of alternative test programs for circuit breakers with a different number of poles, the following program is used: <input type="checkbox"/> Programme 1 (three pole fully tested) <input checked="" type="checkbox"/> Programme 2 (four pole fully tested) <input type="checkbox"/> Alternative program not applicable	
Tests performed (name of test and test clause): TEST SEQUENCE I Sample No.:#01#02 8.3.3 General performance characteristics TEST SEQUENCE II (Ics) Sample No.:#03-#10 8.3.4 Rated service short-circuit breaking capacity TEST SEQUENCE III (Icu) Sample No.:#11-#15 8.3.5 Rated ultimate short-circuit breaking capacity TEST SEQUENCE III (phase+N test) Sample No.:#16 TEST SEQUENCE IV Sample No.:#17#18 8.3.6 Rated short-time withstand current TEST SEQUENCE IV (phase+N test) Sample No.:#19 Annex C -Individual pole short-circuit test sequence Sample No.:#25#26 Annex F - Additional tests for circuit-breakers with electronic over-current protection Sample No.:#20 Annex N- Electromagnetic compatibility (EMC) Sample No.:#23#24	Sample No.:##21#22 Mechanical properties of terminals 8.2.4 Clearances and creepage distances 7.1.4 Insulating material: Comparative tracking index 7.1.4 Resistance to abnormal heat and fire 8.2.1.1.1 Sample specifications: TGM1NE-800MP 800A 4P #01 TGM1NE-800M 800A 3P #02 TGMHE-800M/3300E2 800A 3P #03#04#05 TGMHE-800M/3300E2 630A 3P #06 TGMKE-800M/3300E2 800A 3P #11#12#13#17#20#21#22#25 TGMKE-800M/3300E2 630A 3P #14#18#26 TGMGE-800H/3300E2 800A 3P #07#08#09 TGMGE-800H/3300E2 630A 3P #10 TGMKE-800M/4300CE2 800A 4P #15#16#19 TGM1NE-800 with communication module+overload non-tripping accessory #23#24 Remark: This test report is based on test report 03601-A-21B0976-S issued on 2021-11-19, all the test results are copied from the test report(except CTI test).
Testing location: No.7 Yonghe Street, Binhe Road, New District, Suzhou,China	

Summary of compliance with National Differences (List of countries addressed):**N/A****Statement concerning the uncertainty of the measurement systems used for the tests**

(may be required by the product standard or client)

☐ **Internal procedure used for type testing through which traceability of the measuring uncertainty has been established:****Procedure number, issue date and title:**

Calculations leading to the reported values are on file with the NCB and testing laboratory that conducted the testing.

☒ **Statement not required by the standard used for type testing**