Test Report issued under the responsibility of:

TEST REPORT
IEC 60947-2
Low-voltage switchgear and controlgear - Part 2: Circuit-breakers

Report Number. ..... :	03601-A-21CB0150-S
Date of issue ..... :	2022-04-20
Total number of pages ..... :	153 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 ..... :	IEC 60947-2:2016, AMD1:2019
Test procedure ..... :	CB Scheme
Non-standard test method ..... :	N/A
Test Report Form No. ..... :	IEC60947_2J
Test Report Form(s) Originator .... :	DEKRA Certification B.V.
Master TRF ..... :	Dated 2020-03-31

This report is not valid as a CB Test Report unless signed by an approved CB Testing Laboratory and appended to a CB Test Certificate issued by an NCB in accordance with IECEE 02.

General disclaimer:

The test results presented in this report relate only to the object tested.
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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-1250M,TGM1NE-1250H,TGMKE-1250M, TGMKE-1250H,TGMGE-1250M,TGMGE-1250H, TGMHE-1250M,TGMHE-1250H
Ratings ..... :	See page 10

Responsible Testing Laboratory (as applicable), testing procedure and testing location(s):

☒	**CB 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
☐	**Testing procedure: CTF Stage 1:**		
Testing location/ address ..... :			
Tested by (name, function, signature):			
Approved by (name, function, signature) .. :			
☐	**Testing procedure: CTF Stage 2:**		
Testing location/ address ..... :			
Tested by (name + signature)..... :			
Witnessed by (name, function, signature). :			
Approved by (name, function, signature) .. :			
☐	**Testing procedure: CTF Stage 3:**		
☐	**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 5,153)

Summary of testing:

In case of alternative test programs for circuit breakers with a different number of poles, the following program is used:

☐ **Programme 1 (three pole fully tested)**

☒ **Programme 2 (four pole fully tested)**

☐ **Alternative program not applicable**

Tests performed (name of test and test clause):	Sample No.:##23#24 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
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.:#21 Annex C -Individual pole short-circuit test sequence Sample No.:#19#20 Annex F - Additional tests for circuit-breakers with electronic over-current protection Sample No.:#22#24 Annex N- Electromagnetic compatibility (EMC) Sample No.:#25	Sample specifications: TGM1NE-1250MP/4340CE3 1250A 4P #01 TGM1NE-1250M/3338IIIE3 1250A 3P #02 TGMHE-1250M/3300E3 1250A 3P #03#04#05#19 TGMHE-1250M/3300E3 800A 3P #06#20 TGMKE-1250M/3300E3 1250A 3P #11#12#13#17#22#23#24 TGMKE-1250M/3300E3 800A 3P #14#18 TGMGE-1250H/3300E3 1250A 3P #07#08#09 TGMGE-1250H/3300E3 800A 3P #10 TGMKE-1250M/4300CE3 1250A 4P #15#16#21 TGMGE-1250 with electric operator AC240V+ undervoltage AC240V #25 Remark: This test report is based on test report 03601-A-21B0975-S issued on 2022-01-19, 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