






TEST REPORT EN 60947-2 Low-voltage switchgear and controlgear - Part 2: Circuit-breakers	
Report Number.....:	02401-22119Y29053-1
Date of issue.....:	2022-11-08
Total number of pages.....	119
Name of Testing Laboratory preparing the Report.....:	Zhejiang Fangyuan Test Group CO., Ltd. No.400,Guangqiong Rd, Jiaxing City, Zhejiang Province. P.R. China
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.:	IEC 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).....:	
Manufacturer	Zhejiang Tengen Smart Electrics Co.,Ltd. No.2777 West Zhongshan Road, Xiuzhou District, Jiaxing, Zhejiang Province, P.R.China

Model/Type reference	TeM5DC-400HU;	
Ratings	Ui:1500V;Uimp:12kV;	
	Ue:DC1500V;	
	In:225A,250A,315A,350A,400A;	
	Type of overcurrent release:	
	Thermo-magnetic trip unit, Electro-magnetic trip unit;	
	Selectivity category:A;	
	Ics:20kA(M type/T=10ms),40kA(H type/T=5ms);	
	Icu:20kA(M type/T=10ms),40kA(H type/T=5ms);	
	Wiring mode:4P appearance;	
	The product is suitable for isolation;	
	Applicable to PV	
	(Only the nameplate reflects "IEC 60947-2- Annex P");	
	Electronic accessories complying with Annex N:	
	Undervoltage:Us:AC220/230V;	
	Electric operation:Us: AC220/230V;	
	Auxiliary:1NO1NC,2NO2NC,4NO4NC;lth:6A;	
	AC-15:AC380/400V/1.5A;DC-13:DC220/250V/0.15A;	
Responsible Testing Laboratory (as applicable), testing procedure and testing location(s):		
<input checked="" type="checkbox"/>	CE Testing Laboratory:	Zhejiang Fangyuan Test Group CO., Ltd
	Testing location/ address	No.400,Guangqiong Rd, Jiaxing City, Zhejiang Province. P.R. China
	Tested by (name, function, signature)	Jin Hongfei 
	Approved by (name, function, signature) ...:	Yao Bo 
<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): N/A

Summary of testing:

Standard used :

EN 60947-2:2017+A1:2020; EN 60947-1:2007+A2:2014;

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.	Type	Poles	Wiring diagram	Rated Current	Test Voltage	Short circuit current	Test sequence
I-1#	TeM5DC-400HUM/4350H1	4P	H1	400A	DC1500V	-	I
I-2#	TeM5DC-400HUMZ/4360G1	4P	G1	400A	DC1500V		I
I-3#	TeM5DC-400HUMP/4300I	4P	I	400A	DC1500V		I
II-1#	TeM5DC-400HUM/4300H1	4P	H1	400A	DC1500V	20kA	II+III
II-2#	TeM5DC-400HUM/4300H1	4P	H1	225A	DC1500V	20kA	II+III
II-3#	TeM5DC-400HUM/4300H1	4P	H1	400A	DC1500V	20kA	II+III
II-4#	TeM5DC-400HUM/4300H1	4P	H1	400A	DC1500V	40kA	II+III
II-5#	TeM5DC-400HUM/4300H1	4P	H1	225A	DC1500V	40kA	II+III
II-6#	TeM5DC-400HUM/4300H1	4P	H1	400A	DC1500V	40kA	II+III
II-7#	TeM5DC-400HUM/4300G1	4P	G1	400A	DC1500V	20kA	II+III
II-8#	TeM5DC-400HUM/4300G1	4P	G1	225A	DC1500V	20kA	II+III
II-9#	TeM5DC-400HUM/4300I	4P	G1	400A	DC1500V	20kA	II+III
II-10#	TeM5DC-400HUM/4300I	4P	I	400A	DC1500V	40kA	II+III
P-1#	TeM5DC-400HUM/4300H1	4P	H1	400A	DC1500V	-	P.8.3.9
P-2#	TeM5DC-400HUM/4300G1	4P	G1	400A	DC1500V	-	P.8.3.9
P-3#	TeM5DC-400HUM/4300I	4P	I	400A	DC1500V	-	P.8.3.9
P-4#	TeM5DC-400HUM/4300H1	4P	H1	400A	DC1500V	-	P.8.3.10
P-5#	TeM5DC-400HUMP/4310H1	4P	H1	400A	DC1500V	-	P.8.3.11
N-1#	Electric operation	-	-	-	AC220/230V	-	Annex N
N-2#	undervoltage	-	-	-	AC220/230V	-	Annex N

Note1:I-2#~I-3# only test 8.3.3.4~8.3.3.7

Note1:II-3#,II-6# ,II-8#,II-10#with Reverse wiring

Note2:auxiliary circuit:Report No. 020401-22119Y29053-2