




Test Report issued under the responsibility of:



TEST REPORT IEC 60947-2 Low-voltage switchgear and controlgear - Part 2: Circuit-breakers	
Report Number.....:	(2021)FQIIDQ-0768
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Total number of pages.....:	585
Name of Testing Laboratory preparing the Report.....:	Fujian Inspection and Research Institute for Product Quality (FQII)
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
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Test item description.....:	MCCB
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	TGM1NE-100M,TGM1NE-100H,TGMKE-100M,TGMKE-100H, TGMGE-100M,TGMGE-100H,TGMHE-100M,TGMHE-100H; TGM1NE-125M,TGM1NE-125H,TGMKE-125M,TGMKE-125H, TGMGE-125M,TGMGE-125H,TGMHE-125M,TGMHE-125H; TGM1NE-160M,TGM1NE-160H,TGMKE-160M,TGMKE-160H, TGMGE-160M,TGMGE-160H,TGMHE-160M,TGMHE-160H
Ratings	<p>Uimp:8kV; Ui:1000V; Ue:AC380/400/415V, AC500/550V, AC660/690V;50/60Hz;Type of over-current release: Electronic;</p> <p>TGM1NE-100M,TGM1NE-100H,TGMKE-100M,TGMKE-100H, TGMGE-100M,TGMGE-100H,TGMHE-100M,TGMHE-100H: In:32A(Ir:12.5A-32A adjustable+OFF),63A(Ir:25A-63A adjustable+OFF) ,100A(Ir:40A-100A adjustable+OFF);</p> <p>TGM1NE-125M,TGM1NE-125H,TGMKE-125M,TGMKE-125H, TGMGE-125M,TGMGE-125H,TGMHE-125M,TGMHE-125H: In:32A(Ir:12.5A-32A adjustable+OFF),63A(Ir:25A-63A adjustable+OFF) ,125A(Ir:50A-125A adjustable+OFF);</p> <p>Type M: Ics:50kA,Icu:50 kA,Icw:2 kA /1s(AC380/400/415V), Ics:30kA,Icu:30 kA,Icw:2 kA /1s(AC500/550V), Ics:10kA,Icu:10 kA,Icw:2 kA /1s(AC660/690V);</p> <p>Type H: Ics:50kA,Icu:85 kA,Icw:2 kA /1s(AC380/400/415V), Ics:40kA,Icu:40 kA,Icw:2 kA /1s(AC500/550V), Ics:10kA,Icu:20 kA,Icw:2 kA /1s(AC660/690V);</p> <p>TGM1NE-160M,TGM1NE-160H,TGMKE-160M,TGMKE-160H, TGMGE-160M,TGMGE-160H,TGMHE-160M,TGMHE-160H: In:32A(Ir:12.5A-32A adjustable+OFF),63A(Ir:25A-63A adjustable+OFF) ,125A(Ir:50A-125A adjustable+OFF) ,160A(Ir:63A-160A adjustable+OFF);</p> <p>Type M: Ics:50kA,Icu:50 kA,Icw:2.5 kA /1s(AC380/400/415V), Ics:30kA,Icu:30 kA,Icw:2.5 kA /1s(AC500/550V), Ics:10kA,Icu:10 kA,Icw:2.5 kA /1s(AC660/690V);</p> <p>Type H: Ics:50kA,Icu:85 kA,Icw:2.5 kA /1s(AC380/400/415V), Ics:40kA,Icu:40 kA,Icw:2.5 kA /1s(AC500/550V), Ics:10kA,Icu:20 kA,Icw:2.5 kA /1s(AC660/690V);</p> <p>Selectivity category:A; 3P, 3P+N(3 protected poles with an uninterrupted neutral pole), 4P(3 protected poles with a switched neutral pole), 4P; 3P 4P: suitable for isolation; 3P+N: not suitable for isolation;</p> <p>Matching auxiliary contact:OF-M1/M2/M3,Uimp:4kV,Ui:690V;</p>

OF-M1/M2:Ith:3A,
AC-15:AC380/400/415V/0.3A,DC-13:DC110/220/250V/0.15A;
OF-M3:Ith:6A,
AC-15:AC380/400/415V/1A,DC-13:DC110/220/250V/0.15A;
Alarm contact:SD-M1/M2/M3, Uimp:4kV,Ui:690V;
SD-M1/M2:Ith:3A,
AC-15:AC380/400/415V/0.3A,DC-13:DC110/220/250V/0.15A;
SD-M3:Ith:6A,
AC-15:AC380/400/415V/1A,DC-13:DC110/220/250V/0.15A;
Electronic accessory complying with annex N:
Motor-operators: Uimp:4kV;Ui:690V;
Us:AC220/230/240V,AC380/400/415V,50/60Hz;
Shunt release with prepayment:Uimp:4kV;Ui:690V;
Us: AC220/230/240V,50/60Hz;
Undervoltage release: Uimp:4kV;Ui:800V;
Us:AC220/230/240V,AC380/400/415V,50/60Hz;
Electronic shunt alarm accessory:Uimp:4kV;Ui:690V
Us:AC220/230/240V,AC380/400/415V,50/60Hz;DC24V
Overload alarm no trip accessory:
Us:AC220/230/240V,AC380/400/415V,50/60Hz;DC24V

Responsible Testing Laboratory (as applicable), testing procedure and testing location(s):	
<input checked="" type="checkbox"/> CB Testing Laboratory:	Fujian Inspection and Research Institute for Product Quality(FQII)
Testing location/ address.....:	No. 121, Shan Jiao, West Yang Qiao Road, Fuzhou, Fujian, P.R.China & Chuanxin Road, Kuaian District, Mawei Economic Development Zone, Fuzhou, Fujian, P.R.China
Tested by (name, function, signature).....:	Yang Jilin (Engineer)
Approved by (name, function, signature)....:	Wei Yunming (Chief Engineer)
<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) :	