

## TEST REPORT

IEC 61009-1 and/or EN 61009-1

### Residual current operated circuit-breakers for over current protection for household and similar installations

Report reference No. .... : 03601-A-14CB0006-S  
Tested by (name+signature) ..... : Dai Weiqiang  
Witnessed by (name+signature) ..... :  
Supervised by (name+signature) ..... :  
Approved by (name+signature) ..... : Hu Delin  
Date of issue ..... : 2014-04-29

CB/CCA Testing Laboratory : Suzhou Electrical Apparatus Science Research Institute Stock Co., Ltd.(EETI)  
Address ..... : No.7 Yonghe Street, Binhe Road, New District, Suzhou, China  
Testing location /procedure ..... : TL ☒ RMT ☐ WMT ☐ SMT ☐ TMP ☐  
Address..... :

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 61009-1:1996+A1:2002  
(see also IEC 61009-2-1:1991, IEC 61009-2-2:1991)  
EN 61009-1:2004  
(see also EN 61009-2-1:94 + A11:98)  
Test procedure ..... : CB / CCA  
Non-standard test method ..... : N/A

Test Report Form No. .... : IECEN61009\_1A  
TRF originator ..... : OVE  
Master TRF ..... : 2005-06

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Test item description ..... : Residual current operated circuit breaker  
Trademark ..... : Tache  
Manufacturer ..... : Zhejiang Tengen Smart Electrics Co., Ltd.  
Series ..... : /  
Model and/or type reference ..... : THB1L-40  
Rating(s)..... :

Ue: AC230V; 1P+N  
In:6A,10A,16A,20A,25A,32A,40A; Type C , D  
Ics:7500A;Icn:10000A  
IΔm:3000A ;  
IΔn:30mA,50mA/ Type AC;



**Test items particulars:**

Type of RCBO ..... : AC  
 Time delay ..... : without  
 Method of operating ..... : dependent on the line voltage  
 Type of installation ..... : fixed  
 Number of poles ..... : 1P+N  
 Protection against external influences ..... : unenclosed  
 Method of mounting ..... : surface  
 Method of connection ..... : bolt-on type  
 Instantaneous tripping current ..... : C / D  
 Rated current ( $I_N$ ) ..... : 6A, 10A, 16A, 20A, 25A, 32A, 40A ;  
 Rated residual operating current ( $I_{\Delta N}$ ) ..... : 30mA, 50mA  
 Rated voltage ( $U_N$ ) ..... : 230V~  
 Rated frequency (Hz) ..... : 50Hz  
 Rated short-circuit capacity ( $I_{CN}$ ) ..... : 10000A  
 Rated residual making and breaking capacity  
 ( $I_{\Delta M}$ ) ..... : 3000 A  
 Nature of supply ..... : AC  
 Type of terminal ..... : screw type

**Test case verdicts**

Test case does not apply to the test object ... : N/A  
 Test item does meet the requirement ..... : P(ass)  
 Test item does not meet the requirement ..... : F(ail)

**Testing**

Date of receipt of test item ..... : 2010-01-09                      2013-10-16                      2014-03-20  
 Date(s) of performance of test ..... : 2010-01-13~2010-01-22    2013-10-25~2013-10-30    2014-04-09~2014-04-09

**General remarks**

**This report is not valid as a Test Report according to a Mutual Recognition Agreement (i.e. IECEE-CB, CCA) unless signed by an approved Testing Laboratory and appended to a corresponding Certificate issued by a National Certification Body, signatory to the relevant Scheme.**

The test results presented in this report relate only to the object tested.

This report shall not be reproduced, except in full, without the written approval of the Issuing testing laboratory.

"(see Enclosure #)" refers to additional information appended to the report.

"(see appended table)" refers to a table appended to the report.

Throughout this report a comma is used as the decimal separator.

**The basic part of this test report covers the evaluation of the IEC requirements.**

**Annex 1 of this test report covers the evaluation of the CENELEC common modifications.**



**General product information**

Ue: AC230V; 1P+N

In:6A,10A,16A,20A,25A,32A,40A; Type C , D

Ics:7500A;Icn:10000A

IΔm:3000A ;

IΔn:30mA,50mA/ Type AC;