IEC 61850 Certificate Level B[1]

No. VAL_P849_A0A

Issued to:
Schneider Electric Infrastructure Business China
Building 6B/C, F Block, No.188, Xinjun Ring Rd
Pujiang Hi-Tech Park, Minhang District, Shanghai

For the product:
Schneider MICOM P849
Type: Input & Output extension device
Software Version: A0A
Hardware Version: K

Issued by:
Schneider Electric Infrastructure Business China
CTC Validation Laboratoires

The product has not shown to be non-conforming to:

IEC 61850-6, 7-1, 7-2, 7-3, 7-4 and 8-1

Communication networks and systems in substations

The conformance test has been performed according to IEC 61850-10 with product's protocol, model and TISSUE implementation conformance statements: "Protocol Implementation Conformance Statement (PICS), version A0", "Model Implementation Conformance Statement (MICS), versionA0", "IEC61850 Tissues Implementation Statement (TICS), version A0", and extra information for testing "Protocol Implementation EXTRA INFORMATION FOR TESTING (PIXIT), version A0".

The following IEC 61850 conformance blocks are tested with a positive result (number of relevant and executed test cases / total number of test cases as defined in the UCA International Users Group Device Test Procedures Version 2.3 with TPCL[2] version 1.5):

1	Basic Exchange (22/24)	12a	Direct Control (4/12)
2	Data Sets (3/6)	12b	SBO Control (7/14)
4	Setting Group Selection (2/3)	12c	Enhanced Direct Control (4/13)
5	Unbuffered Reports (16/19)	12d	Enhanced SBO Control (10/19)
6	Buffered Reports (18/21)	13	Time Synchronization (3/5)
9a	GOOSE Publish (13/13)	14	File Transfer (6/7)
9b	GOOSE Subscribe (10/11)		

Schneider Electric grants this Certificate on account of tests performed at the Schneider Electric Infrastructure Business CTC's Validation Laboratories in Shanghai China, on 04/07/2012, with UniCASim 61850 ver 3.23.02 simulating an IEC 61850 client and the UniCA Analyzer ver 4.21.03. The tests are based on the UCA International Users Group Device Test Procedure Version 2.3 with TPCL version 1.5. This certificate has been issued for information purposes only and the original copy of the Schneider report: No. VAL_P849_A0A_RPT_01, on 04/07/2012 will prevail.
The tests have been carried out on one single specimen of the above-mentioned products, submitted by *Schneider Electric*. The certificate does not include an assessment of the manufacturer's production process. Conformity of his production process or any other product than the specimen tested by CTC Validation Laboratories is not the responsibility of Schneider Electric Infrastructure Business CTC Validation Laboratories.

Baohua WANG
CTC Validation Manager

Shanghai, 2012-07-24
Lin ZHANG
Test Engineer

1 Level B – Tester with ISO 9001 Quality System

2 TPCL – Test Procedure Change List

Schneider Electric Infrastructure Business China Technology Center
No.6 Building, No.188 XinJun Ring Road, F Block, Pujiang Hi-Tech , Minhang District, 201114 Shanghai, P.R.China
Tel: +86(0)21 3357 6888 Fax: +86(0)21 3357 6997 www.schneider-electric.com

Applicable Test Procedures from the UCA International Users Group Device Test Procedures version 2.3 with TPCL version 1.5

Conformance Block	Mandatory	Conditional
1: Basic Exchange	Ass1, Ass2, Ass3, AssN2, AssN3, AssN4, AssN5 Srv1, Srv2, Srv3, Srv4, Srv5, SrvN1abcd, SrvN4	AssN6 Srv6, Srv7, Srv8, Srv10, SrvN1e, SrvN1f, SrvN3
2: Data Sets	Dset1, Dset10a, DsetN1ae	
4: Setting Group Selection	Sg1, SgN1a	
5: Unbuffered Reporting	Rp1, Rp2, Rp3, Rp4, Rp7, Rp10, Rp12, RpN1, RpN2, RpN3, RpN4	Rp5, Rp8, Rp9, RpN5, RpN6
6: Buffered Reporting	Br1, Br2, Br3, Br4, Br7, Br8, Br9, Br12, Br14, BrN1, BrN2, BrN3, BrN4, BrN5	Br5, Br10, Br11, BrN6
9a: GOOSE publish	Gop2, Gop3, Gop4, Gop7, Gop10a	Gop1, Gop5, Gop6, Gop8 Gop9, Gop10b, GopN1, GopN2
9b: GOOSE subscribe	Gos1a, Gos2, Gos3, GosN1, GosN2, GosN3, GosN4, GosN5, GosN6	Gos1b
12a: Direct control	CtlN3, CtlN8, DOns1, DOns3	
12b: SBO control	Ctl3, CtlN1, CtlN2, CtlN3, CtlN4, SBOns1, SBOns2	
12c: Enhanced Direct control	CtlN3, CtlN8 Does2, Does5	
12d: Enhanced SBO control	Ctl3, CtlN1, CtlN2, CtlN3, CtlN4, CtlN9, SBOes1, SBOes2, SBOes3	CtlN6
13: Time sync	Tm1, Tm2, TmN1	
14: File transfer	Ft1, Ft2ab, Ft4, FtN1ab	Ft2c, FtN1c