IEC 61850 Conformance Certificate Level B[1]

Issued to: Nanjing SAC Power Grid Automation CO., Ltd. No. 39 Shuige Road, Jiangning Development Zone Nanjing, China	*For the product:* Differential Protection device PSL6603U 61850 module Ver. 5.02.02.08f ICD Ver. 1.05

Issued by: ABB Switzerland Ltd, Power Systems, SVC Baden

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

IEC 61850 First Edition Parts 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, the UCA International Users Group Device Test Procedures version 2.3 with TPCL[2] version 1.7.1, the product's protocol, model and technical issue implementation conformance statements:" IEC 61850 PICS for PS6600U series"," IEC 61850 MICS for PS6600U series"," IEC 61850 TICS for PS6600U series" and the extra information for testing: "IEC 61850 PIXIT for PS6600U series"

The following IEC 61850 conformance blocks have been tested with a positive result (number of relevant and executed test cases / total number of test cases):
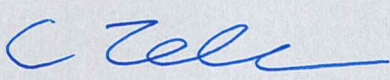
1	Basic Exchange (20/24)	9a	GOOSE Publish (8/13)
2	Data Sets (3/6)	9b	GOOSE Subscribe (10/11)
4	Setting Group Selection (3/3)	12a	Direct Control (5/12)
4+	Setting Group Definition (7/7)	12d	Enhanced SBO Control (10/19)
5	Unbuffered Reporting (15/19)	13	Time Synchronization (4/5)
6	Buffered Reporting (18/21)	14	File Transfer (4/7)
6+	Enhanced buffered reporting (9/12)		

This Certificate includes a summary of the test results as carried out at the SVC Baden in Switzerland with UniCAsim 61850 version 4.28.04 with test suite 3.28.00 and UniCA Analyzer 5.28.03. This document has been issued for information purposes only, and the original paper copy of the SVC Baden report: No. 1KHL050058 will prevail.

The test has been carried out on one single specimen of the product as referred above and submitted to SVC Baden by Nanjing SAC Power Grid Automation CO.,Ltd. The manufacturer's production process has not been assessed. This certificate does not imply that SVC Baden has approved any product other than the specimen tested.

Baden, 2014-08-06

S. Gerspach
Certification Manager

C. Zehnder
Test engineer

1 Level B - Tester with ISO 9001 Quality System
2 TPCL - Test procedures change list

ABB Switzerland Ltd
Power Systems, System Verification and Validation Center, SVC Baden
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Conformance Block		Mandatory	Conditional
1	Basic Exchange	Ass1, Ass2, Ass3, AssN2, AssN3, AssN4, AssN5 Srv1, Srv2, Srv3, Srv4, Srv5, SrvN1abcd, SrvN4	Srv6, Srv7, Srv8, SrvN1e, SrvN1f, SrvN3
2	Data Sets	Dset1, Dset10a, DsetN1ae	
4	Setting Group Selection	Sg1, SgN1a, Sg3	
4+	Setting Group Definition	Sg2, Sg4, SgN1b, SgN2, SgN3, SgN4, SgN5	
5	Unbuffered Reports	Rp1, Rp2, Rp3, Rp4, Rp7, Rp10, Rp12 RpN1, RpN2, RpN3, RpN4	Rp5, Rp8, Rp9, RpN6
6	Buffered Reports	Br1, Br2, Br3, Br4, Br7, Br8, Br9, Br12, Br14 BrN1, BrN2, BrN3, BrN4, BrN5	Br5, Br10, Br11, BrN6
6+	Enhanced buffered reporting	BrE1, BrE2, BrE3, BrE6, BrE7, BrE8, BrE9, BrE10, BrE11	
9a	GOOSE publish	Gop2, Gop3, Gop4, Gop7, Gop9, Gop10a	Gop5, GopN2
9b	GOOSE subscribe	Gos1a, Gos2, Gos3, GosN1, GosN2, GosN3, GosN4, GosN5, GosN6	Gos1b
12a	Direct Control	CtlN3, CtlN8 DOns1	CtlN11 DOns3
12d	Enhanced SBO control	Ctl3, CtlN1, CtlN2, CtlN3, CtlN4, CtlN9 SBOes1, SBOes2, SBOes3	CtlN11
13	Time Synchronization	Tm1, Tm2	Tm3, TmN1
14	File Transfer	Ft1, Ft2ab, Ft4, FtN1ab	

Applicable Test Procedures from the UCA International Users Group Device Test Procedures version 2.3 with TPCL version 1.7.1

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