



IEC 61850 Conformance Certificate Level B

1KHL050019

Issued to:
ABB AB
SA Products
S_721 59 Västerås
Sweden

For the product:
IED 670 1.1.12
Software version 1.4_77m_31
Hardware version 1MRK004812-DB
Serial No: I0937018

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

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 tests have been performed according to IEC 61850-10 with product's protocol and model implementation conformance statements: "IED 670 Series ver 1.1r12 – IEC 61850 PICS " (1MRK117-712, "IED 670 series, version 1.1r12 – IEC 61850 MICS " (1MRK117-710), and the related extra information for testing: "IED 670 version 1.1r13-PIXIT", (1MRG000769). The PIXIT document also contains the included and supported Tissues from UCA user forum.

The following IEC 61850 conformance blocks have been tested with successful results (number of relevant and executed test cases / total number of test cases as defined in the UCA International Users Group Device Test procedures):

1	Basic Exchange (19/24)	9a	GOOSE Publish (6/9)
2	Data Sets (2/29)	9b	GOOSE Subscribe (9/10)
3	Substitution (3/4)	12a	Direct Control (4/12)
4	Setting Group Selection (2/10)	12d	Enhanced SBO Control (11/20)
5	Unbuffered Reports (10/18)	13	Time Synchronization (3/5)
6	Buffered Reports (13/20)	14	File Transfer (3/7)

SVC grants this Certificate on account of successful tests performed at the SVC Baden, Switzerland.

These tests have been performed with UniCAsim 61850 version 3.18.00 test system running test suite "61850 Conformance Test v3.18.00", UniCA 61850 analyzer version 4.17.01.

The test is based on the UCA International Users Group Device Test Procedures version 2.2.

The results are described in SVC report: "IEC61850 Conformance Report REL670" (1KHL050018).

The tests have been carried out on one single specimen of the above-mentioned products, submitted by ABB AB.

The Certificate does not include an assessment of the manufacturer's production process. Conformity of his production process with the specimen tested by SVC Baden is not the responsibility of SVC.

Baden, 2009-12-23


S. Gerspach
SVC Lead


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ABB Switzerland Ltd
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Bruggerstrasser 72, CH-5400 Baden





Performed test cases:

Conformance Block	Mandatory	Conditional
1 Basic Exchange	Ass1, Ass2, Ass3, AssN2, AssN3, AssN4, AssN5, Svr1, Srv2, Svr3, Svr4, Svr5, SvrN1abcd, SvrN4.	Svr6, Srv7, Srv8, SrvN1e, SrvN3
2 Data Sets	Dset1, DsetN1ae	
3 Substitution	Sub1, Sub2, SubN1	
4 Setting Group Selection	Sg1, SgN1	
5 Unbuffered Reports	Rp1, Rp2, Rp3, Rp4, Rp7, RpN1, RpN2, RpN3, RpN4	Rp5
6 Buffered Reports	Br1, Br2, Br3, Br4, Br7, Br8, Br9, BrN1, BrN2, BrN3, BrN4, BrN5	Br5
9a GOOSE Publish	Gop2, Gop3, Gop4, Gop7	Gop1, GopN1
9b GOOSE Subscribe	Gos1, Gos2, Gos3, GosN1, GosN2, GosN3, GosN4, GosN5, GosN6	
12a Direct Control	CtlN3, CtlN8, DOns1, DOns3	
12d Enhanced SBO Control	Ctl3, CtlN1, CtlN2, CtlN3, CtlN4, CtlN6, CtlN9, SBOes1, SBOes2, SBOes3	Ctl7
13 Time Synchronization	Tm1, Tm2, TmN1	
14 File Transfer	Ft1, Ft2ab, FtN1ab	

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