



IEC 61850 Conformance Certificate Level B

Issued to:

ABB Switzerland Ltd
Synchronizing Equipment,
Excitation Systems and
Voltage Regulators
Austrasse
CH-5300 Turgi / Switzerland

For the product:

SYNCHROACT 5
SYN5-AUTO-50/60 V2.1

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: "IEC 61850 Interface PICS for SYNCHROACT 5" (3BHS263405 E02 Rev B. - Edition: may 2010), "IEC 61850 Interface MICS for SYNCHROACT 5" (3BHS263405 E01 Rev.B - Edition: may 2010), IEC 61850 Interface TICS for SYNCHROACT 5" (3BHS263405 E03 Rev.B - Edition: may 2010) and the related extra information for testing: "IEC 61850 Interface PIXIT for SYNCHROACT 5" (3BHS263405 E04 Rev.B - Edition: may 2010).

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 (17/23)	9a	GOOSE Publish (6/12)
2	Data Sets (2/26)	9b	GOOSE Subscribe (0/9)
3	Substitution (0/4)	12a	Direct Control (3/16)
4	Setting Group Selection (0/10)	12d	Enhanced SBO Control (0/20)
5	Unbuffered Reports (0/18)	13	Time Synchronization (1/5)
6	Buffered Reports (13/20)	14	File Transfer (0/5)

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

These tests have been performed with UniCAsim 61850 version 3.19.02 test system running test suite "61850 Conformance Test v3.19.00", UniCA 61850 analyzer version 4.20.01.

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 Syncrotact" (1KHL050021).

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

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, 2010-06-21

S. Gerspach
SVC Manager

Ch. Zehnder
Test engineer

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ABB Switzerland Ltd
Power Systems, System Verification and Validation Center, SVC Baden
Bruggerstrasser 72, CH-5400 Baden





Performed test cases:

Conformance Block	Mandatory	Conditional
1 Basic Exchange	Ass1, Ass2, Ass3, AssN2, AssN3, AssN4, AssN5, Svr1, Svr2, Srv3, Srv4, Srv5, SrvN1abcd, SrvN4.	Srv7,Srv8,SrvN1e, SrvN3
2 Data Sets	Dset1, DsetN1ae	
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
12a Direct Control	CtIN3, CtIN8,DOns1	
13 Time Synchronization	Tm1	

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