



# IEC 61850 Certificate Level A<sup>1</sup>

No. 30530028-Consulting 2005-0575

Issued to:  
ABB Switzerland, Ltd.  
Power Technology Systems  
Bruggerstrasse 72  
Baden  
Switzerland

For the product:  
ABB RE.316\*4  
Software Version RE.316 V7.00

Issued by:



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 technical issue implementation conformance statements: "1KHA001032-TEN IEC61850 conformance statement for RE.316\*4" and "1KHA001033-TEN IEC61850 TICS for RE.316\*4", and extra information for testing (PIXIT) "1KHA001034-TEN IEC61850 PIXIT for RE.316\*4".

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 as defined in the UCA International Users Group Device Test procedures):

1 Basic Exchange (19/23)	9ab GOOSE (13/20)
2 Data Sets (2/5)	12a Direct Control (5/11)
4 Setting Group Selection (2/3)	12d Enhanced SBO Control (12/18)
5 Unbuffered Reports (11/13)	13 Time Synchronization (3/4)
6 Buffered Reports (14/15)	

KEMA grants this Certificate on account of tests performed at the KEMA laboratory in Arnhem, The Netherlands. These tests are performed with UniCASim 61850 version 2.12.01 test system running test suite "61850 Conformance Test v1.17", UniCA 61850 analyzer version 4.11.01. The test is based on the UCA International Users Group Device Test Procedures version 1.1. The results are described in KEMA report: No. 30530028-Consulting 2005-0574.

The tests have been carried out on one single specimen of the above-mentioned products, submitted by ABB. The Certificate does not include an assessment of the manufacturer's production process. Conformity of his production process with the specimen tested by KEMA is not the responsibility of KEMA.

Arnhem, August 29, 2005

S.J.L.M. Janssen  
Managing Director KEMA Consulting

E.F. Melenhorst  
Senior Test Engineer

1 Level A – Independent Test Lab with certified ISO 9000 or ISO 17025 Quality System

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