



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

International Usersgroup

No. 74100446-MOC/INC 12-02379

Issued to:  
Stucke Elektronik GmbH  
Merkurring 26  
22143 Hamburg  
Germany

For the product:  
SYMAP-Compact+  
Digital Protection Relay  
Firmware v1.0-1.6.0  
Firmware IEC61850: v1.0

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, the UCA International Users Group Device Test Procedures version 2.3 with TPCL<sup>2</sup> version 1.5, the product's protocol, model and technical issue implementation conformance statements and the extra information for testing: "SYMAP-Compact Protection Communication Appendix, version 3.4".

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):

1	Basic Exchange (16/24)	9a	GOOSE Publish (8/13)
2	Data Sets (3/6)	9b	GOOSE Subscribe (10/11)
2+	Data Set Definition (23/23)	12a	Direct Control (4/12)
5	Unbuffered Reporting (14/19)	13	Time Synchronization (3/5)

This certificate includes a summary of the test results as carried out at KEMA in the Netherlands with UniCA 61850 Client simulator 3.25.02 with test suite 3.24.03 and UniCA 61850 Analyzer 5.26.03. This document has been issued for information purposes only, and the original paper copy of the KEMA report: No. 74100446-MOC/INC 12-02378 will prevail.

The test has been carried out on one single specimen of the product as referred above and submitted to KEMA by Stucke Elektronik. The manufacturer's production process has not been assessed. This attestation does not imply that KEMA has approved any product other than the specimen tested.

Arnhem, December 18, 2012

M. Adriaensen  
Director Intelligent Networks & Communication

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Certification Manager

- 1 Level A - Independent test lab with certified ISO 9000 or ISO 17025 quality system
- 2 TPCL - Test procedures change list

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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	Srv8, SrvN1f
2: Data Sets	Dset1, Dset10a, DsetN1ae	
2+: Data Set Definition	Dset2, Dset3, Dset4, Dset5, Dset6, Dset7, Dset8, Dset9  DsetN1cd, DsetN2, DsetN3, DsetN4, DsetN5, DsetN6, DsetN7, DsetN8, DsetN9, DsetN10, DsetN11, DsetN12, DsetN13, DsetN14, DsetN15	
5: Unbuffered Reporting	Rp1, Rp2, Rp3, Rp4, Rp7, Rp10, Rp12  RpN1, RpN2, RpN3, RpN4	Rp6, Rp8, RpN5
9a: GOOSE publish	Gop2, Gop3, Gop4, Gop7, Gop10a	Gop1, Gop6, GopN1
9b: GOOSE subscribe	Gos1a, Gos2, Gos3, GosN1, GosN2, GosN3, GosN4, GosN5, GosN6	Gos1b
12a: Direct control	CtlN3, CtlN8  DOns1, DOns3	
13: Time Synchronization	Tm1, Tm2, TmN1	