

IEC 61850 Certificate Level A1

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Issued to:

SCHNEIDER ELECTRIC 35 rue Joseph Monier 92500 Rueil Malmaison France No. 74104410-MOC/INC 13-2121

For the server product: MiCOM P746 Software version A0B Hardware Suffix K SER No. 36201551/02/13 Made in Stone, UK

Issued by:



The server 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 TPCL² version 1.5, the product's protocol, model and technical issue implementation conformance statements: "MiCOM P746 Numerical Busbar Protection P746/EN TC/B31 PICS & MICS" and "MiCOM P746 Numerical Busbar Protection P746/EN TC/B31 TICS" and the extra information for testing: "MiCOM P746 Numerical Busbar Protection P746/EN TC/B31 PIXIT".

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 (18/24)
- 2 Data Sets (3/6)

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- 4 Setting Group Selection (2/3)
- 5 Unbuffered Reporting (15/19)
 - Buffered Reporting (17/21)

- 9a GOOSE Publish (9/13)
- 9b GOOSE Subscribe (10/11)
- 12a Direct Control (4/12)
- 12b SBO Control (6/14)
- 12c Enhanced Direct Control (4/13)
- 12d Enhanced SBO Control (9/19)13 Time Synchronization (4/5)
- 14 File Transfer (6/7)

This certificate includes a summary of the test results as carried out at SCHNEIDER ELECTRIC in China with UniCA 61850 Client simulator 4.27.02 with test suite 3.26.00 and UniCA 61850 Analyzer 5.26.04. This document has been issued for information purposes only, and the original paper copy of the KEMA report: No. 74104410-MOC/INC 13-2122 will prevail.

The test has been carried out on one single specimen of the product as referred above and submitted to KEMA by SCHNEIDER ELECTRIC. 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, May 1, 2018

M. Adriaensen

Director Intelligent Networks & Communication

R. Schimmel
Certification Manager

1 Level A - Independent test lab with certified ISO 9001 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	Srv6, Srv7, SrvN1e, SrvN3
2: Data Sets	Dset1, Dset10a, DsetN1ae	
4: Setting Group Selection	Sg1, SgN1a	
5: Unbuffered Reporting	Rp1, Rp2, Rp3, Rp4, Rp7, Rp10, Rp12 RpN1, RpN2, RpN3, RpN4	Rp5, Rp8, RpN5, RpN6
6: Buffered Reporting	Br1, Br2, Br3, Br4, Br7, Br8, Br9, Br12, Br14 BrN1, BrN2, BrN3, BrN4, BrN5	Br5, Br10, BrN6
9a: GOOSE publish	Gop2, Gop3, Gop4, Gop7, Gop10a	Gop1, Gop6, Gop10b, GopN1
9b: GOOSE subscribe	Gos1a, Gos2, Gos3, GosN1, GosN2, GosN3, GosN4, GosN5, GosN6	Gos1b
12a: Direct control	CtiN3, CtiN8	
	DOns1, DOns3	
12b: SBO control	Ctl3, CtlN1, CtlN2, CtlN3, CtlN4,	
	SBOns2	
12c: Enhanced Direct Control	CtiN3, CtiN8	
	DOes2, DOes5	
12d: Enhanced SBO control	Cti3, CtiN1, CtiN2, CtiN3, CtiN4, CtiN9	
	SBOes1, SBOes2, SBOes3	
13: Time sync	Tm1, Tm2, TmN1	Tm3
14: File transfer	Ft1, Ft2ab, Ft4, FtN1ab	Ft2c, FtN1c