

IEC 61850 Certificate Level A¹

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Issued to: Areva T&D Lyoner Strasse 44-48 D-60528 Frankfurt am Main Germany No. 30710079-Consulting 07-0416

For the product:
MiCOM P634
Transformator-Differential Protection Device
Firmware version -611 -203

Issued by: KEMA

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: "P634 Transformator-Differential Protection Device Version -611 –203 PICS, MICS and Address Assignment List", "PX30 Version -6xx –2xx Technical Issues (TISSUES)" and product's extra information for testing: "PX3X/EN PX Version 01C Protocol Implementation Extra Information for Testing (PIXIT) of the IEC 61850 Communication Interface".

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 v1.1):

1 Basic Exchange (16/23)

2 Data Sets (2/5)

5 Unbuffered Reporting (10/13)

9ab Generic Object Oriented Substation Event (16/20)

13 Time Synchronization (3/4)

14 File Transfer (3/6)

This Certificate includes a summary of the test results as carried out at in with UniCAsim 61850 version 2.15.00 with test suite 2.15.00 and UniCA 61850 analyzer 4.15. The test is based on the UCA International Users Group Device Test Procedures version 1.1. This document has been issued for information purposes only, and the original paper copy of the KEMA report: No. 30710079-Consulting 07-0415 will prevail.

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

Arnhem, June 5, 2007

S.J.L.M. Janssen Managing Director KEMA Consulting R. Schimmel Certification Manager

1 Level A - Independent Test lab with certified ISO 9000 or ISO 17025 Quality System

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Applicable Test Procedures from the UCA International Users Group Device Test Procedures version 1.1

Conformance Block	Mandatory	Conditional
1: Basic Exchange	Ass1, Ass2, Ass3,	SrvN1e, SrvN3
	AssN2, AssN3, AssN4, AssN5	
	Srv1, Srv2, Srv3, Srv4, Srv5,	
	SrvN1abcd, SrvN4	
2: Data Sets	Dset1, DsetN1ae	
5: Unbuffered Reporting	Rp1, Rp2, Rp3, Rp4, Rp7	Rp5
	RpN1, RpN2, RpN3, RpN4	
9a: GOOSE publish	Gop2, Gop3, Gop4, Gop7	Gop1, Gop6, GopN1
9b: GOOSE subscribe	Gos1, Gos2, Gos3, GosN1, GosN2,	
	GosN3, GosN4, GosN5, GosN6	
13: Time sync	Tm1, Tm2, TmN1	
14: File transfer	Ft1, Ft2ab, FtN1ab	