No. 30920191-Consuling 09-0562

Issued to:
Areva T&D
Lyoner Strasse 44-48
D-60528 Frankfurt am Main
Germany

For the product:
AREVA P632
Transformator-Differential Protection Device
Version -611 -204

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: "AREVA 632 Transformator-Differential Protection Device Version -611 -204 PICS, MICS and Address Assignment List", and product's extra information for testing: "AREVA PX3X PX3X/EN PX Version 01D 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 v2.2):

| | | | | |
|---|---|---|---|---|
| 1 | Basic Exchange (19/24) | | 9a | GOOSE Publish (7/11) |
| 2 | Data Set (3/6) | | 9b | GOOSE Subscribe (9/10) |
| 5 | Unbuffered Reporting (12/18) | | 13 | Time Synchronization (3/5) |
| | | | 14 | File Transfer (4/7) |

This Certificate includes a summary of the test results as carried out at KEMA in Arnhem, The Netherlands with UniCAsim 61850 version 3.18.00  with test suite 3.18.00 and UniCA 61850 analyzer 4.18.01. The test is based on the UCA International Users Group Device Test Procedures version 2.2. This document has been issued for information purposes only, and the original paper copy of the KEMA report: No. 30920191-Consuling 09-0561 will prevail.

The test has 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, 23 March 2009

W. Strabbing
Manager Intelligent Networks and Communication

M.Flohil
Senior test engineer

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

Applicable Test Procedures from the UCA International Users Group Device Test Procedures version 2.2

| Conformance Block | Mandatory | Conditional |
|---|---|---|
| 1: Basic Exchange | Ass1, Ass2, Ass3, AssN2, AssN3, AssN4, AssN5<br><br>Srv1, Srv2, Srv3, Srv4, Srv5, SrvN1abcd, SrvN4 | Srv6, Srv7, Srv8, SrvN1e, SrvN3 |
| 2: Data Set | Dset1, Dset10a, DsetN1ae | |
| 5: Unbuffered Reporting | Rp1, Rp2, Rp3, Rp4, Rp7<br><br>RpN1, RpN2, RpN3, RpN4 | Rp5, Rp8, Rp10 |
| 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, Ft4, FtN1ab | |

Note: TmN1 the time quality is always valid