



IEC 61850 Certificate Level A¹

No. 2016PUCA0001

Issued to:

Beijing Sifang Automation CO., LTD
No.9, Shangdi 4th Street, Haidian District, Beijing,
P.R.China

For the product:

CSC-316 Numerical Transformer Protection IED
Software Version: 1.00MYS

Issued by:



The server product has not been 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 test procedures change list version 1.8, the product's protocol, model and technical issue implementation conformance statements: "Protocol Implementation Conformance Statement (PICS) for CSC-316 Numerical Transformer Protection IED", "Modeling Implementation Conformance Statement (MICS) for CSC-316 Numerical Transformer Protection IED", "IEC 61850 Tissues Conformance Statement (TICS) for CSC-316 Numerical Transformer Protection IED" and the extra information for testing: "Protocol implementation extra information (PIXIT) of the IEC 61850 communication interface in CSC-316 Numerical Transformer Protection IED".

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 (23/24) | 5 Unbuffered Reporting (18/19) |
| 2 Data Sets (3/6) | 6 Buffered Reporting (25/28) |
| 2+ Data Set Definition (23/23) | 12a Direct control (5/12) |
| 3 Substitution (4/4) | 12d Enhanced SBO Control (11/19) |
| 4 Setting Group Selection (3/3) | 13 Time sync (3/5) |
| 4+ Setting Group Definition (7/7) | 14 File transfer (4/7) |

This Certificate includes a summary of the test results as carried out at the KETOP Lab's offices in Xuchang, China with UniCAsim 61850 Client Version 4.26.04 with test suite Version 3.26.00 and the UniCA 61850 analyzer Version 5.27.07. This document has been issued for information only, and the original paper copy of the KETOP Lab report: No. JW151674 will prevail.

The test have been carried out on one single specimen of the product as referred above and submitted to KETOP Lab by Beijing Sifang Automation CO., LTD. The manufacturer's production process has not been assessed. This certificate does not imply that KETOP Lab has approved any product other than the specimen tested.

Xuchang, Feb 15th, 2016

He Chun
Director of PRTC Department

Yin Qingwei
Test Engineer

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

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China KETOP Lab (Xuchang KETOP Testing Technology CO.LTD)
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Applicable Test Procedures from the UCA International Users Group Server Device Test Procedures version 2.3 with test procedures change list version 1.8

| Conformance Block | Mandatory | Conditional |
|------------------------------|--|--|
| 1: Basic Exchange | Ass1, Ass2, Ass3, AssN2, AssN4, AssN5 Srv1, Srv2, Srv3, Srv4, Srv5, SrvN1abcd, SrvN4 | AssN3, Srv6, Srv7, Srv8, Srv9, Srv10, SrvN1e, SrvN1f, SrvN2, SrvN3 |
| 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 | |
| 3: Substitution | Sub1, Sub2, Sub3, SubN1 | |
| 4: Setting Group Selection | Sg1, SgN1a, Sg3 | |
| 4+: Setting Group Definition | Sg2, Sg4 SgN1b, SgN2, SgN3, SgN4, SgN5 | |
| 5: Unbuffered Reporting | Rp1, Rp2, Rp3, Rp4, Rp9, Rp15 RpN1, RpN2, RpN3, RpN4, RpN8 | Rp5, Rp6, Rp7, Rp8, Rp11, Rp12, RpN5 |
| 6: Buffered Reporting | Br1, Br2, Br3, Br4, Br9, Br15, Br20, Br21, Br22, Br25, Br26, Br27, Br28 BrN1, BrN2, BrN3, BrN4, BrN5, BrN8 | Br5, Br6, Br7, Br8, Br11, Br12 |
| 12a Direct control | CtlN3, CtlN8, DOns1 | CtlN11, DOns3 |
| 12d Enhanced SBO control | Ctl3, CtlN1, CtlN2, CtlN3, CtlN4, CtlN9 SBOes1, SBOes2, SBOes3 | CtlN6, CtlN11 |
| 13 Time sync | Tm1, Tm2 | TmN1 |
| 14: File transfer | Ft1, Ft2ab, Ft4, FtN1ab | |

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