

IEC 61850 Certificate Level A1

No. 2016PUCA0004

Issued to:

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

CSC-300 Numerical Generator Transformer Unit Protection IED Software Version: 1.00MYS

Issued by: **KEIOP**开誓

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-300 Numerical Generator Transformer Unit Protection IED",

"Modeling Implementation Conformance Statement (MICS) for CSC-300 Numerical Generator Transformer Unit Protection IED", "IEC 61850 Tissues Conformance Statement (TICS) for CSC-300 Numerical Generator Transformer Unit Protection IED" and the extra information for testing: "Protocol implementation extra information (PIXIT) of the IEC 61850 communication interface in CSC-300 Numerical Generator Transformer Unit 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)
- 2 Data Sets (3/6)
- 2+ Data Set Definition (23/23)
- 3 Substitution (4/4)
- 4 Setting Group Selection (3/3)
- 4+ Setting Group Definition (7/7)

- 5 Unbuffered Reporting (18/19)
- 6 Buffered Reporting (25/28)
- 12a Direct control (5/12)
- 12d Enhanced SBO Control (11/19)
- 13 Time sync (3/5)
- 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. JW151763 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

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



Applicable Test Procedures from the UCA International Users Group Server Device Test Procedures version 2.3

with test procedures change list version 1.8 Mandatory Conditional Conformance Block Ass1, Ass2, Ass3, AssN2, AssN4, AssN3, Srv6, Srv7, Srv8, Srv9, 1: Basic Exchange AssN5 Srv10, SrvN1e, SrvN1f, SrvN2, Srv1, Srv2, Srv3, Srv4, Srv5, SrvN3 SrvN1abcd, SrvN4 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 Sg2, Sg4 Definition SgN1b, SgN2, SgN3, SgN4, SgN5 Rp1, Rp2, Rp3, Rp4, Rp9, Rp15 5: Unbuffered Reporting Rp5, Rp6, Rp7, Rp8, Rp11, Rp12, RpN1, RpN2, RpN3, RpN4, RpN8 RpN5 6: Buffered Reporting Br1, Br2, Br3, Br4, Br9, Br15, Br20, Br5, Br6, Br7, Br8, Br11, Br12 Br21, Br22, Br25, Br26, Br27, Br28 BrN1, BrN2, BrN3, BrN4, BrN5, BrN8 12a Direct control CtlN11, DOns3 CtlN3, CtlN8, DOns1 12d Enhanced SBO Ctl3, CtlN1, CtlN2, CtlN3, CtlN4, CtlN6, CtlN11 control CtlN9 SBOes1, SBOes2, SBOes3 13 Time sync Tm1, Tm2 TmN1 14: File transfer Ft1, Ft2ab, Ft4, FtN1ab

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