

IEC 61850 Certificate Level A¹

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Issued to:

Siemens Protection Devices Limited North Farm Road, Hebburn, Tyne & Wear. NE31 1LX. United Kingdom No. 74101108-MOC/INC 11-3053

For the product:
Reyrolle 7SR220
Directional Overcurrent Protection
Firmware Version: 7a
EN100 V04.08

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: "7SR210 & 7SR220 PICS (R7a-7a)", "7SR220 MICS (R7a-7a)", "7SR210 & 7SR220 TICS (R7a-7a)" and product's extra information for testing: "7SR210 & 7SR220 PIXIT (R7a-7a)".

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 v2.2b):

- 1 Basic Exchange (20/24)
- 2 Data Sets (3/6)
- 2+ Data Set Definition (23/23)
- Setting Group Selection (2/3)Unbuffered Reporting (15/18)
- 6 Buffered Reporting (17/20)
- 6+ Enhanced buffered reporting (10/12)
- 9a GOOSE Publish (7/12)
- 9b GOOSE Subscribe (10/10)
- 12a Direct Control (5/12)
- 12c Enhanced Direct Control (5/13)
- 12d Enhanced SBO Control (10/19)
- 13 Time Synchronization (4/5)
- 14 File Transfer (4/7)

This Certificate includes a summary of the test results as carried out at Siemens in United Kingdom with UniCAsim 61850 version 3.23.02 with test suite 3.23.00 and UniCA 61850 analyzer 4.24.02 The test is based on the UCA International Users Group Device Test Procedures version 2.2b. This document has been issued for information purposes only, and the original paper copy of the KEMA report: No. 74101108-MOC/INC 11-3052 will prevail.

The test has been carried out on one single specimen of the product as referred above and submitted to KEMA by Siemens Protection Devices Limited. 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 ested.

Arnhem, 5 December 2011

M. Adriaensen

Regional Director Management & Operations Consulting

R.S. Massink Test engineer

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 2.2b

Conformance Block	Mandatory	Conditional
1: Basic Exchange	Ass1, Ass2, Ass3, AssN2, AssN3, AssN4, AssN5	Srv6, Srv7, Srv8, SrvN1e, SrvN1f, SrvN3
	Srv1, Srv2, Srv3, Srv4, Srv5, 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	
4: Setting Group Selection	Sg1, SgN1a	
5: Unbuffered Reporting	Rp1, Rp2, Rp3, Rp4, Rp7, Rp10	Rp5, Rp6, Rp8, Rp9, RpN5
	RpN1, RpN2, RpN3, RpN4	
6: Buffered Reporting	Br1, Br2, Br3, Br4, Br7, Br8, Br9, Br12	Br5, Br6, Br10, Br11
	BrN1, BrN2, BrN3, BrN4, BrN5	
6+: Enhanced buffered reporting	BrE1, BrE2, BrE3, BrE6, BrE7, BrE8, BrE9, BrE10, BrE11	BrE12
9a: GOOSE publish	Gop2, Gop3, Gop4, Gop7	Gop1, Gop6, GopN1
9b: GOOSE subscribe	Gos1a, Gos2, Gos3, GosN1, GosN2, GosN3, GosN4, GosN5, GosN6	Gos1b
12a: Direct control	CtlN3, CtlN8	CtlN11
	DOns1, DOns3	
12c: Enhanced Direct Control	CtlN3, CtlN8	CtlN11
	DOes2, DOes5	
12d: Enhanced SBO control	Ctl3, CtlN1, CtlN2, CtlN3, CtlN4, CtlN9	CtlN11
	SBOes1, SBOes2, SBOes3	
13: Time sync	Tm1, Tm2, TmN1	Tm3
14: File transfer	Ft1, Ft2ab, Ft4, FtN1ab	