IEC 61850 Certificate Level A[1]

No. 74101420-MOC/INC 12-01001

Issued to:
Ashida Electronics Pvt. Ltd.
Plot No. A308, Road No. 21, Wagle
Industrial Estate,
THANE 400604, Mumbai INDIA

For the product:
Type: ADR 233B
Serial number: 12E233B008
Hardware: V3.0
Software: V02.04 / 2012/5

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, the UCA International Users Group Device Test Procedures version 2.3 with TPCL[2] version 1.5, the product's Protocol, Model, Technical issue implementation conformance statements and the extra information for testing: "ASHIDA Numerical Differential Protection Relay Issue 0.0.6 Date: 2012-06-22".

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 (19/24)		9a	GOOSE Publish (8/13)
2	Data Sets (3/6)		9b	GOOSE Subscribe (10/11)
2+	Data Set Definition (23/23)		12a	Direct Control (6/12)
5	Unbuffered Reporting (15/19)		13	Time Synchronization (4/5)
6	Buffered Reporting (17/21)			

This certificate includes a summary of the test results as carried out at Ashida Electronics in India with UniCA 61850 client simulator version 3.23.02 with test suite 3.24.00 and UniCA 61850 analyzer 4.24.02. This document has been issued for information purposes only, and the original paper copy of the KEMA report: No. 74101420-MOC/INC 12-01000 will prevail.

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

Arnhem, June 5, 2012

M. Adriaensen
Director Intelligent Networks & Communication

R. Schimmel
Certification Manager

1 Level A - Independent Test lab with certified ISO 9000 or ISO 17025 Quality System
2 TPCL - test procedures change list

Applicable Test Procedures from the UCA International Users Group Device Test Procedures version 2.3 with TPCL version 1.5

Conformance Block	Mandatory	Conditional
1: Basic Exchange	Ass1, Ass2, Ass3, AssN2, AssN3, AssN4, AssN5 Srv1, Srv2, Srv3, Srv4, Srv5, SrvN1abcd, SrvN4	Srv6, Srv7, Srv8, SrvN1e, 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	
5: Unbuffered Reporting	Rp1, Rp2, Rp3, Rp4, Rp7, Rp10, Rp12 RpN1, RpN2, RpN3, RpN4	Rp6, Rp8, Rp9, RpN5
6: Buffered Reporting	Br1, Br2, Br3, Br4, Br7, Br8, Br9, Br12, Br14 BrN1, BrN2, BrN3, BrN4, BrN5	Br6, Br10, Br11
9a: GOOSE publish	Gop2, Gop3, Gop4, Gop7, Gop10a	Gop1, Gop6, GopN1
9b: GOOSE subscribe	Gos1a, Gos2, Gos3, GosN1, GosN2, GosN3, GosN4, GosN5, GosN6	Gos1b
12a: Direct control	CtlN3, CtlN8 DOns1, DOns3	Ctl2, CtlN11
13: Time sync	Tm1, Tm2, TmN1	Tm3