

IEC 61850 Certificate Level A¹

No. 74101045-MOC/INC 12-00262

SCHEME No. 472PTA

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Issued to:

Mitsubishi Electric Corporation Protection & Control Systems Transmission & Distribution Systems Center Kobe, Japan



For the product:
Bus Bar Protection Relay MBP-H1A
s/w version:
MM-CPU PGJP21 E
MR-CPU PGJP22 G
FE-CPU PGJP28 B
h/w version:

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: "Protocol Implementation Conformance Statement (PICS) and Tissues Conformance Statement (TICS) of the IEC 61850 interface for MBP-H1A", "Model Implementation Conformance Statement (MICS) of the IEC 61850 interface for MBP-H1A", and product's extra information for testing: "protocol implementation extra information for testing (PIXIT) of the IEC 61850 interface in MBP-H1A".

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 v2.3 with TPCL version 1.3):

1 Basic Exchange (18/24)

2 Data Sets (3/6)

4 Setting Group Selection (3/3)

4+ Setting Group Definition (7/7)5 Unbuffered Reporting (15/19)

6 Buffered Reporting (17/21)

9a GOOSE Publish (8/13)

9b GOOSE Subscribe (10/11)

12a Direct Control (4/12)

13 Time Synchronization (4/5)

14 File Transfer (4/7)

This Certificate includes a summary of the test results as carried out at Mitsubishi Electric Corporation in Japan with UniCAsim 61850 version 3.23.02 with test suite 3.24.01 and UniCA 61850 analyzer 4.21.03. The test is based on the UCA International Users Group Device Test Procedures version 2.3. This document has been issued for information purposes only, and the original paper copy of the KEMA report: No. 74101045-MOC/INC 12-00261 will prevail.

The test has been carried out on one single specimen of the product as referred above and submitted to KEMA by Mitsubishi Electric Corporation. 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, February 2, 2012

M. Adriaensen
Regional Director Management & Operations Consulting

S.J.T. Mulder Senior 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 2.3

Conformance Block	Mandatory	Conditional
1: Basic Exchange	Ass1, Ass2, Ass3, AssN2, AssN3, AssN4, AssN5	Srv8, SrvN1e, SrvN1f, SrvN3
	Srv1, Srv2, Srv3, Srv4, Srv5, SrvN1abcd, SrvN4	
2: Data Sets	Dset1, Dset10a, DsetN1ae	
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, Rp7, Rp10, Rp12 RpN1, RpN2, RpN3, RpN4	Rp5, Rp8, Rp9, RpN5
6: Buffered Reporting	Br1, Br2, Br3, Br4, Br7, Br8, Br9, Br12, Br14 BrN1, BrN2, BrN3, BrN4, BrN5	Br5, 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	
13: Time sync	Tm1, Tm2, TmN1	Tm3
14: File transfer	Ft1, Ft2ab, Ft4, FtN1ab	