IEC 61850 Certificate Level A[1]

No. 30820234-Consulting 09-1524

Issued to:

P&B Engineering
Belle Vue Works
Boundary Street
Manchester
M12 5NG
UK

For the product:

P&B SuperVision Series
MotorVision MVD
Motor Protection Relay
Firmware V2.058

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: "IEC 61850 Protocol Implementation Conformance Statement(PICS) for P&B SuperVision Series MotorVision MVD relays, Version 1.0", "IEC 61850 Model Implementation Conformance Statement(MICS) for P&B SuperVision Series MotorVision MVD relays, Version 1.0", "IEC 61850 TIssues Conformance Statement (TICS) for P&B SuperVision Series MotorVision MVD relays, Version 1.0" and product's extra information for testing: "IEC 61850 Protocol Implementation eXtra Information for Testing (PIXIT) for P&B SuperVision MotorVision MVD relays, Version 1.0".

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 v2.2):

1	Basic Exchange (20/24)	12a	Direct Control (5/11)
2+	Data Set Definition (26/29)	12b	SBO Control (7/15)
5	Unbuffered Reporting (14/18)	12c	Enhanced Direct Control (5/13)
6	Buffered Reporting (16/20)	12d	Enhanced SBO Control (10/19)
9a	GOOSE Publish (7/12)	13	Time Synchronization (3/5)
9b	GOOSE Subscribe (9/10)	14	File Transfer (6/7)

This Certificate includes a summary of the test results as carried out at KEMA in The Netherlands with UniCAsim 61850 version 3.19.00 with test suite 3.19.00 and UniCA 61850 analyzer 4.18.01. The test is based on the UCA International Users Group Device Test Procedures version 2.2. This document has been issued for information purposes only, and the original paper copy of the KEMA report: No. 09-1523 will prevail.

The test has been carried out on one single specimen of the products as referred above and submitted to KEMA by P&B Engineering. 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, July 21 2009

W. Strabbing
Manager Intelligent Networks and Communication

Richard Schimmel
Certification Manager

Applicable Test Procedures from the UCA International Users Group Device Test Procedures version 2.2

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, SrvN2, SrvN3
2+: Data Set Definition	Dset1, Dset10a, DsetN1ae 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 RpN1, RpN2, RpN3, RpN4	Rp5, Rp6, Rp9, RpN5
6: Buffered Reporting	Br1, Br2, Br3, Br4, Br7, Br8, Br9, Br12 BrN1, BrN2, BrN3, BrN4, BrN5	Br5, Br6, Br10
9a: GOOSE publish	Gop2, Gop3, Gop4, Gop7	Gop1, Gop6, GopN1
9b: GOOSE subscribe	Gos1a, Gos2, Gos3, GosN1, GosN2, GosN3, GosN4, GosN5, GosN6	
12a: Direct control	CltN3, CtlN8 DOns1, DOns3	CtlN11
12b: SBO control	Ctl3, CltN1, CltN2, CtlN3, CltN4 SBOns2	CtlN11
12c: Enhanced Direct Control	CltN3, CtlN8 DOes2, DOes5	CtlN11
12d: Enhanced SBO control	Ctl3, CltN1, CltN2, CltN3, CltN4, CtlN9 SBOes1, SBOes2, SBOes3	CtlN11
13: Time sync	Tm1, Tm2, TmN1	
14: File transfer	Ft1, Ft2ab, Ft4, FtN1ab	Ft2c, FtN1c

Note: Dset3, Dset5, Dset6, Dset9, DsetN3, DsetN5, DsetN7, DsetN9, DsetN11, DsetN14 These testcases have not been performed since the DUT does not support non-persistent datasets.