

# IEC 61850 Certificate Level A<sup>1</sup>

No. 30610052-Consulting 2006-0908

Issued to:  
GE MULTILIN  
215 Anderson Ave.,  
Markham, ON  
Canada  
L6E 1B3

For the product:  
UR F60 Feeder Relay  
Model nr. F60-G03-HCH-F8F-H6H  
Firmware v5.20, Boot v3.01

Issued by:



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 and model implementation conformance statements: "UR IEC 61850 ACSI Conformance Statement And Logical Nodes, revision 6" and technical issue (TICS) and extra information for testing (PIXIT): "IEC 61850 Tissues Conformance Statement For UR, v1.0" and "Protocol implementation extra information for testing (PIXIT) of the IEC 61850 communication interface in UR Family, October 5, 2006".

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):

1	Basic Exchange (20/23)	12a	Direct Control (4/11)
2	Data Sets (2/5)	12b	SBO Control (5/13)
5	Unbuffered Reports (11/13)	13	Time Synchronization (3/4)
6	Buffered Reports (14/15)	14	File transfer (3/6)
9ab	Generic Object Oriented Substation Event (15/20)		

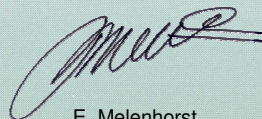
This Certificate includes a summary of the test results as carried out at KEMA Arnhem, the Netherlands with UniCasim 61850 version 2.14.01 test system running test suite "61850 Conformance Test v2.14.02", UniCA 61850 analyzer version 4.14.01. The test is based on the UCA International Users Group Device Test Procedures version 1.1. This document has been issued for information purposes only, and the original paper copy of the KEMA report: No. 30610052-Consulting 2006-0909 will prevail.

The test have been carried out on one single specimen of the products as referred above and submitted to KEMA by GE Multilin. 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, October 9, 2006



S.J.L.M. Janssen  
Managing Director KEMA Consulting



E. Melenhorst  
Senior Test Engineer

1) Level A – Independent Test Lab with certified ISO 9000 or ISO 17025 Quality System

Copyright © KEMA Nederland B.V., Arnhem, the Netherlands. All rights reserved. Please note that any electronic version of this KEMA certificate is provided to KEMA's customer for convenience purposes only. It is prohibited to update or change it in any manner whatsoever, including but not limited to dividing it into parts. In case of a conflict between the electronic version and the original version, the original paper version issued by KEMA will prevail

**KEMA Nederland B.V.**

Utrechtseweg 310, 6812 AR Arnhem; P.O. Box 9035, 6800 ET Arnhem, The Netherlands.  
Telephone + 31 26 356 6142, Telefax + 31 26 515 456, Email sales@kema.com

Applicable Test Procedures from the UCA International Users Group Device Test Procedures version 1.1

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 Sets	Dset1, DsetN1ae	
5: Unbuffered Reporting	Rp1, Rp2, Rp3, Rp4, Rp7 RpN1, RpN2, RpN3, RpN4	Rp5, RpN6
6: Buffered Reporting	Br1, Br2, Br3, Br4, Br7, Br8, Br9 BrN1, BrN2, BrN3, BrN4, BrN5	Br5, BrN6
9a: GOOSE publish	Gop2, Gop3, Gop4, Gop7	Gop1, GopN1
9b: GOOSE subscribe	Gos1, Gos2, Gos3, GosN1, GosN2, GosN3, GosN4, GosN5, GosN6	
12a Direct control	CltN3, CltN8, DOns1, DOns3	
12b SBO control	Clt3, CltN1, CltN2, CltN4, SBOs2	
13 Time sync	Tm1, Tm2, TmN1	
14 File transfer	Ft1, Ft2ab, FtN1ab	

Copyright © KEMA Nederland B.V., Arnhem, the Netherlands. All rights reserved. Please note that any electronic version of this KEMA certificate is provided to KEMA's customer for convenience purposes only. It is prohibited to update or change it in any manner whatsoever, including but not limited to dividing it into parts. In case of a conflict between the electronic version and the original version, the original paper version issued by KEMA will prevail

**KEMA Nederland B.V.**

Utrechtseweg 310, 6812 AR Arnhem; P.O. Box 9035, 6800 ET Arnhem, The Netherlands.  
Telephone + 31 26 356 6142, Telefax + 31 26 515 456, Email sales@kema.com