GE Digital Energy

EPM 9450

Firmware Version 224 Release Notes

GE Publication Number: GER-4374

Copyright © 2008 GE Multilin

Overview

Summary

EPM9450 has added new features and enhancements to the system firmware (v224).

Corresponding changes have been made to GE Communicator (v3.0.99):

- 1. Correct Phase Angle information for frequencies below 30 Hz
- 2. Change Frequency detection from sample-based to Edge detect zero crossing.
- 3. Improved Refcal performance.

Release details

In the following enhancement descriptions, a revision category letter is placed to the left of the description. Refer to the Appendix at the end of this document for a description of the categories displayed.

Enhancements

Е

Correct Phase Angle information for frequencies below 30 Hz

Change Frequency detection from sample-based to Edge detect zero crossing.

Improved Refcal performance.

- 1. Faster return to normal computations after RefCal.
- 2. Indication in Tenth Second Block Timestamp prior to RefCal.
- 3. Better guarantee of clearing Waveform Capture pause after RefCal.
- 4. Ignore RefCal caused frequency shifts.

Appendix

Change categories

This document uses the following categories to classify the changes.

Table 1: Revision categories		
Code	Category	Comments
N	New feature	A separate feature added to the relay. Changes to existing features even if they significantly expand the functionality are not in this category
G	Change	A neutral change that does not bring any new value and is not correcting any known problem
E	Enhancement	Modification of an existing feature bringing extra value to the application
D	Changed, incomplete or false faceplate indications	Changes to, or problems with text messages, LEDs and user pushbuttons
R	Changed, incomplete or false relay records	Changes to, or problems with relay records (oscillography, demand, fault reports, etc.)
С	Protocols and communications	Changes to, or problems with protocols or communication features
М	Metering	Metering out of specification or other metering problems
Ρ	Protection out of specification	Protection operates correctly but does not meet published specifications (example: delayed trip)
U	Unavailability of protection	Protection not available in a self-demonstrating way so that corrective actions could be taken immediately
Н	Hidden failure to trip	Protection may not operate when it should
F	False trip	Protection may operate when it should not
В	Unexpected restart	Relay restarts unexpectedly

Table 1: Revision categories

The revision category letter is placed to the left of the change description.

GE Multilin technical support

GE Multilin contact information and call center for product support is shown below:

GE Multilin 215 Anderson Avenue Markham, Ontario Canada L6E 1B3

Telephone: 905-294-6222 or 1-800-547-8629 (North America), +34 94 485 88 00 (Europe) Fax: 905-201-2098 (North America), +34 94 485 88 45 (Europe)

E-mail: multilin.tech@ge.com Home Page: <u>http://www.GEmultilin.com</u>