



# 369 Motor Management Relay

## Product release notes

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## Overview

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### Summary

This document describes the 2.50 release of the 369 Motor Management Relay.

- Affected products: 369 Motor Management Relay
- Date of release: June 19, 2006
- Firmware revision: 2.50
- Hardware revision: B
- Manual revision: GEK-106288G
- Software: EnerVista 369 Setup version 3.50

## Release details

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### New features

#### Communications: the 369 relay is now ODVA DeviceNet CONFORMANCE TESTED™

The 369 Motor Management Relay with the DeviceNet communications option (D) installed has been tested and approved by the ODVA (Open DeviceNet Vendor Association). ODVA's conformance testing provides assurance that the 369 relays are built to the ODVA specifications.



### Harsh Environment coating: now available for communications interface options

The Harsh Environment coating option is now available for the Modbus-TCP Ethernet (E), Profibus (P and P1), and DeviceNet (D) communication protocol options. With the 2.50 release, all 369 Motor Management Relay ordering options are available with the Harsh Environment coating.

The Harsh Environment Conformal Coating is engineered to resist H<sub>2</sub>S gas and other corrosive agents, including humidity, and is strongly recommended for chemically harsh and high moisture environments, including applications in: Oil & Gas, Petrochemical, Pulp & Paper, Sewer & Waste Water, Water Treatment Plants, Primary Metals, and Mining

### Reduced voltage starter: addition of start control relay timer

Prior to the 2.50 release, the start control relay activation period for the reduced voltage start transition was fixed at one second. With the 2.50 release, a new setting has been added to allow the activation period for the start control relay to be extended up to 10 seconds, providing higher flexibility when configuring the 369 for reduced voltage applications.

### Starts per hour: new Modbus register for starts per hour lockout time remaining

A new register has been added to version 2.50, allowing the time remaining in the Starts Per Hour Block to be read using Modbus communications.

ADDRESS	DESCRIPTION	MIN.	MAX.	STEP	UNITS	FORMAT	DEFAULT
02CA	Starts Per Hour Lockout Timer	0	60	1	min	F1	0

## Modified features

### Alarms and trips: Local and remote reset operation of latched trip/alarm corrected when multiple relay reset modes are programmed

In previous versions, firmware resetting of latched elements was not possible if the protection element was assigned to multiple output contacts, and those contacts were programmed with different reset modes.

Version 2.50 corrects this resetting issue. When multiple output contacts are assigned to a single protection element, each output contact can be reset based on its programmed reset mode.

### Communications: Profibus interface reset issued via front panel changed to log one event record

In previous releases, two events would be logged in the event recorder (6 seconds apart) if the Profibus communications interface was reset from the front panel. With the 2.50 release, the reset event is now logged approximately 6 seconds after the command has been issued, once the reset has been successfully completed.

### Default messages: the DEFAULT TO HOTTEST STATOR RTD setting has been modified to display only when the RTD option is installed

With the 2.50 release, the [DEFAULT TO HOTTEST STATOR RTD](#) setting is hidden from view when the RTD option is not installed or if an RRTD is not being used.

### Event recorder: "Motor Stopped" and "Motor Running" events now log properly in the event recorder

In previous versions, multiple *Motor Stopped* events would be recorded if the metered current fluctuated around the 5% metering threshold due to low load conditions. Multiple *Motor Running* events would be recorded if the motor current were to fluctuate near the overload pickup level due to high motor load conditions.

The 2.50 release has been modified to prevent multiple *Motor Stopped* and *Motor Running* events.

### Differential switch: modified to properly reset latched trips according to the RELAY RESET MODE setting

With the **DIFFERENTIAL SWITCH** function set to “Differential Switch”, a differential trip (which will be a latched trip) should only be resettable by the mode programmed in **S2 SYSTEM SETUP** → → → **OUTPUT RELAY SETUP** → **TRIP RELAY RESET MODE** (all resets, remote only, or local only). In previous releases, it would reset the trip from any reset mode, regardless of this setting. This issue has been fixed for the 2.50 release.

### Digital inputs: “General” alarm/trip modified to deactivate after digital input function is disabled

Applicable to any digital input programmed as “General” with the associated general alarm or trip programmed as unlatched.

In previous releases, the alarm or trip LED and programmed output relays will deactivate, but the alarm/trip will remain active (see **A1 STATUS** → → **DIAGNOSTIC MESSAGES**) when the digital input function setpoint was changed to OFF while the general alarm or trip was active. This issue has been fixed for the 2.50 release.

### Front panel display: display text modified for last trip data POWER FACTOR PRETRIP value

In previous releases, the **POWER FACTOR PRETRIP** display (seen under the **LAST TRIP** menu), was missing the letter “d” from the word “Lead”. The 2.50 release corrects this display message.

### Modbus communications: broadcast date and time Modbus addresses modified

When using Modbus communications, a transmission from the master device using a slave address of 0 indicates a broadcast command. With 369 firmware version 1.90, additional Modbus addresses were added to provide the capability to synchronize the 369 with GE Multilin SR-series relays using a broadcast command. The order of the date and time addresses in the 1.90 release was reversed when compared with the SR-series relays. This has been corrected with 369 version 2.50 firmware.

ADDRESS	DESCRIPTION	MIN.	MAX.	STEP	UNITS	FORMAT	DEFAULT
00F0	Time (2 words)	valid	time	N/A	-	F19	-
00F2	Date (2 words)	valid	date	N/A	-	F18	-

## Software updates

The EnerVista 369 Setup software version 3.50 has been updated to support the 369 version 2.50 release. The following change has been made to coincide with firmware modifications:

- Addition of new setpoint for Start Control Relay Timer under the Reduced Voltage Starting menu

## Instruction manual updates

The following items have been added or changed in the 369 Motor Management Relay instruction manual for revision 2.50 (GE Publication number GEK-106288G)

- Updated firmware build date and time to “Apr. 12, 2006 13:55:42”.
- Addition of new **START CONTROL RELAY TIMER** setpoint under the Reduced Voltage Starting menu.
- Added new Modbus register for “Starts Per Hour Lockout Time” at address 0x02CA.
- Section 5.10.5: SPEED SWITCH modified to reflect the correct front panel display order.
- Table in section 8.2.3 updated to reflect the correct ground fault CT range.
- Broadcast date and time Modbus addresses corrected (0x00F0 and 0x00F2).
- DeviceNet Assembly object, class code 04h, instance 68h, Attribute 03 access type corrected to “GET”.
- Added ODVA DeviceNet CONFORMANCE TESTED™ certification to technical specifications.
- Updated section 2.2.10: TYPE TEST STANDARDS to reflect updates to IEC and EN test numbers.

## Upgrading firmware/software

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### Software and firmware information

The latest 369 Motor Management Relay firmware and software files can be downloaded from <http://www.GEmultilin.com/>.

Firmware filename: 53CMB250.000

Software filename: 369SETUP350.EXE

Settings files can be updated for version 2.50 firmware using the EnerVista 369 Setup software.

### GE Multilin technical support

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

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