

3 Series

GA Factory Service Tool

Technical Note

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Introduction

To change the order code of a 3 Series relay, contact GE Multilin Technical Support with the following information:

- Customer Name
- Purchase Order Number (if applicable)
- Number of Relays and all Serial Numbers
- Original and New order codes for each relay

The GE Multilin Tech Support team will assess the order code change request, and upon approval provide the .SOC (Secure Order Code) file containing update information for all relays being changed.

Order codes cannot always be changed on 3 Series relays since there are hardware and firmware limitations associated with certain order code changes. Prior approval must be obtained from the GE Multilin Tech Support team before changing order codes. Changing an order code without compatibility confirmation from the factory may break the relay and render it unusable.

When advanced features are added to a relay through an order code change, the order code upgrade is billable to the customer. If the service department receives a relay with a different order code than was issued during manufacturing, and there was no approval issued or order code change request made, the warranty is voided.

GE Multilin Tech Support: Multilin.Tech@ge.com or +1 905-927-7070

Usage

Change the Relay Order Code

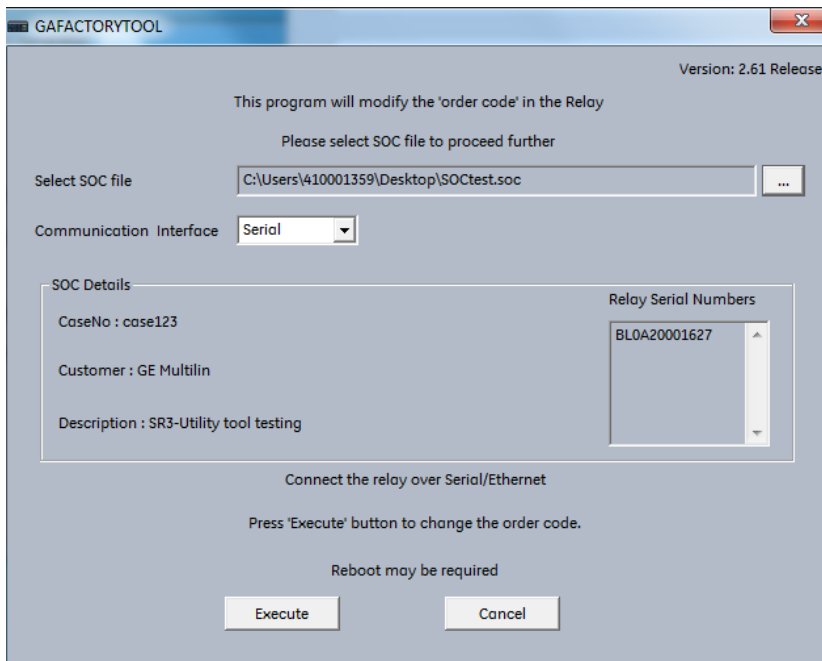
Once you have obtained the .SOC file from GE Multilin Tech Support, you can begin the order code change process.

1. Download and install the GA Factory Tool GAServiceTool (GAServiceToolsetup.exe) from the following link: <https://www.gegridsolutions.com/app/viewfiles.aspx?prod=350&type=7>
2. Install the software tool on the local PC.
3. Using the latest version of the 3 Series EnerVista Setup software, save the settings file from all affected relays to the computer.

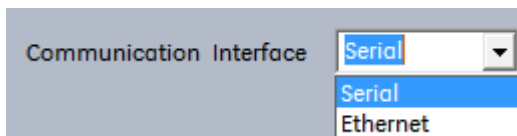


When order codes are changed, relays are reset to factory default settings. Make sure all settings files have been saved.

4. Open the GA Factory Tool and browse to find the *.SOC (Secure Order Code) file provided by the Tech Support team.
5. Once the .SOC file is loaded, the associated case number, customer name, and a description of the changes are shown.

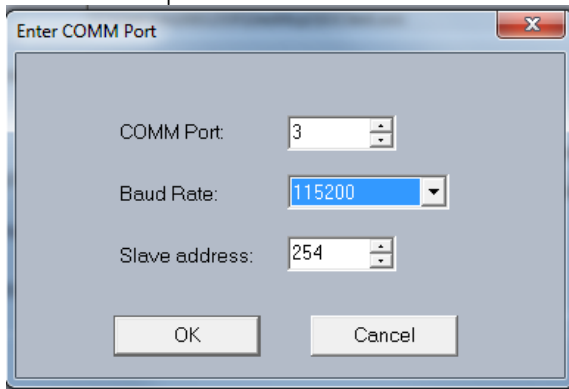


6. Connecting to the 3 Series relay through the front USB port is recommended. Choose Communication Interface as Serial.

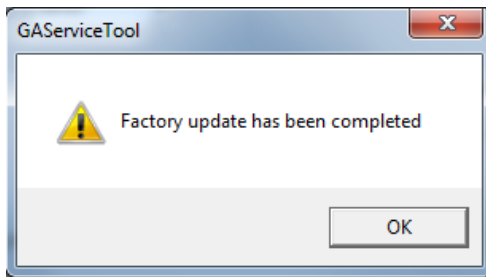


7. Click **Execute**.

8. Enter the computer COMM Port and set the baud rate to 115200. Click OK.



9. Once the order code has been successfully changed, a message indicates that the factory update has been completed and the relay automatically reboots.

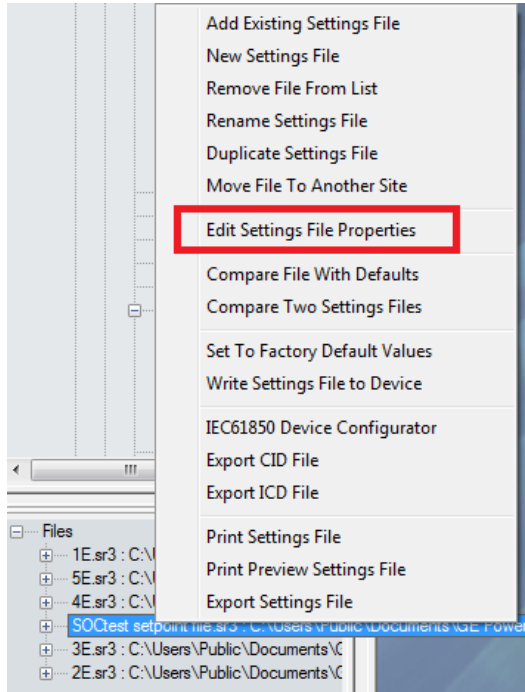


10. Wait for the relay to reboot and verify that the new order code has been stored under **Maintenance > M1 Relay Info > Order Code**.
11. Verify that the added or removed functionality with the new order code works as expected.

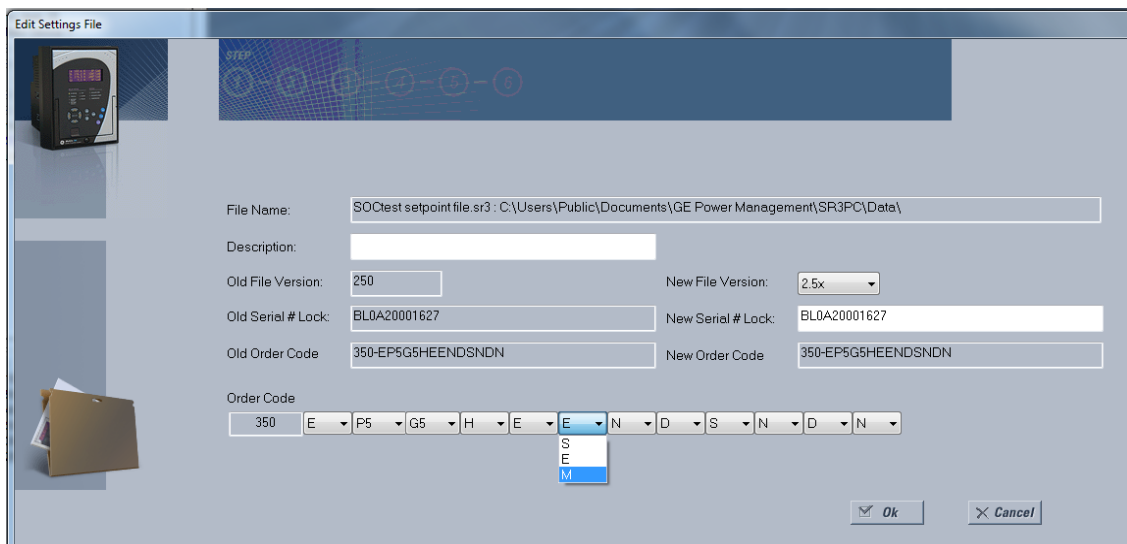
Change the Settings File and Device Setup Order Code

Once the order code has been changed in the relay, the order code must also be updated in the settings file and the software device connection.

1. Using the 3 Series EnerVista Setup software, right click on the downloaded settings file and select **Edit Settings File Properties**.



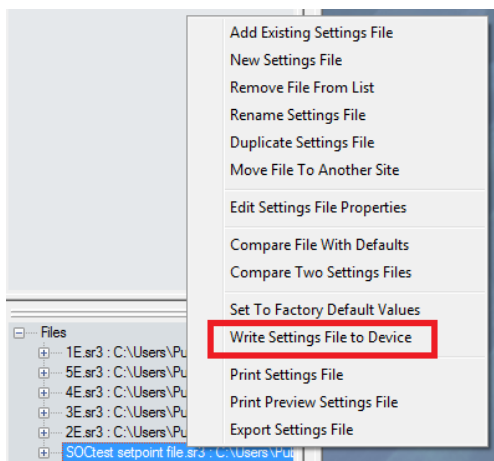
2. Keeping the serial number the same, modify the order code in the settings file to match the new relay order code and click **OK**. This will convert the settings file to match the features and functionality of the new order code.



- After successful conversion, verify the added, removed, or modified settings to ensure that the relay operation is as intended.

Setting Name	Value 1	Value 2	Tree Path
Neg Seq IOC Function	NA	Disabled	Setpoints : S3 Protection : Setpoint Group 1 : Negative Sequence IOC
Neg Seq IOC Pickup	NA	1.00 x CT	Setpoints : S3 Protection : Setpoint Group 1 : Negative Sequence IOC
Neg Seq IOC Delay	NA	0.00 s	Setpoints : S3 Protection : Setpoint Group 1 : Negative Sequence IOC
Neg Seq IOC Block 1	NA	Off	Setpoints : S3 Protection : Setpoint Group 1 : Negative Sequence IOC
Neg Seq IOC Block 2	NA	Off	Setpoints : S3 Protection : Setpoint Group 1 : Negative Sequence IOC
Neg Seq IOC Block 3	NA	Off	Setpoints : S3 Protection : Setpoint Group 1 : Negative Sequence IOC
Neg Seq IOC Relays	NA	Disabled	Setpoints : S3 Protection : Setpoint Group 1 : Negative Sequence IOC
Negative Sequence TOC Block 1	NA	Off	Setpoints : S3 Protection : Setpoint Group 1 : Negative Sequence TOC
Negative Sequence TOC Block 2	NA	Off	Setpoints : S3 Protection : Setpoint Group 1 : Negative Sequence TOC
Negative Sequence TOC Block 3	NA	Off	Setpoints : S3 Protection : Setpoint Group 1 : Negative Sequence TOC
Negative Sequence TOC Function	NA	Disabled	Setpoints : S3 Protection : Setpoint Group 1 : Negative Sequence TOC
Negative Sequence TOC Pickup	NA	1.00 x CT	Setpoints : S3 Protection : Setpoint Group 1 : Negative Sequence TOC
Negative Sequence TOC Curve	NA	Extremely Inverse	Setpoints : S3 Protection : Setpoint Group 1 : Negative Sequence TOC
Negative Sequence TOC TDM	NA	1.00	Setpoints : S3 Protection : Setpoint Group 1 : Negative Sequence TOC
Negative Sequence TOC Reset	NA	Instantaneous	Setpoints : S3 Protection : Setpoint Group 1 : Negative Sequence TOC
Negative Sequence TOC Relays	NA	Disabled	Setpoints : S3 Protection : Setpoint Group 1 : Negative Sequence TOC
Broken Conductor Function	NA	Disabled	Setpoints : S3 Protection : Setpoint Group 1 : Broken Conductor
Broken Conductor L _{2/L₁} Ratio	NA	20.0 %	Setpoints : S3 Protection : Setpoint Group 1 : Broken Conductor
Broken Conductor L ₁ Min	NA	0.10 x CT	Setpoints : S3 Protection : Setpoint Group 1 : Broken Conductor
Broken Conductor L ₁ Max	NA	1.50 x CT	Setpoints : S3 Protection : Setpoint Group 1 : Broken Conductor
Broken Conductor Pkp Delay	NA	20.000 s	Setpoints : S3 Protection : Setpoint Group 1 : Broken Conductor
Broken Conductor Relays	NA	Disabled	Setpoints : S3 Protection : Setpoint Group 1 : Broken Conductor
Broken Conductor Block 1	NA	Off	Setpoints : S3 Protection : Setpoint Group 1 : Broken Conductor
Broken Conductor Block 2	NA	Off	Setpoints : S3 Protection : Setpoint Group 1 : Broken Conductor
Broken Conductor Block 3	NA	Off	Setpoints : S3 Protection : Setpoint Group 1 : Broken Conductor
Neg Seq IOC Function	NA	Disabled	Setpoints : S3 Protection : Setpoint Group 2 : Negative Sequence IOC
Neg Seq IOC Pickup	NA	1.00 x CT	Setpoints : S3 Protection : Setpoint Group 2 : Negative Sequence IOC

- Using the 3 Series EnerVista Setup Software, make the same change to the order code under **Device Setup**.
- Load the settings file into the relay.



For further assistance

For product support, contact the information and call center as follows:

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