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Introduction

IFE Switchboard Server

When an intelligent modular unit (IMU) contains a circuit breaker equipped with a communicating MicroLogic trip unit, the IFE Ethernet switchboard server (IFE server) enables the IMU to be connected to an Ethernet network. Each circuit breaker has its own IFE server and a corresponding IP address.

The IFE server is compatible with the following ranges of circuit breakers:

- MasterPact MTZ circuit breakers
- MasterPact NT/NW circuit breakers
- ComPact NS circuit breakers
- ComPact NSX circuit breakers
- PowerPact P- and R-frame circuit breakers
- PowerPact H-, J-, and L-frame circuit breakers

The IFE server with part number LV434002 or LV434011 is an Ethernet interface for the circuit breaker in the IMU and a server for Modbus-SL (serial line) connected devices.

IFE Ethernet Interface for One Circuit Breaker

When an intelligent modular unit (IMU) contains a circuit breaker equipped with a communicating MicroLogic trip unit, the IFE Ethernet interface for one circuit breaker (IFE interface) enables the IMU to be connected to an Ethernet network. Each circuit breaker has its own IFE interface and a corresponding IP address.

The IFE interface is compatible with the following ranges of circuit breakers:

- MasterPact MTZ circuit breakers
- MasterPact NT/NW circuit breakers
- ComPact NS circuit breakers
- ComPact NSX circuit breakers
- PowerPact P- and R-frame circuit breakers
- PowerPact H-, J-, and L-frame circuit breakers

The IFE interface with part number LV434001 or LV434010 is an Ethernet interface for the circuit breaker in the IMU.
IFE Embedded Ethernet Interface for One MasterPact MTZ Drawout Circuit Breaker

The IFE Embedded Ethernet interface for one MasterPact MTZ drawout circuit breaker (or IFE interface) enables one MasterPact MTZ drawout circuit breaker to be connected to an Ethernet network.

It provides:
- Digital access to all the data that is delivered by the MicroLogic X control unit of the MasterPact MTZ circuit breaker.
- Information about the intelligent modular unit (IMU) system

It also monitors the three positions of the circuit breaker in the cradle:
- Cradle connected
- Cradle disconnected
- Cradle test position

IFE Server Firmware Release History

<table>
<thead>
<tr>
<th>Date</th>
<th>Firmware version</th>
<th>Availability</th>
</tr>
</thead>
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<td>April 2018</td>
<td>003.007.024</td>
<td>Release for manufacturing</td>
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<tr>
<td>July 2017</td>
<td>003.006.011</td>
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</tr>
<tr>
<td>December 2016</td>
<td>003.005.003</td>
<td>Obsolete</td>
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</table>

IFE Interface Firmware Release History

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<tr>
<th>Date</th>
<th>Firmware version</th>
<th>Availability</th>
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<tbody>
<tr>
<td>March 2019</td>
<td>003.009.010</td>
<td>Available as a result of firmware update with EcoStruxure Power Commission software</td>
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<td>Obsolete</td>
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</tbody>
</table>

Firmware Update Policy

If the latest features of a firmware update are not required, it is not mandatory to update the firmware of a device.

Use this release note to confirm if an update to the latest version of the IFE/EIFE firmware is relevant to the application.
For more information on the firmware update policy and the firmware compatibility between devices, refer to DOCA0155EN MicroLogic Trip and Control Units - Firmware History.

**Firmware Update with EcoStruxure Power Commission Software**

EcoStruxure™ Power Commission is the new name of Ecoreach software.

Use the latest version of EcoStruxure Power Commission software to:

- Check the firmware compatibility of the devices in the IMU
- Update the devices with the latest firmware version available

After updating the firmware of one device, use EcoStruxure Power Commission software to check the firmware compatibility between IMU devices.

The Firmware Update table helps the user to diagnose and identify all discrepancy issues between IMU devices. This table also provides the recommended actions for each discrepancy issue.

The latest version of EcoStruxure Power Commission software is available at www.se.com.

For more information on the use of EcoStruxure Power Commission software, refer to *EcoStruxure Power Commission Online Help*. 
Firmware Version 003.009.010

New Features

New features in this firmware version for IFE/EIFE interface:

- Added the following maintenance features, available with a Micrologic X control unit with firmware version 003.011.000 or higher:
  - New events for contact wear ratio
  - New events for type of preventive maintenance to be performed
- Added access through Modbus registers to the following data for MasterPact MTZ circuit breakers:
  - Average peak current demand
  - Minimum and maximum values of real-time measurements
  - Energy per phase values
  - Main settings of the active setting group of current protection functions

NOTE: The configuration of the connection to EcoStruxure Facility Expert is not available now. You can use Enerlin’X COM’X energy servers to configure the connection to EcoStruxure Facility Expert.

Bug Fixes

Bugs fixed in this firmware version for IFE/EIFE interface:

- IFE/EIFE interface lost its clock master status when SNTP server did not answer.
- IFE/EIFE interface restarted when discovery packet from Satchwell Sigma BMS platform was received.
Firmware Version 003.007.024

New Features

New features in this firmware version for IFE server and IFE/EIFE interface:

Added the following features, available with a MicroLogic X control unit with firmware version 002.000.003 or higher:

- Monitoring of current and power demand values
- Reset of peak demand values
- New events for notification by email:
  - Presence of 24 Vdc power supply
  - Ground-fault alarm/ Earth-leakage alarm (available when Ground-fault Digital Module is installed on MicroLogic X control unit)
- Update of standard dataset with current and power demand values
- Availability of legacy dataset when Modbus Legacy Dataset Digital Module is installed on the MicroLogic X control unit
- Availability of individual harmonics and currents up to rank 40 when Individual Harmonics Analysis Digital Module is installed on the MicroLogic X control unit
- Introduction of new mechanism for activating Digital Modules across Enerlin’X devices
- Modification to management of multiple requests through command interface: reception of new command aborts previous command still in progress.

New features in this firmware version for IFE server and IFE interface:

- Added ComPact NSX circuit breaker with MicroLogic 7 trip unit as discoverable device that can be connected to ULP port of IFE server or IFE interface.

New features in this firmware version for IFE server:

- Added Vigirex RHU and Vigirex RMH relays as discoverable devices that can be connected as Modbus slaves on an IFM interface stacked to the IFE server.

Bug Fixes

Bugs fixed in this firmware version for IFE server and IFE interface:

- LV434001 and LV434002: ULP LED was blinking green instead of yellow when IFE server or IFE interface was in Boot mode.
Firmware Version 003.006.011

New Features

New features in this firmware version for IFE server and IFE/EIFE interface:

• Added access through Modbus registers to the trip cause data for MasterPact MTZ circuit breakers
• Added support of alpha-numeric passwords for IFE webpages

New features in this firmware version for IFE server and IFE interface:

• Added support for the internal battery that maintains the date and time settings of the real-time clock (RTC) during a power loss (references LV434001 and LV434002)
• Added compatibility with ULP cables up to 20 m (65 ft) in length
• Added alarm support for the MicroLogic P and H advanced protection settings, allowing an alarm email to be sent
• Added discovery from IFE webpages of devices equipped with non-communicating trip units, through BCM or BSCM module (e.g. NSX non-communicating MicroLogic with BSCM module), for device status display only
• Added compatibility with new MicroLogic 7 trip units for ComPact NSX circuit breakers

New features in this firmware version for IFE server:

• Added Integration of Acti9 Smartlink SI D as a remote device
• Updated Modbus end-of-line termination default value in webpage for easier default configuration

NOTE: The Schneider Electric automatic email profile is not available now. You have to use your own SMTP server.

Bug Fixes

Bugs fixed in this firmware version for IFE server and IFE/EIFE interface:

• FTP server could not be enabled in Italian language

Bugs fixed in this firmware version for IFE server and IFE interface:

• BCM firmware update was not performed when IFE device closed connection in DHCP mode.
Firmware Version 003.005.003

New Features

New features in this firmware version for IFE server and IFE/EIFE interface:
  • Added the MasterPact MTZ circuit breakers as discoverable devices.
  • Added the integration of secure email.

Bug Fixes

Bugs fixed in this firmware version for IFE server and IFE/EIFE interface:
  • IFE time and date were not well synchronized with the SNTP server.
  • Refresh of data on IFE device stopped after a few hours of use.
  • IP filtering was disabled after a firmware update of IFE devices.
  • IFE device and IO module ULP communication did not share the correct cradle status when powered up with a device in disconnected position.
# Related Documents

## Related Documents for IEC Devices

The following table lists the documents valid for IEC devices that are compatible with an IFE/EIFE device with the latest firmware version:

<table>
<thead>
<tr>
<th>Title of documentation</th>
<th>Publication date</th>
<th>Reference number</th>
</tr>
</thead>
<tbody>
<tr>
<td>Enerlin’X IFE – Ethernet Switchboard Server/ Ethernet Interface for One Circuit Breaker – Instruction Sheet</td>
<td>03/2018</td>
<td>QGH13473-02</td>
</tr>
<tr>
<td>Enerlin’X EIFE – Embedded Ethernet Interface for One MasterPact MTZ Drawout Circuit Breaker – Instruction Sheet</td>
<td>03/2018</td>
<td>NVE23550-03</td>
</tr>
<tr>
<td>ComPact NSX – Modbus Communication Guide</td>
<td>03/2019</td>
<td>DOCA0091EN-06, DOCA0091ES-06, DOCA0091FR-06, DOCA0091ZH-06</td>
</tr>
<tr>
<td>MasterPact MTZ – Modbus Communication Guide</td>
<td>03/2019</td>
<td>DOCA0105EN-05, DOCA0105ES-05, DOCA0105FR-05, DOCA0105ZH-05</td>
</tr>
</tbody>
</table>

You can download these technical publications and other technical information from the website at [https://www.se.com/en/download](https://www.se.com/en/download).

If the document with the revision index is not available on the website, contact Customer Care Center to obtain it from the documentation repository.
# Related Documents for UL/ANSI Devices

The following table lists the documents valid for IEC devices that are compatible with an IFE/EIFE device with the latest firmware version:

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<td>03/2018</td>
<td>QGH13473-02</td>
</tr>
<tr>
<td>Enerlin’X IFE – Ethernet Switchboard Server – User Guide (UL)</td>
<td>03/2019</td>
<td>1040IB1401-07 (EN)</td>
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<td>1040IB1402-07 (ES)</td>
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<td>1040IB1404-07 (ZH)</td>
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<tr>
<td>Enerlin’X IFE – Ethernet Interface for One UL Circuit Breaker – User Guide</td>
<td>03/2019</td>
<td>0602IB1801EN-01</td>
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<tr>
<td>Enerlin’X EIFE – Embedded Ethernet Interface for One MasterPact MTZ Drawout Circuit Breaker – Instruction Sheet</td>
<td>03/2018</td>
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<tr>
<td>ULP System (UL Standard) – User Guide</td>
<td>03/2019</td>
<td>0602IB1503-02 (EN)</td>
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<tr>
<td>MasterPact NT/NW and PowerPact P- and R-Frame – Modbus Communication Guide</td>
<td>03/2019</td>
<td>0613IB1313-06 (EN)</td>
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<td>0613IB1316-06 (ZH)</td>
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<td>MasterPact MTZ – Modbus Communication Guide</td>
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