

Enerlin'X IFM Modbus-SL Interface for One Circuit Breaker

Firmware Release Notes

DOCA0146EN-07
11/2024



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Safety Information

Important Information

Read these instructions carefully, and look at the equipment to become familiar with the device before trying to install, operate, service, or maintain it. The following special messages may appear throughout this documentation or on the equipment to warn of potential hazards or to call attention to information that clarifies or simplifies a procedure.



The addition of this symbol to a “Danger” or “Warning” safety label indicates that an electrical hazard exists which will result in personal injury if the instructions are not followed.



This is the safety alert symbol. It is used to alert you to potential personal injury hazards. Obey all safety messages that follow this symbol to avoid possible injury or death.

DANGER

DANGER indicates a hazardous situation which, if not avoided, **will result in** death or serious injury.

WARNING

WARNING indicates a hazardous situation which, if not avoided, **could result in** death or serious injury.

CAUTION

CAUTION indicates a hazardous situation which, if not avoided, **could result in** minor or moderate injury.

NOTICE

NOTICE is used to address practices not related to physical injury.

Please Note

Electrical equipment should be installed, operated, serviced, and maintained only by qualified personnel. No responsibility is assumed by Schneider Electric for any consequences arising out of the use of this material.

A qualified personnel is one who has skills and knowledge related to the construction and operation of electrical equipment and its installation, and has received safety training to recognize and avoid the hazards involved.

Cybersecurity Safety Notice

⚠ WARNING

POTENTIAL COMPROMISE OF SYSTEM AVAILABILITY, INTEGRITY, AND CONFIDENTIALITY

- Change default passwords at first use to help prevent unauthorized access to device settings, controls, and information.
- Disable unused ports/services and default accounts to help minimize pathways for malicious attackers.
- Place networked devices behind multiple layers of cyber defenses (such as firewalls, network segmentation, and network intrusion detection and protection).
- Use cybersecurity best practices (for example, least privilege, separation of duties) to help prevent unauthorized exposure, loss, modification of data and logs, or interruption of services.

Failure to follow these instructions can result in death, serious injury, or equipment damage.

About the Book

Document Scope

This document provides the firmware version history of IFM Modbus-SL interface for one circuit breaker (IFM interface).

Validity Note

This document is valid only for IFM Modbus-SL interface for one circuit breaker.

Online Information

The technical characteristics of the devices described in this guide also appear online. To access the information online, go to the Schneider Electric country website at www.se.com.

The information contained in this guide is likely to be updated at any time. Schneider Electric strongly recommends that you have the most recent and up-to-date version available on www.se.com/ww/en/download/.

Related Documents for IEC Devices

The following table lists documents valid for IEC devices that are compatible with an IFM interface with the latest firmware version:

Title of documentation	Publication date	Reference number
<i>ULP System (IEC Standard) - User Guide</i>	02/2024	DOCA0093EN DOCA0093ES DOCA0093FR DOCA0093ZH
<i>MasterPacT MTZ Modbus Communication Guide</i>	05/2023	DOCA0105EN DOCA0105ES DOCA0105FR DOCA0105ZH
<i>MasterPacT NT/NW, ComPacT NS Modbus Communication Guide</i>	07/2022	DOCA0054EN DOCA0054ES DOCA0054FR DOCA0054ZH
<i>ComPacT NSX Modbus Communication User Guide</i>	07/2024	DOCA0213EN DOCA0213ES DOCA0213FR DOCA0213ZH
<i>ComPacT NSX - Modbus Communication Guide</i>	07/2022	DOCA0091EN DOCA0091ES DOCA0091FR DOCA0091ZH

To find documents online, visit the Schneider Electric download center (www.se.com/ww/en/download/).

Related Documents for UL/ANSI Devices

The following table lists documents valid for UL/ANSI devices that are compatible with an IFM interface with the latest firmware version:

Title of documentation	Publication date	Reference number
<i>ULP System (UL Standard) - User Guide</i>	02/2024	0602IB1503 (EN) 0602IB1504 (ES) 0602IB1505 (FR) 0602IB1506 (ZH)
MasterPacT MTZ Modbus Communication Guide	05/2023	DOCA0105EN DOCA0105ES DOCA0105FR DOCA0105ZH
<i>MasterPacT NT/NW and PowerPacT P- and R-Frame Modbus Communication Guide</i>	07/2022	0613IB1313 (EN) 0613IB1314 (ES) 0613IB1315 (FR) 0613IB1316 (ZH)
<i>PowerPacT H-, J-, and L-Frame Modbus Communication Guide</i>	07/2022	0611IB1302 (EN) 0611IB1303 (ES) 0611IB1304 (FR) 0611IB1305 (ZH)

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Information on Non-Inclusive or Insensitive Terminology

As a responsible, inclusive company, Schneider Electric is constantly updating its communications and products that contain non-inclusive or insensitive terminology. However, despite these efforts, our content may still contain terms that are deemed inappropriate by some customers.

Introduction

IFM Interface

The IFM interface enables an intelligent modular unit (IMU) containing a circuit breaker equipped with a communicating MicroLogic trip unit to be connected to a two-wire Modbus-SL RS-485 serial line Modbus network.

Each circuit breaker has its own IFM interface and a corresponding Modbus address.

The IFM interface with part number LV434000 is compatible with the following ranges of circuit breaker:

- MasterPacT MTZ circuit breakers
- MasterPacT NT/NW circuit breakers
- ComPacT NS circuit breakers
- PowerPacT P- and R-frame circuit breakers
- ComPacT NSX circuit breakers
- PowerPacT H-, J-, and L-Frame circuit breakers

NOTE:

- The information related to the new generation of ComPacT NS and PowerPacT P- and R-frame circuit breakers in this document applies to the existing range ComPacT NS and PowerPacT P- and R-frame circuit breakers also. The exceptions are mentioned wherever applicable.
- The information related to the new generation of ComPacT NSX and PowerPacT H-, J-, and L-Frame circuit breakers in this document applies to the existing range ComPacT NSX and PowerPacT H-, J-, and L-frame circuit breakers also. The exceptions are mentioned wherever applicable.
- These new ranges are based on the same technical and dimensional architecture as that of the existing range of circuit breakers.

Firmware Release History

The following table indicates the availability of each firmware version.

Date	Firmware version	Availability
October 2024	003.003.000	Digital release in EcoStruxure Power Commission software
April 2021	003.002.011	Released for manufacturing
December 2020	003.002.010	Obsolete
October 2020	003.002.009	Obsolete
December 2019	003.002.006	Obsolete
March 2019	003.001.012	Obsolete
September 2018	003.001.010	Obsolete
April 2018	003.001.006	Obsolete
July 2017	003.000.016	Obsolete
April 2017	003.000.012	Obsolete

Firmware Update Policy

Firmware update is recommended to benefit from the latest features and potential bug fixes. Do not update the firmware to the latest version, if the latest features are not required for your application and no bug fixes are provided.

Use this release note to determine whether an update to the latest version of the IFM firmware is relevant for your application.

For more information about the firmware update policy and the firmware compatibility between devices, refer to *MicroLogic Trip and Control Units - Firmware History* – DOCA0155EN.

Firmware Update with EcoStruxure Power Commission Software

Use the latest version of EcoStruxure Power Commission software to:

- Check the firmware compatibility of the devices in the Intelligent Modular Unit (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.

Click [here](#) to download the latest version of EcoStruxure Power Commission software.

For more information about the use of EcoStruxure Power Commission software, refer to *EcoStruxure Power Commission Online Help*.

Firmware Versions

Firmware Version 003.003.000

New Features

The following ground fault protection events are added to IFM interface for MasterPacT MTZ circuit breakers:

- IDMT ground fault start
- IDMT ground fault operate
- IDMT ground fault trip

Firmware Version 003.002.011

New Features

The new range of ComPacT NSX and PowerPacT H-, J-, and L- frame circuit breakers are introduced with the evolution of existing Compact NSX and PowerPacT H-, J-, and L-frame range of circuit breakers.

Bugs Fixed

The following bugs are fixed:

- The manufacturing date and time register (11914–11917) showed incorrect seconds information.
- In IO1 module and M2C status register (32003), bits 9 and 10 showed incorrect M2C status.

Firmware Version 003.002.010

Bug Fixed

The time synchronization of IFM interface with IFE server did not happen when the IFE server was in **Daylight Saving** mode.

Firmware Version 003.002.009

New Features

The following features are added:

- New events to monitor the internal Current Power Supply (CPS) sensors for MasterPacT MTZ circuit breaker.
- Retry mechanism for optimizing data continuity (automatic bus resynchronization).

Bugs Fixed

The following bugs are fixed:

- The values in the MasterPacT MTZ circuit breaker dataset were not changed to **NA**, when MicroLogic was disconnected or IO module source address conflicted.
- Modbus communication failure with IFM interface was observed when there was unstable power supply.

Firmware Version 003.002.006

New Feature

Access has been added through Modbus registers to the following data for MasterPacT MTZ circuit breakers:

- IDMTL protection trip
- Over/Under frequency trip
- Directional overcurrent trip
- Discrepancy between display and MicroLogic
- Neutral protection setting

Firmware Version 003.001.012

New Features

The following features are added:

- New user profiles are added.
- Reliability improvement of firmware update when IFM interface is stacked with IFE server.

Firmware Version 003.001.010

New Feature

Access has been added 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

Firmware Version 003.001.006

New Features

The following features are added:

- Access to the legacy dataset for MasterPacT MTZ circuit breakers with the Legacy Dataset Digital Module installed on the MicroLogic X control unit.
- New signature revocation mechanism to enhance cybersecurity.

Bugs Fixed

Modbus communication parameters of the IFM interface were reset to factory settings after an interruption of the IFM power supply.

Firmware Version 003.000.016

New Features

The following features are added:

- Access through Modbus registers to the trip cause data for MasterPacT MTZ circuit breakers.
- Aligned display of weekday with MasterPacT MTZ circuit breakers.

Firmware Version 003.000.012

New Features

A new IFM interface with part number LV434000 is introduced:

- With backward compatibility with existing IFM interfaces with part numbers TRV00210 and STRV00210.
- With the following new features:
 - Compatible with MasterPacT MTZ circuit breakers.
 - Supports discovery and firmware update with EcoStruxure Power Commission software.
 - Improved logic in updating frequency metering values based on quality.
 - Improved logic in managing broadcast commands sent through command interface.

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As standards, specifications, and design change from time to time,
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DOCA0146EN-07