Chapter 1 Introduction

1.1 Intended Use

The Eaton© Low Voltage Dry Type Current-limiting Reactor 5000A (hereafter "the Reactor") is a power conditioning system that limits fault current under short-circuit conditions, helping to support overall NFPA-70E and NFPA-75 safety.

The Reactor is to be installed between a switchboard and switchgear and will be electrically connected to them with flexible busbar connectors.

1.2 Description

The Reactor is a stand-alone unit with no operational controls.

The Reactor is connected to adjacent switchgear and switchboard with flexible busbar connectors. See section

Panels on all four sides lift off. Side panels are removed and discarded for connection to the adjacent switchgear or switchboard.

The Reactor has the following dimensions:

• 46" [1168.4 mm] W x 96" [2438.4 mm] H x 48"[1219.15 mm] D.

Monitoring
Compartment

Mechanical Power
Transfer Compartment

Switches

Mechanical Interlock

RPP V2 (250A)

Left Hand Configuration

Circuit Breaker Compartment,

Main Input Power to RPP

Figure 1. Eaton Low Voltage Dry Type Current-limiting Reactor 5000A

Front, back, top, and bottom panels are ventilated. When side panels are removed for connection to the adjacent switchgear and switchboard, additional side ventilation is provided through these units.

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Routine maintenance can be performed from the front of the unit. The front of the unit has service doors on the left and right side for viewing and infrared scanning of busbar connections. The lower front panel can be removed to adjust or re-torque connections.

1.3 Using This Manual

Read this manual thoroughly and make sure you understand the procedures before you attempt to install, set up, operate or carry out any maintenance work on this Eaton product.

Read through each procedure before beginning the procedure. Perform only those procedures that apply to the unit being installed or operated.

1.4 Conventions Used in This Manual

This manual uses these type conventions:



NOTE

Some conventions only apply to display screens (if installed).

- Bold type highlights important concepts in discussions, key terms in procedures, and menu options, or represents a command or option that you type or enter at a prompt.
- Italic type highlights notes and new terms where they are defined.
- Screen type represents information that appears on the screen or LCD.

lcon	Description
i	Information notes call attention to important features or instructions.
[Keys]	Brackets are used when referring to a specific key, such as [Enter] or [Ctrl].

1.5 Symbols, Controls, and Indicators

The following are examples of symbols used on the reactor or accessories to alert you to important information:



RISK OF ELECTRIC SHOCK - Observe the warning associated with the risk of electric shock symbol.



CAUTION: REFER TO OPERATOR'S MANUAL - Refer to your operator's manual for additional information, such as important operating and maintenance instructions.

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This symbol indicates that you should not discard the UPS or the UPS batteries in the trash. This product contains sealed, lead-acid batteries and must be disposed of properly. For more information, contact your local recycling/reuse or hazardous waste center.



This symbol indicates that you should not discard waste electrical or electronic equipment (WEEE) in the trash. For proper disposal, contact your local recycling/reuse or hazardous waste center.

1.6 Getting Help

If help is needed with any of the following:

- Scheduling initial startup
- Regional locations and telephone numbers
- A question about any of the information in this manual
- A question this manual does not answer

Please call the Eaton Help Desk at:

United States: 1-800-843-9433 or 1-919-870-3028

Canada: 1-800-461-9166 ext 260

All other countries: Call your local service representative

Please use the following e-mail for manual comments, suggestions, or to report a technical error in this manual.

E-ESSDocumentation@eaton.com

1.7 Warranty and End User License Agreement

To view the warranty please click on the link or copy the address to download from the Eaton website:

Eaton Product Warranty

https://www.eaton.com/content/dam/eaton/products/backup-power-ups-surge-it-power-distribution/backup-power-ups/portfolio/eaton-three-phase-ups-warranty.pdf

https://www.eaton.com/content/dam/eaton/products/backup-power-ups-surge-it-power-distribution/backuppower-ups/portfolio/eaton-three-phase-ups-warranty.pdf

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