

Chapter 1 Introduction

The 1000A Static Transfer Switch (STS) has bypass circuits to allow maintenance to occur on the STS while the bypass circuit provides power to the load. The procedures for going between normal or static mode STS operation and bypass operation use Kirk Keys to control which paths are active.

Kirk Keys protect against two situations that can cross-connect STS sides causing damage to the STS and possibly to upstream equipment such as a UPS:

- The two Bypass MCCBs must not be both ON.
- A Bypass must not be active while the Source on the opposite side is active.

The STS has Kirk-Key lock-outs to prevent these cross-connects occurring.

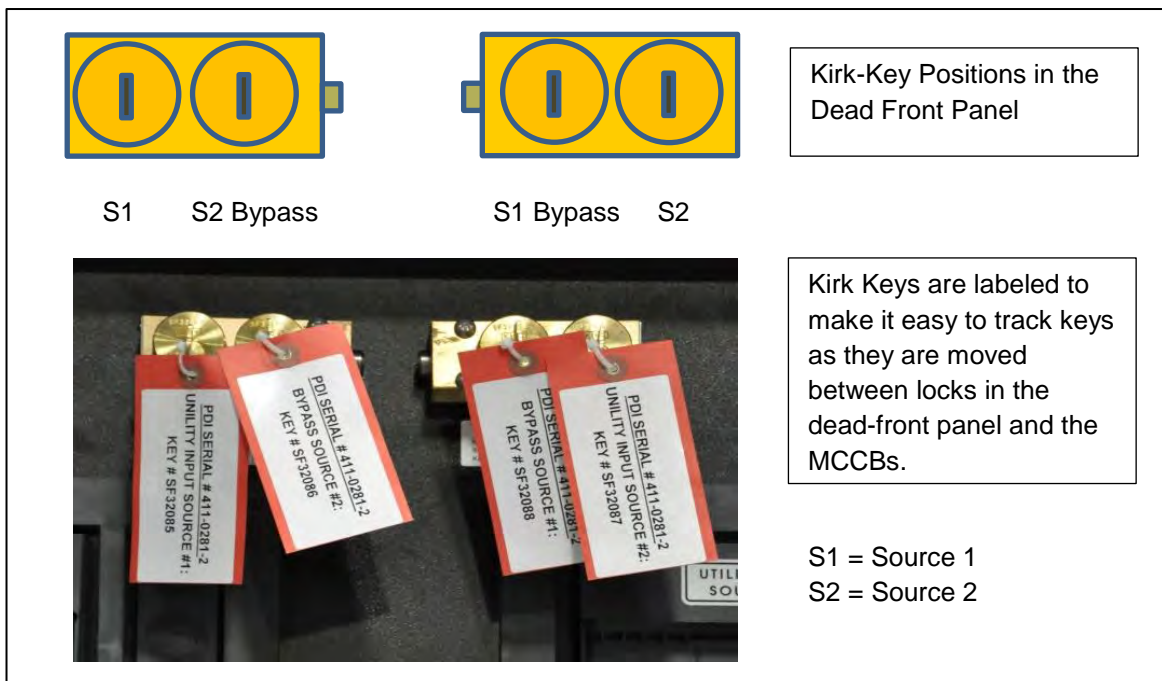
1.1 Dead-Front Kirk Key Layout

Customers with other WaveStar Static Transfer Switches should note that these bypass procedures are different than bypass procedures for PDI STSs of different amperages. Unlike MCCBs on other PDI STSs, the Bypass MCCBs on the 1000A STS are available with only a single Kirk-Key lock, which does not provide sufficient interlock control. To provide the needed interlocks, four (4) Kirk Key locks are installed above the MCCBs on the dead-front panel. Kirk Keys are moved between the dead-front panel locks and the MCCBs or MCSWs for the bypass procedures.

The dead-front Kirk Keys locks are labeled ([Figure 1](#)) as follows:

- Left Kirk-Key block: Utility Input Source #1 (left key), Bypass Source #2 (right key)
- Right Kirk-Key block: Bypass Source #1 (left key), Utility Input Source #2 (right key)

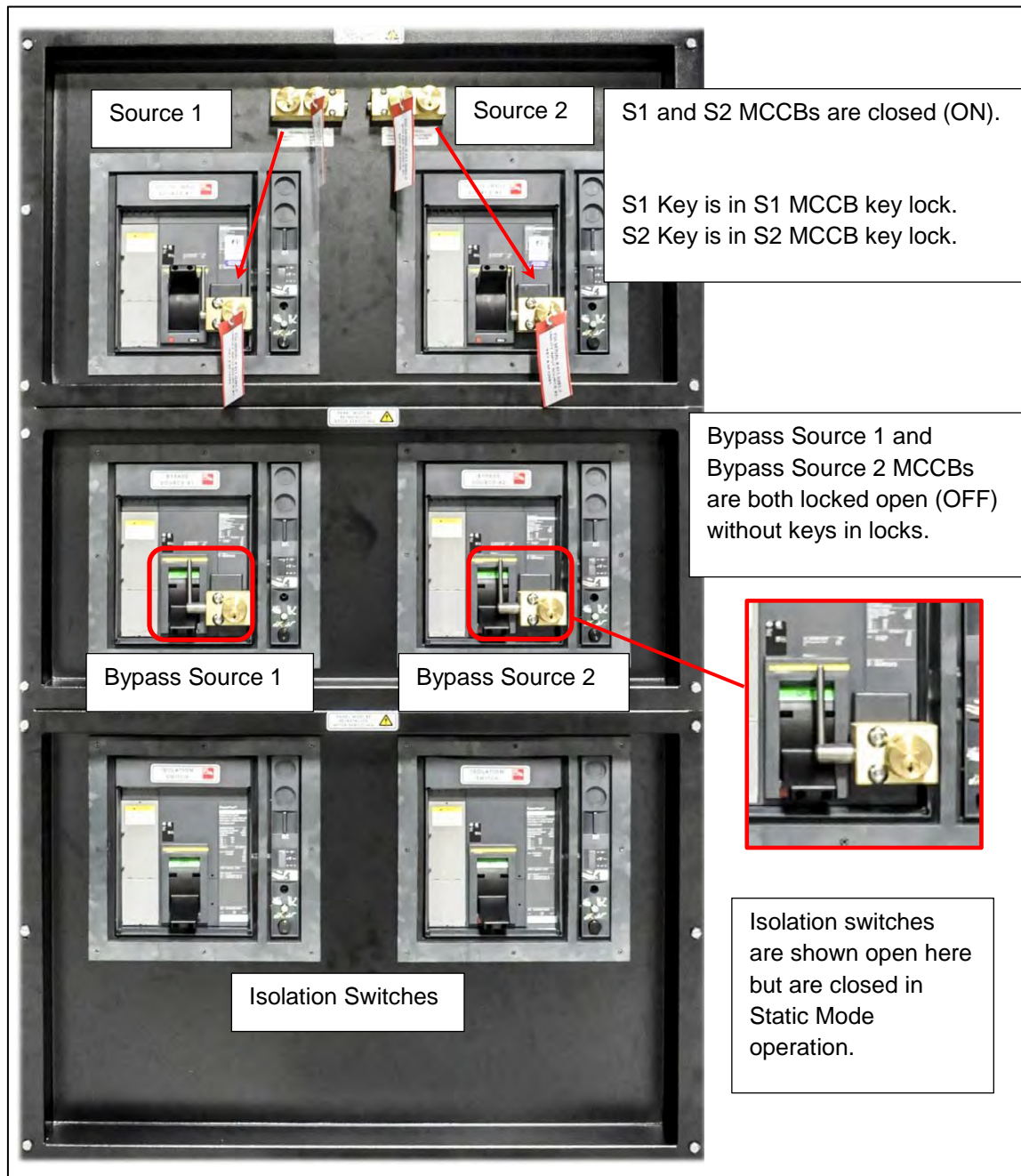
Figure 1. Kirk-Key Layout in Dead Front Panel



1.2 Static Mode Key Positions

The normal operating position of the 1000A Static Transfer Switch is static mode in which both input sources are enabled (Source 1 and Source 2 MCCBs are closed), allowing the STS to switch between them, and Isolation MCCBs or MCSWs are closed,. The static mode key configuration is shown in [Figure 2](#).

Figure 2. Static Mode: Kirk Key Positions and MCCB States





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).
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<ul style="list-style-type: none">• 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.• <i>Italic type</i> highlights notes and new terms where they are defined.• <code>Screen type</code> represents information that appears on the screen or LCD.	
<hr/>	
Icon	Description
	Information notes call attention to important features or instructions.
<hr/>	
[Keys]	Brackets are used when referring to a specific key, such as [Enter] or [Ctrl].
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1.5 Symbols, Controls, and Indicators

The following are examples of symbols used on the UPS 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.
	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.

Eaton PDI Static Transfer Switch website: [Eaton PDI Static Transfer Switch](#)

E-ESSDocumentation@eaton.com

1.7 Warranty

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

[UPS 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>