

Cordex Rectifier Replacement Procedure

Summary

This procedure explains the steps for replacing a Cordex rectifier and refreshing the inventory count in the Cordex Controller.

Tools/Reference Documents required

Laptop and a Cross-over Ethernet Cable (only needed with systems having CXCI, CXCI+, CXCM1 or CXCM1+ controller)

Applicable Part Number

Applies to any Cordex rectifier system with CXC Series controller.

Procedures

1. Turn the AC feed off (optional), note that rectifier power modules are “hot swappable”, meaning they can be inserted or removed from the shelf without cutting AC feed.
2. Loosen mounting screws and remove the rectifier then pull the module out from the shelf
3. Locking mechanism differs from one type of rectifier to another (Figures 1 & 2). It could be a thumb screw, a locking clip or locking handle. See below samples of different locking mechanisms and how to unlock rectifiers.

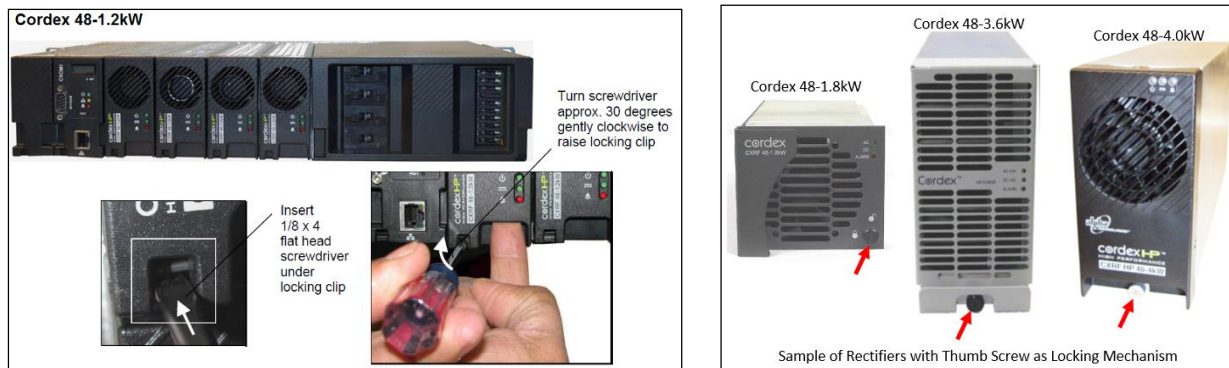


Figure 1: Example of Cordex rectifier locking mechanism

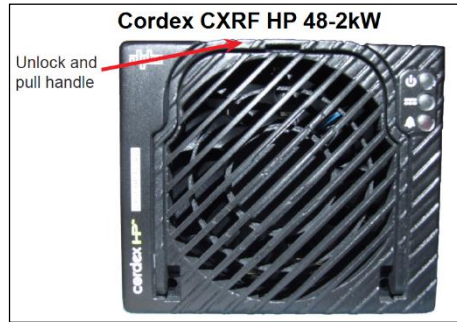
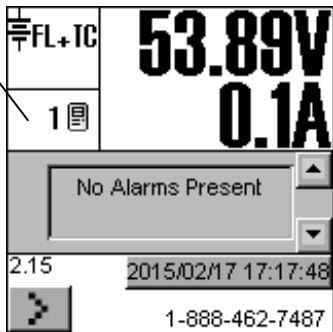


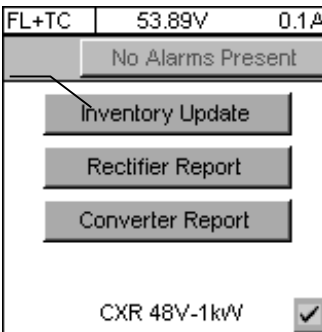
Figure 2: Example of Cordex rectifier locking mechanism

4. Verify that the replacement rectifier is the same part number and list option compared with the unit being replaced. For rectifiers that have been discontinued, make sure that the replacement unit is the equivalent upgrade or replacement model (with respect to input and output voltage). For example, Cordex 48-3.6kW can be replaced by, or mixed with a Cordex HP 48-4kW, and a Cordex 48-1.8kW can also be replaced by or mixed with a Cordex HP 48-2kW.
5. Install the new rectifier then secure with the locking mechanism and turn on the AC feed to the rectifier
6. Update inventory. Can be done two ways 1) via the LCD, if controller type has the touch display – see 6a or 2) via web interface – see 6b
 - a. Updating rectifier inventory using the LCD touch display. Follow steps as shown below.

Tap on the rectifier count. Will possibly show more than what is physically plugged in. The controller will still maintain the count of the rectifiers removed plus rectifiers installed.



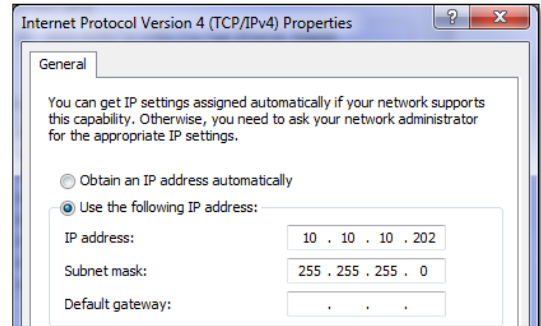
Tap on **Inventory Update** to refresh the rectifier count.



Controller will then update rectifier count and clear any rectifier communications alarms.

b. Updating rectifier inventory using the Web Interface.

- i. Connect a laptop to the CXC controller via a cross-over Ethernet cable. Set the Laptop's LAN properties – Internet Protocol version 4 (TCP/IPv4) to IP address and Subnet Mask as shown on the right image.
- ii. Open Internet Explorer and type in “10.10.10.201”.
- iii. Username and password log-in window will pop up. Enter your name in the user name field. The default password is “1234” (without the quotes).
- iv. Once logged in, click on “Rectifiers” then “Inventory Update”. The rectifier report should repopulate and show actual number of rectifiers plugged in and clear any rectifier communications alarms.



System | Controller | Converters | LPS | **Rectifiers** | Batteries | Alarms | Signals | Controls | Communications | Hardware | Logs and Files | Supervisor

[View Live Status](#) | [Configure Rectifiers](#) | [Inventory Update](#) | [Power Save](#) | [Rectifier Phase Mapping](#)

Rectifiers > View Live Status

Rectifier Report						Rectifier Alarms
Serial Number	Device Name	%	Amps	Alarms	OOT	
00401837/0105	48V-1kW	1	0.3	0	0	

Should you have any questions regarding this procedure, please contact Alpha Technical Support at 1-888-462-7487/800-667-8743 (Toll Free North America) or +1 (604) 436-5900 (International), 6:30am to 5:30pm (North America Pacific Standard Time) or email support@alpha.ca.

Sincerely,

Charlie Manson
 Manager, Customer Services
 Alpha Technologies Ltd.