

FXR and VFXR International Series Inverter/Charger Installation Manual AS4777.2:2015 Compliance Addendum

Purpose

This document describes the operation and parameters associated with AS4777 compliance for 24- and 48-volt FXR international series inverters. It depicts the application of labels for installer compliance with this requirement. It also lists previously unrecorded specifications and requirements.

Firmware Requirements

FXR firmware must be revision 001.006.0063 or greater. An inverter .GIP file (grid support profile) must be installed. The available files are 4777Z1R2 (for Australia) or 4777Z2R2 (for New Zealand). Also see the *FXR and VFXR Inverter/Charger Installation Manual Firmware Addendum*. This and the firmware package can be downloaded by going to the FXR Series link in the Firmware Update section of www.outbackpower.com. Once there, click *FXR Series 001.006.063 Grid Support Firmware*.

Hardware Requirements

The use of a DRED (Demand Response Enabling Device) is required in AS4777.

- This OutBack product complies with DRM-0 (Demand Response Mode Level 0). This allows the utility to issue an "operate the disconnection device" signal, forcing the inverter to disconnect itself from the grid.
- This OutBack product does not comply with the other, optional, Demand Response Modes.
- Two labels are supplied. To comply with the requirements for DRM-0, these labels must be applied in the following locations.

The INVERTER ON/OFF jumper must be removed after the new firmware is installed.



Hardware Operation

When the utility sends the "operate the disconnection device" signal, the DRED closes the CL/0 and RG/0 connections. This is an AC DROP command to the inverter. It takes precedence regardless of any USE commands from the MATE3 or another system display such as OPTICS RE. (The DRED and the system display must show a USE signal before it will be allowed to reconnect. A USE signal from the DRED is an open circuit on the two wires.) See next page.





NOTES:

- If the DRED requires making connections to an RJ-45 cable, the RG/0 conductor is pin 5 and the CL/0 conductor is pin 6.
- If the DRED signal to these terminals causes the grid relay to disconnect, the system display will display *Manual Drop* **Y** on the *Last AC Disconnect* screen.
- DRED commands will not operate if the INVERTER ON/OFF jumper is left in place.

Compliance and Specifications

The FXR inverter is capable of DRM-0 and is labeled accordingly. This product complies with AS4777 requirements for

- anti-islanding
- voltage and frequency limits
- sustained operation for voltage variations
- sustained operation for frequency variations

All other optional inverter power quality response modes are unavailable.

Additional Specifications or Requirements

Item	Value
Compliance	AS4777.2:2015 — Grid Connection of Energy Systems via Inverters
Maximum Output Overcurrent Protection	30 Aac
Inverter Topology	Galvanic Isolation
Active Anti-Islanding Method	Active Frequency Drift

Decisive Voltage Class	Item			
DVC-C	AC Port			
DVC-B	Battery Port			
DVC-A	 Inverter (CL/0) 	 AUX+ 	 XCT+ 	 BATTERY TEMP
	 On/Off (RG/0) 	 AUX– 	 XCT- 	 MATE/HUB

Contact Information

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