

# **FXR Inverter/Charger Temperature De-rating**

## Models: All FX Series Inverter/chargers

All OutBack FXR inverters can deliver their full rated wattage at temperatures up to 25°C (77°F). OutBack FXR inverter maximum wattage has a lower rating at higher temperatures. Above 25°C, the FXR is derated by a factor of approximately 1%/C°. Note: in OutBack product literature, at maximum temperature extremes product performance is stated as "functions, but does not necessarily meet all component specifications" for this reason.

The following graphs show the FXR wattage decreasing with increased temperature. The graph ends at 60° because FXR inverters are not rated for operation above that temperature.

## FXR Power/Temperature Derating Curves for 60Hz Inverter/Chargers 4000 3500 FXR2012A 3000 FXR2524A 2500 VFXR2812A Power (VA) 2000 FXR3048A 1500 VFXR3524A 1000 VFXR3648A 500 -40 -35 -30 -25 -20 -15 30 35 50 55 45 Ambient Temperature (Celsius)

Figure 1: Power/Temperature de-rating for FXR 60Hz models

-40

-35

-30

-25

-20

-15



# FXR Power/Temperature Derating Curves for 50Hz Inverter/Chargers 4000 3500 FXR2012E 3000 ■FXR2348E 2500 Power (VA) 2000 VFXR2612E 1500 VFXR3024E VFXR3048E 1000 500

#### Figure 2: Power/Temperature de-rating for FXR 50Hz models

10

**Ambient Temperature (Celsius)** 

15

20

25

30

35

45

50

55

60

5

# **Application Note**



## **About OutBack Power Technologies**

OutBack Power Technologies is a leader in off-grid and Grid/Hybrid advanced energy conversion technology. OutBack products include true sine-wave inverter/chargers, maximum power point tracking charge controllers, batteries, and system communication components, pre-assembled systems, and accessories.

#### **Contact Information**

#### **Corporate Headquarters**

17825 – 59th Avenue N.E., Suite B Arlington, WA 98223 USA

+1.360.435.6030

+1.360.618.4363 (Technical Support)

+1.360.435.6019 (Fax)

Email: Support@outbackpower.com Website: http://www.outbackpower.com

#### **Asia Office**

Suite 1903, Tower 1, China Hong Kong City 33 Canton Road, Kowloon Hong Kong

+852.2736.8663 +852.2199.7988 (Fax)

### **European Office**

Hansastrasse 8 D-91126 Schwabach, Germany

+49.9122.79889.0 +49.9122.79889.21 (Fax)

Email: re.support@alphatechnologies.de

#### **Latin American Office**

15105 Cedar Bluff Pl. Wellington, FL 33414 USA

+1.561.792.9651 +1.561.792.7157 (Fax)

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