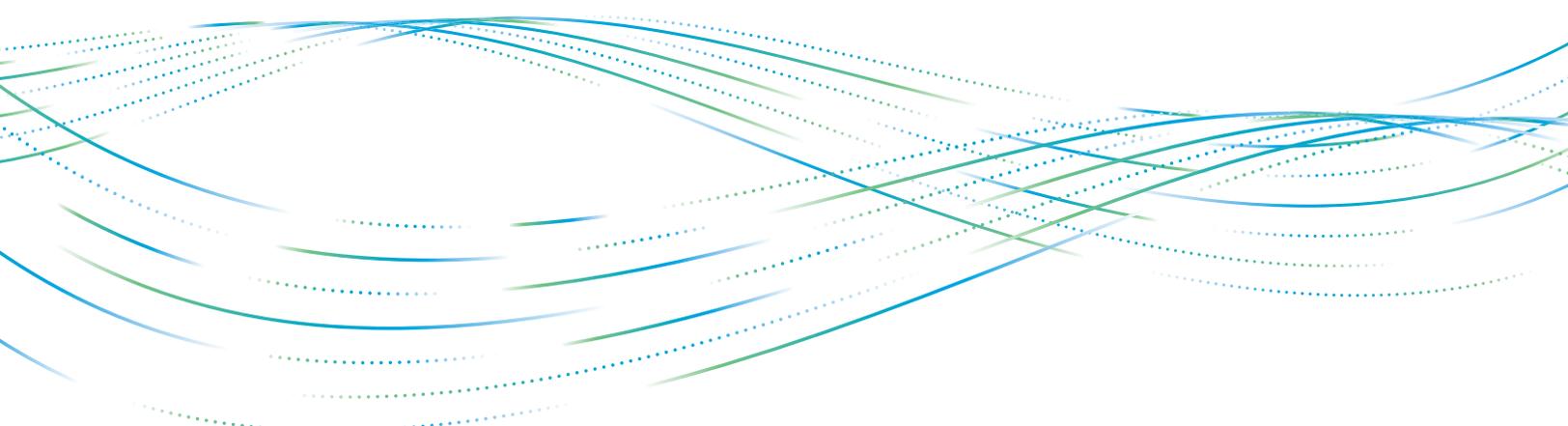


APPLICATION NOTE

Minimum Loading Region for 62000D Bidirectional DC Sources

Chroma 62000D



Introduction

The 62000D Bidirectional DC Source is a unit that can operate both as a source as well as a load. When the 62000D has a voltage applied to it that is larger than its own set voltage, the unit will act as a load and draw current. When acting as a load, the amount of current that can be drawn is dependent on the voltage applied to the unit. Each unit has a rated minimum load voltage. Once the applied voltage drops below this level, the maximum current draw will begin to limit. It is important to note that the graphs and information presented in this document are only guidelines and accuracy below the minimum operating voltage is not guaranteed.

Minimum Operating Voltage 62000D 100V Models

In figure 1, the minimum operating voltage is 5V. Voltage applied below 5V cannot draw max current.

Note: It has been observed through testing that the minimum load voltage of the 18kW unit (62180D) is 4.5V

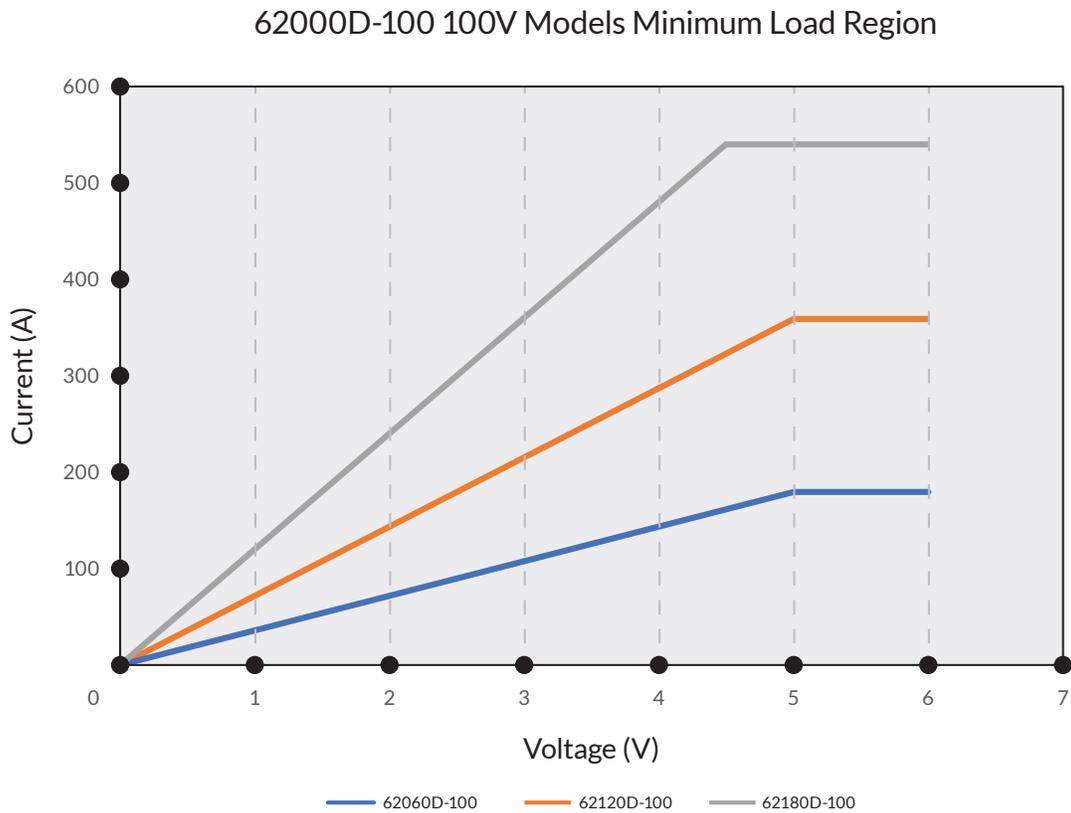


Figure 1: 62000D-100 100V Models Minimum Load Region

Minimum Operating Voltage 62000D 600V Models

In figure 2, the minimum operating voltage is 30V. Voltage applied below 30V cannot draw max current.

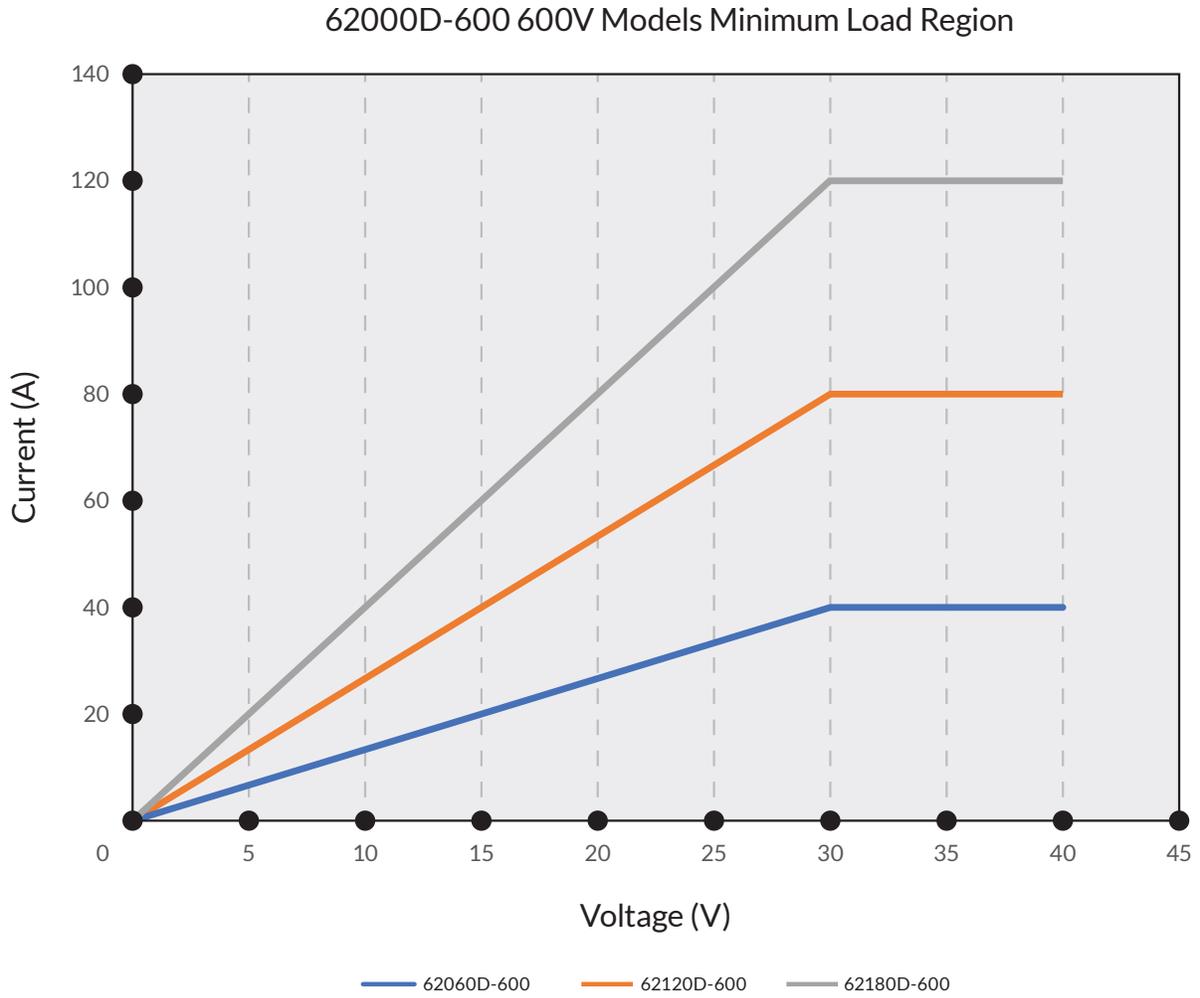


Figure 2: 62000D-600 Models Minimum Load Region

Minimum Operating Voltage 62000D 1200/1800V Models

In figure 3, the minimum operating voltage is 90V. Voltage applied below 90V cannot draw max current.

Note: As shown, all three units (62120D-1200, 62180D-1200, 62180D-1800) have the same output current range and minimum load voltage.

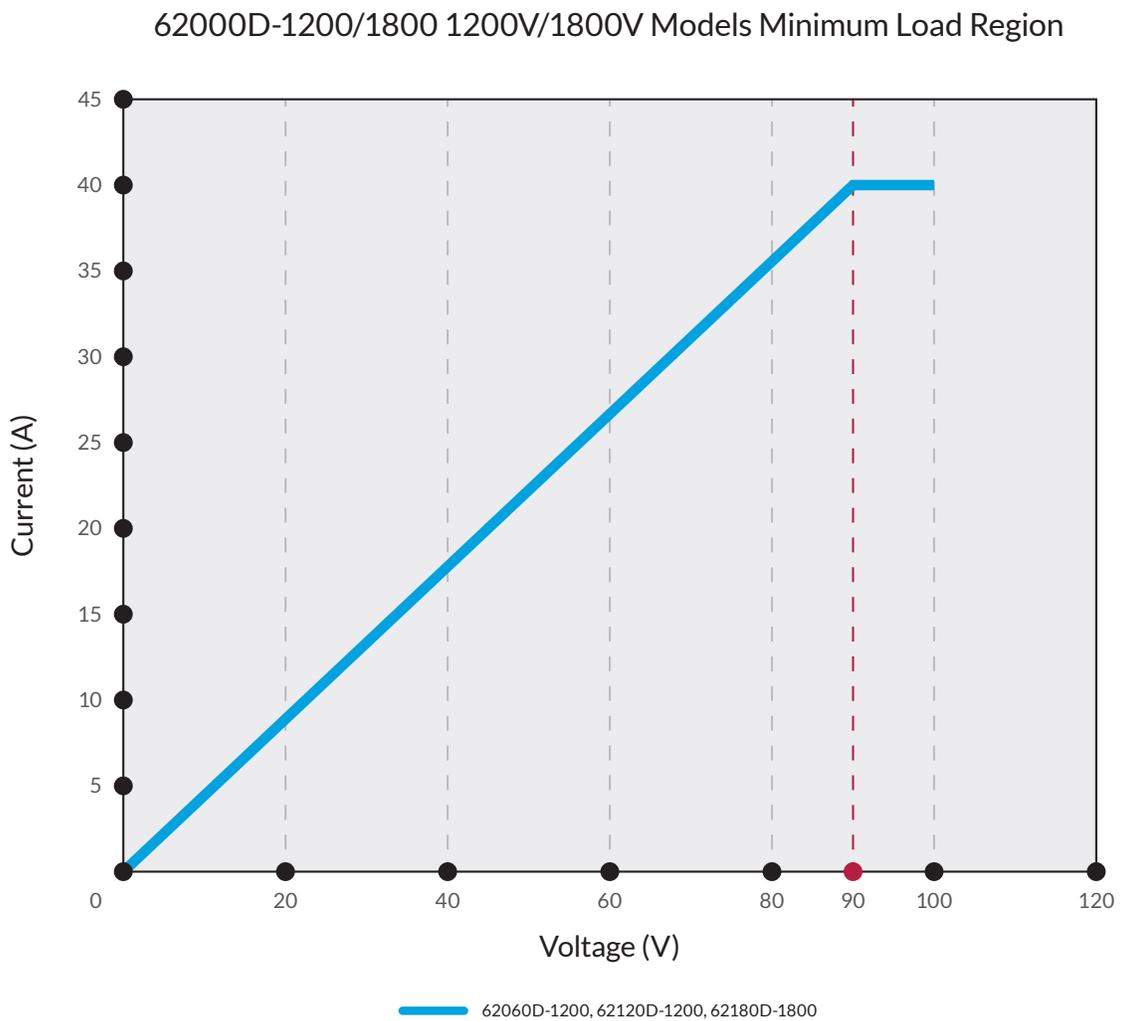


Figure 3: 62000D-1200/1800 Models Minimum Load Region