

## AN001 – Grid-Connection Thresholds

The sonnen product range as is compliant and certified to AS/NZS 4777.2 aligns with the following grid voltage and frequency thresholds;

- **Sonnen Eco8.2 Single Phase Products;**

Minimum Voltage for Grid-connection: 188V stable for 2s  
 Maximum voltage for Grid-connection: 265V disconnection after 0.2s  
 Volt-Watt response softening (charge / discharge) Accordance with AS4777.2:2015

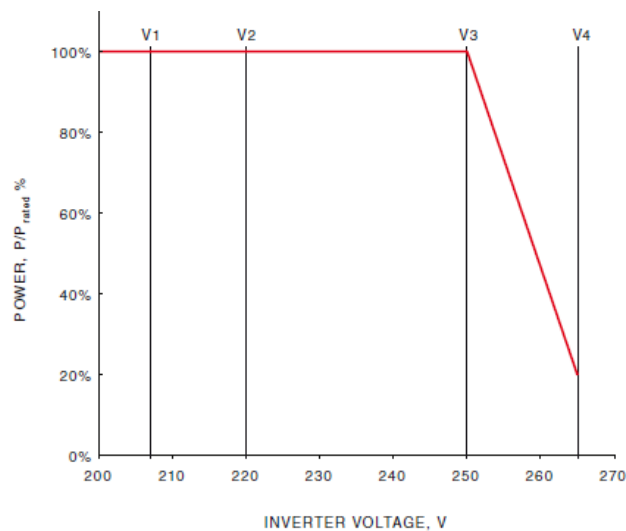


FIGURE 2(A) EXAMPLE CURVE FOR A VOLT-WATT RESPONSE MODE (AUSTRALIA)

Reconnection range after disconnection; 213.4V – 264V  
 Minimum frequency for Grid-connection: 47Hz stable for 2s  
 Maximum frequency for Grid-connection: 55Hz disconnection after 0.2s  
 Frequency Range for stable Grid-connection: 47.5Hz – 50.15Hz

- Sonnen Eco8.0 / 8.1 Three Phase Products;

Minimum Voltage for Grid-connection: 196V  
 Minimum Voltage for stable Grid-connection: 184V  
 Maximum voltage for Grid-connection: 264V disconnection after 0.2s  
 253V disconnection after 10min average  
 Volt-Watt response softening (charge / discharge) Accordance with AS4777.2:2015

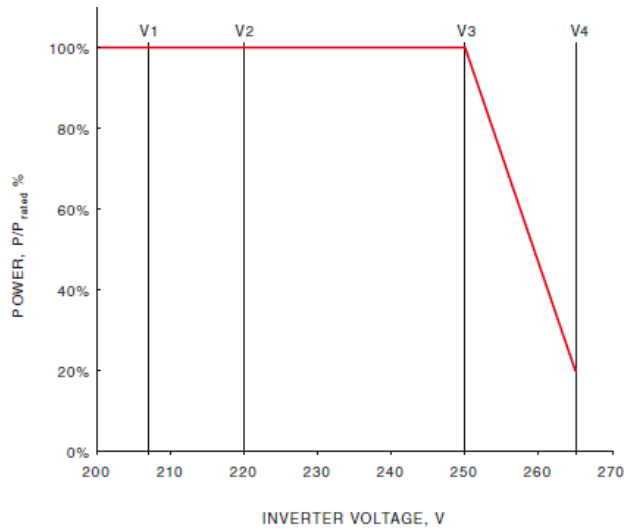


FIGURE 2(A) EXAMPLE CURVE FOR A VOLT-WATT RESPONSE MODE (AUSTRALIA)

Reconnection range after disconnection; 196V – 253V  
 Maximum Phase Balancing for Export: 5% Variation of Current  
 Minimum frequency for Grid-connection: 47.5Hz stable for 2s  
 Maximum frequency for Grid-connection: 51.5Hz disconnection after 0.2s  
 Grid frequency Derate threshold 50.2Hz  
 Reduction percentage based on frequency 40%  
 Reconnection threshold based on frequency 50.05Hz  
 Exit-reconnection based on frequency 50.2Hz  
 Reconnection gradient of power 10%  
 Frequency Range for stable Grid-connection: 47.5Hz – 50.05Hz

If you have any further questions, please contact us at any time for further support or assistance.

Yours faithfully,





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