Manufacturer: Solectria Renewables, LLC

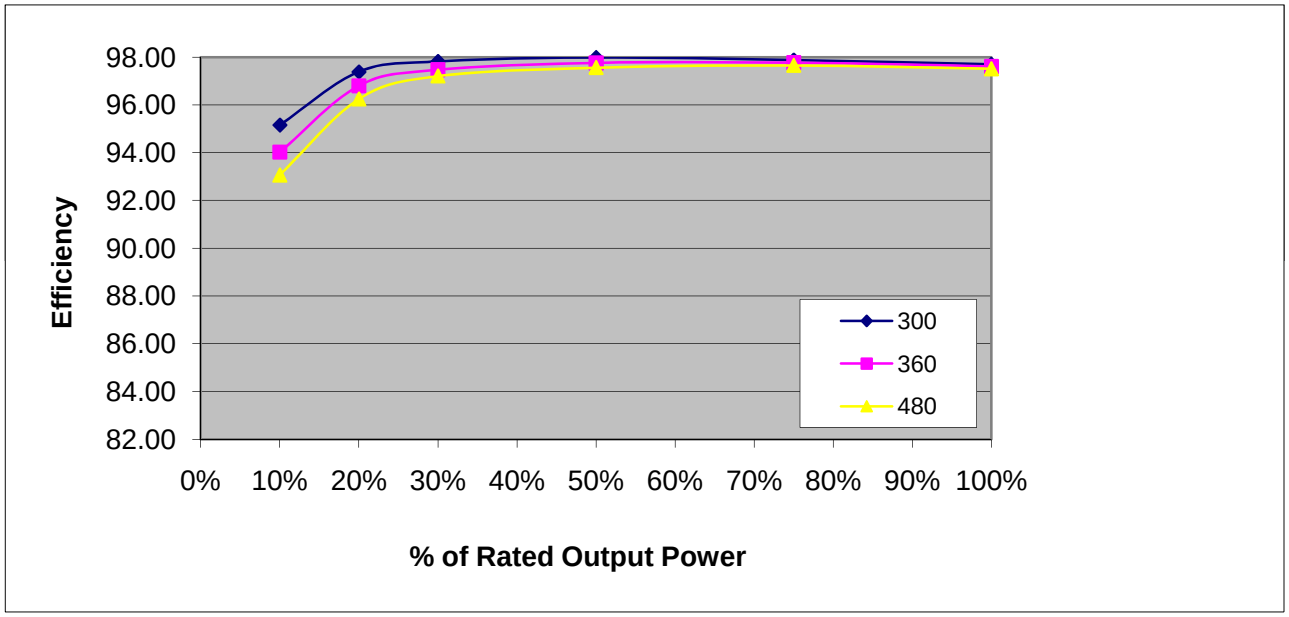
Model #: SGI 225

Rated Maximum Continuous Output Power: 230.146 kW  Night Tare Loss: -28.00 W

Vmin: 300 Vdc  Vnom: 360 Vdc  Vmax: 480 Vdc

| | | Power Level (%; kW) | | | | | | |
|---|---|---|---|---|---|---|---|---|
| | | 10% | 20% | 30% | 50% | 75% | 100% | |
| Input Voltage (Vdc) | | 21.2 | 45.2 | 69.8 | 120.7 | 159.0 | 215.2 | Wtd |
| Vmin | 300 | 95.16 | 97.39 | 97.82 | 97.99 | 97.88 | 97.70 | 97.76 |
| Vnom | 360 | 94.02 | 96.80 | 97.47 | 97.76 | 97.76 | 97.61 | 97.52 |
| Vmax | 480 | 93.06 | 96.24 | 97.21 | 97.56 | 97.66 | 97.51 | 97.32 |

**CEC Efficiency = 97.5%**



| Specified | | Sample #1 | | | Sample #2 | | | Sample #3 | | | Sample #4 | | | Sample #5 | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Output Power (% of rated) | Input Voltage (Vdc) | Output Power (kW) | Input Voltage (Vdc) | Efficiency (%) | Output Power (kW) | Input Voltage (Vdc) | Efficiency (%) | Output Power (kW) | Input Voltage (Vdc) | Efficiency (%) | Output Power (kW) | Input Voltage (Vdc) | Efficiency (%) | Output Power (kW) | Input Voltage (Vdc) | Efficiency (%) |
| | | | | | | | | | | | | | | | | |
| 10% | Vmin | 21.734 | 302.115 | 95.137 | 21.733 | 302.138 | 95.156 | 21.730 | 302.159 | 95.161 | 21.732 | 302.182 | 95.174 | 21.741 | 302.170 | 95.155 |
| 20% | Vmin | 47.843 | 301.424 | 97.343 | 47.850 | 301.532 | 97.379 | 47.898 | 301.591 | 97.400 | 47.893 | 301.623 | 97.422 | 47.871 | 301.642 | 97.403 |
| 30% | Vmin | 71.799 | 300.869 | 97.808 | 71.713 | 301.117 | 97.808 | 71.734 | 301.250 | 97.840 | 71.798 | 301.280 | 97.832 | 71.806 | 301.319 | 97.835 |
| 50% | Vmin | 122.478 | 300.817 | 97.999 | 122.402 | 300.833 | 97.993 | 122.165 | 301.046 | 97.971 | 122.231 | 301.471 | 97.991 | 122.347 | 301.627 | 97.998 |
| 75% | Vmin | 162.373 | 302.032 | 97.900 | 162.328 | 301.646 | 97.875 | 162.351 | 301.365 | 97.870 | 162.254 | 301.239 | 97.891 | 162.211 | 301.189 | 97.888 |
| 100% | Vmin | 215.183 | 301.869 | 97.694 | 215.418 | 301.454 | 97.699 | 215.332 | 301.319 | 97.712 | 215.361 | 301.259 | 97.710 | 215.212 | 301.189 | 97.707 |
| | | | | | | | | | | | | | | | | |
| 10% | Vnom | 21.191 | 360.858 | 93.990 | 21.204 | 360.697 | 93.965 | 21.213 | 360.590 | 94.037 | 21.199 | 360.571 | 94.061 | 21.201 | 360.533 | 94.052 |
| 20% | Vnom | 45.149 | 360.624 | 96.793 | 45.161 | 360.627 | 96.819 | 45.168 | 360.622 | 96.792 | 45.219 | 360.366 | 96.782 | 45.218 | 360.233 | 96.796 |
| 30% | Vnom | 69.778 | 359.516 | 97.470 | 69.778 | 359.508 | 97.487 | 69.795 | 359.504 | 97.486 | 69.780 | 359.520 | 97.469 | 69.675 | 359.687 | 97.431 |
| 50% | Vnom | 120.649 | 360.725 | 97.761 | 120.739 | 360.702 | 97.756 | 120.716 | 360.718 | 97.757 | 120.668 | 360.734 | 97.750 | 120.642 | 360.739 | 97.759 |
| 75% | Vnom | 159.061 | 360.437 | 97.770 | 158.987 | 360.383 | 97.762 | 158.918 | 360.365 | 97.766 | 158.964 | 360.413 | 97.760 | 159.047 | 360.491 | 97.764 |
| 100% | Vnom | 215.368 | 360.374 | 97.606 | 215.230 | 360.207 | 97.611 | 215.178 | 360.107 | 97.603 | 215.085 | 360.038 | 97.618 | 215.186 | 359.979 | 97.615 |
| | | | | | | | | | | | | | | | | |
| 10% | Vmax | 20.097 | 480.615 | 93.066 | 20.096 | 480.645 | 93.064 | 20.098 | 480.628 | 93.050 | 20.103 | 480.606 | 93.064 | 20.090 | 480.547 | 93.060 |
| 20% | Vmax | 47.817 | 481.706 | 96.236 | 47.804 | 481.734 | 96.232 | 47.868 | 480.943 | 96.230 | 47.840 | 480.634 | 96.250 | 47.836 | 480.503 | 96.260 |
| 30% | Vmax | 72.180 | 481.149 | 97.221 | 72.158 | 481.098 | 97.202 | 72.171 | 481.003 | 97.203 | 72.168 | 480.907 | 97.211 | 72.190 | 480.451 | 97.200 |
| 50% | Vmax | 120.529 | 479.948 | 97.565 | 120.521 | 479.844 | 97.574 | 120.545 | 479.836 | 97.573 | 120.455 | 479.771 | 97.550 | 120.526 | 479.982 | 97.559 |
| 75% | Vmax | 159.496 | 479.375 | 97.643 | 159.361 | 479.666 | 97.649 | 159.534 | 479.862 | 97.660 | 159.504 | 479.903 | 97.662 | 159.705 | 479.928 | 97.673 |
| 100% | Vmax | 215.558 | 479.197 | 97.522 | 215.387 | 479.221 | 97.515 | 215.361 | 479.232 | 97.513 | 215.264 | 479.716 | 97.501 | 215.407 | 479.928 | 97.509 |

| Specified | | Sample #6 | | | Sample #7 | | | Sample #8 | | | Sample #9 | | | Sample #10 | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Output Power (% of rated) | Input Voltage (Vdc) | Output Power (kW) | Input Voltage (Vdc) | Efficiency (%) | Output Power (kW) | Input Voltage (Vdc) | Efficiency (%) | Output Power (kW) | Input Voltage (Vdc) | Efficiency (%) | Output Power (kW) | Input Voltage (Vdc) | Efficiency (%) | Output Power (kW) | Input Voltage (Vdc) | Efficiency (%) |
| | | | | | | | | | | | | | | | | |
| 10% | Vmin | | | | | | | | | | | | | | | |
| 20% | Vmin | | | | | | | | | | | | | | | |
| 30% | Vmin | | | | | | | | | | | | | | | |
| 50% | Vmin | | | | | | | | | | | | | | | |
| 75% | Vmin | | | | | | | | | | | | | | | |
| 100% | Vmin | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | |
| 10% | Vnom | | | | | | | | | | | | | | | |
| 20% | Vnom | | | | | | | | | | | | | | | |
| 30% | Vnom | | | | | | | | | | | | | | | |
| 50% | Vnom | | | | | | | | | | | | | | | |
| 75% | Vnom | | | | | | | | | | | | | | | |
| 100% | Vnom | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | |
| 10% | Vmax | | | | | | | | | | | | | | | |
| 20% | Vmax | | | | | | | | | | | | | | | |
| 30% | Vmax | | | | | | | | | | | | | | | |
| 50% | Vmax | | | | | | | | | | | | | | | |
| 75% | Vmax | | | | | | | | | | | | | | | |
| 100% | Vmax | | | | | | | | | | | | | | | |