

PQ Vs DC, AC, Temperature and Altitude of SUN2000-33KTL-US



Huawei Technologies Co., Ltd.

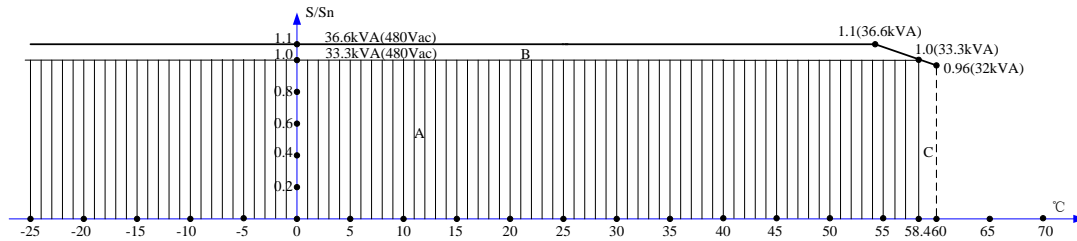
Version	Created by	Date	Remarks
01	Huawei	01/24/2017	Initial version created
02	Huawei	07/28/2017	Adding DC Voltage Curve Vs Altitude

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Power De-rating Curve VS. Ambient Temperature

Power De-rating Curve VS. Ambient Temperature of SUN2000-33KTL-US:



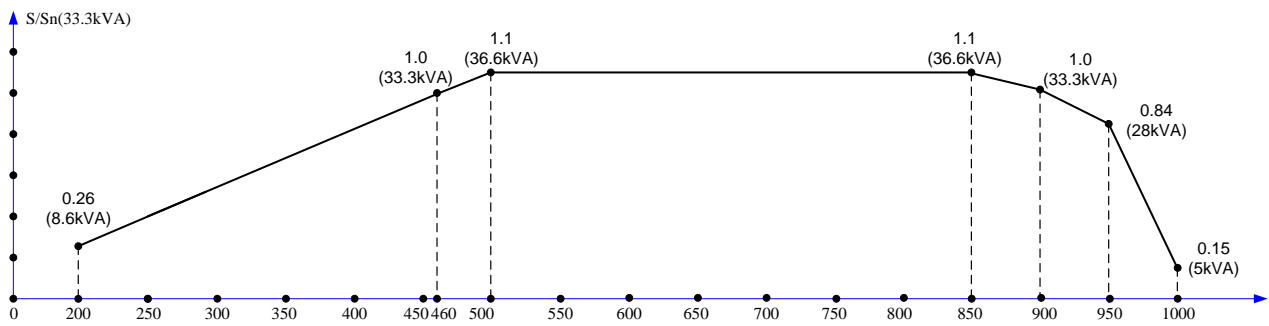
Air speed: 0.5m/s

Model	MPPT Input	-25°C	40°C	54.3°C	58.4°C	60°C
SUN2000-33KTL-US	460 ~ 900 V dc	33.3kW	33.3kW	33.3kW	33.3kW	32kW
	500 ~ 850 V dc	36.6kVA	36.6kVA	36.6kVA	33.3kVA	32kVA



Power-Voltage Curve

Power-Voltage Curve of SUN2000-33KTL-US

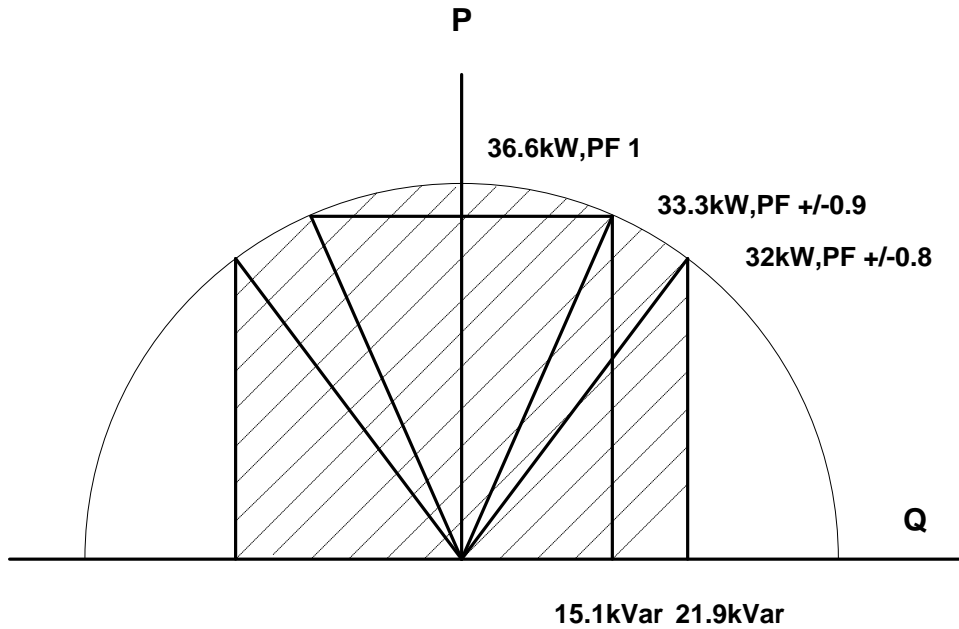


Note: The power-voltage curve is shaped in the condition that the PF equals 1.0.



PQ Curve

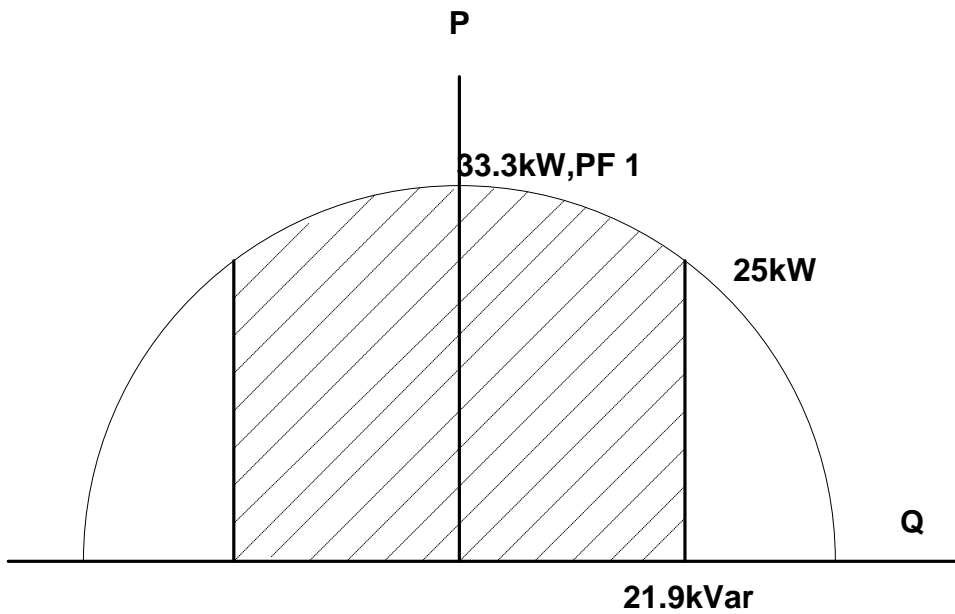
PQ Curve of SUN2000-33KTL-US @ 1.0 p.u. voltage



Note: When SUN2000-33KTL-US is in the condition that it operates at rated output voltage and ambient temperature below 54.3°C , and grid voltage 1.0 p.u., it can output 33.3kW (when PF=1) at most by adjusting its nominal active power which it is 36.6kW by default.



PQ Curve of SUN2000-33KTL-US @ 0.9 p.u. voltage

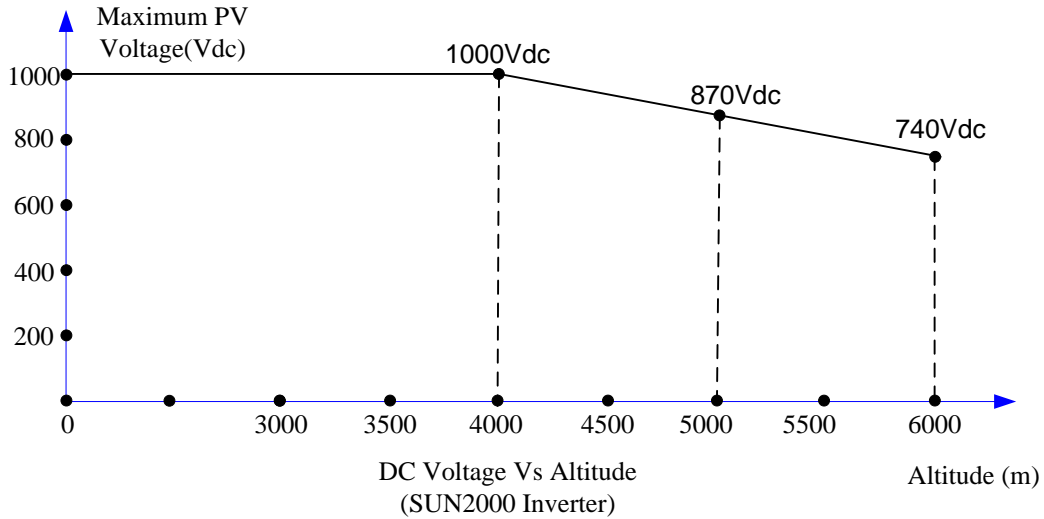


Note: When SUN2000-33KTL-US is in the condition that it operates at grid voltage 0.9 p.u. and ambient temperature below 54.3°C, it can output 33.3kW (when PF=1) or 33.3kVA at most.



DC Voltage Curve Vs Altitude

DC Voltage Curve of SUN2000-33KTL-US:

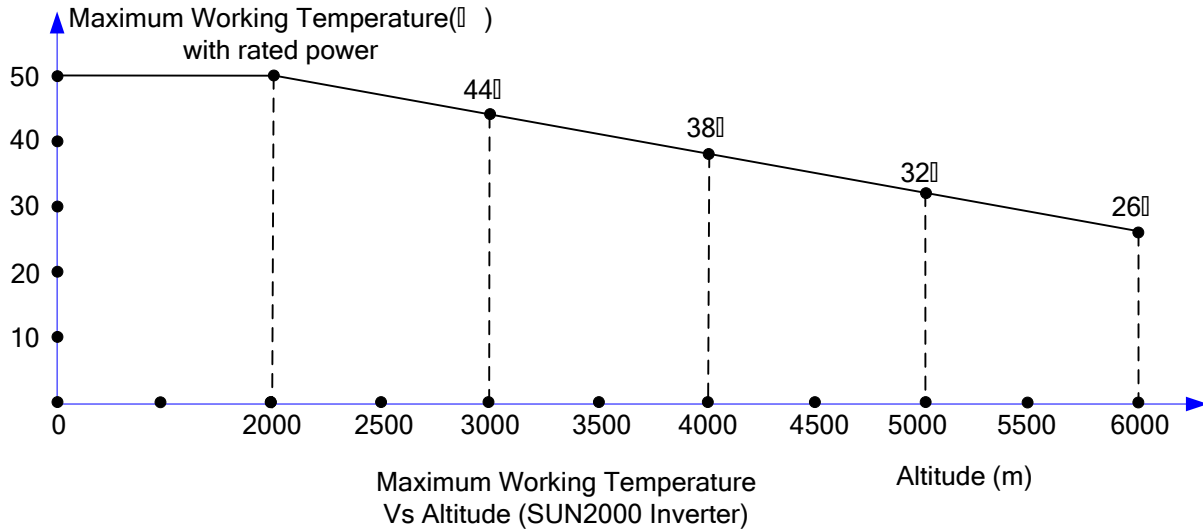


Note:

SUN2000 inverter design safety distance in accordance with running at the altitude of 4000m and below to avoid no power derating. As altitude increases above 4000m, DC voltage derating of SUN2000 should be taken into consideration and DC voltage drop in accordance with 13V/100m. For SUN2000 inverter, the rated AC voltage@480V will not be affected by the altitude.

Maximum Working Temperature Vs Altitude

Maximum Working Temperature Vs Altitude SUN2000-33KTL-US :



Note:

The maximum working temperature indicates that SUN2000 is capable of export rated power without de-rating below the ambient temperature. With the elevation rises, heat emission will slow down, so the operating temperature of inverters will be higher and severer than at the lower altitude area. As altitude increases above 2000m, the maximum working temperature of SUN2000 should be taken into consideration and temperature drop in accordance with $6^{\circ}\text{C}/1000\text{m}$.