De-rating Behavior and P-Q Curve of Inverter SUN2000-60KTL-M0 (380_400Vac)

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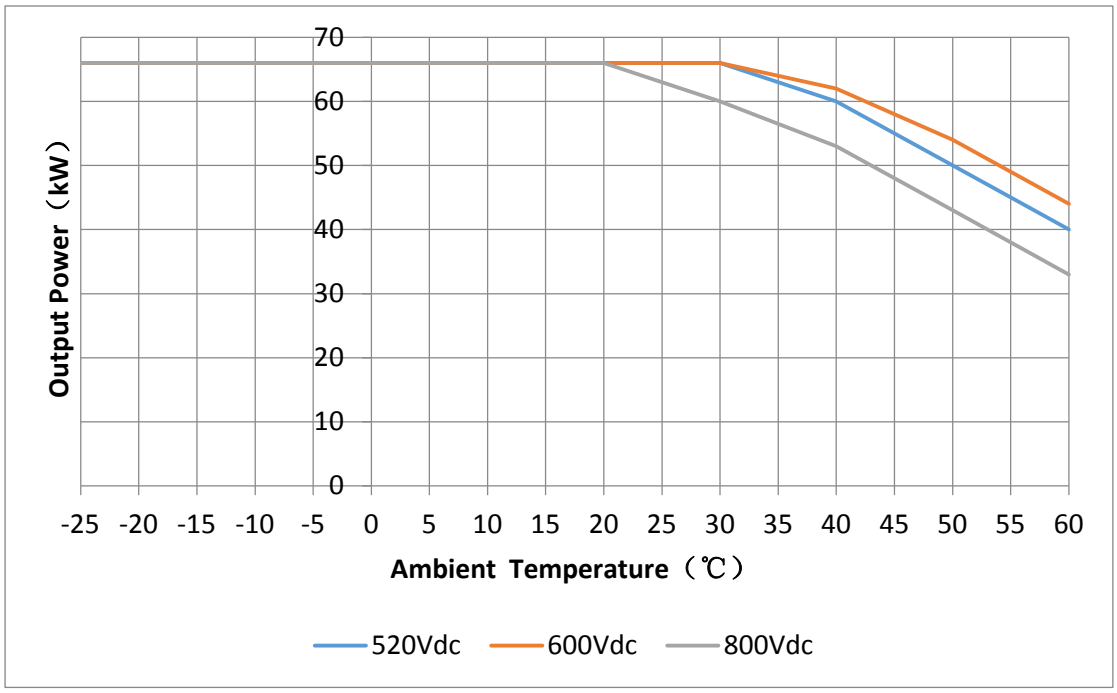
Version	Created by	Date	Remarks
01	Huawei	12/31/2017	

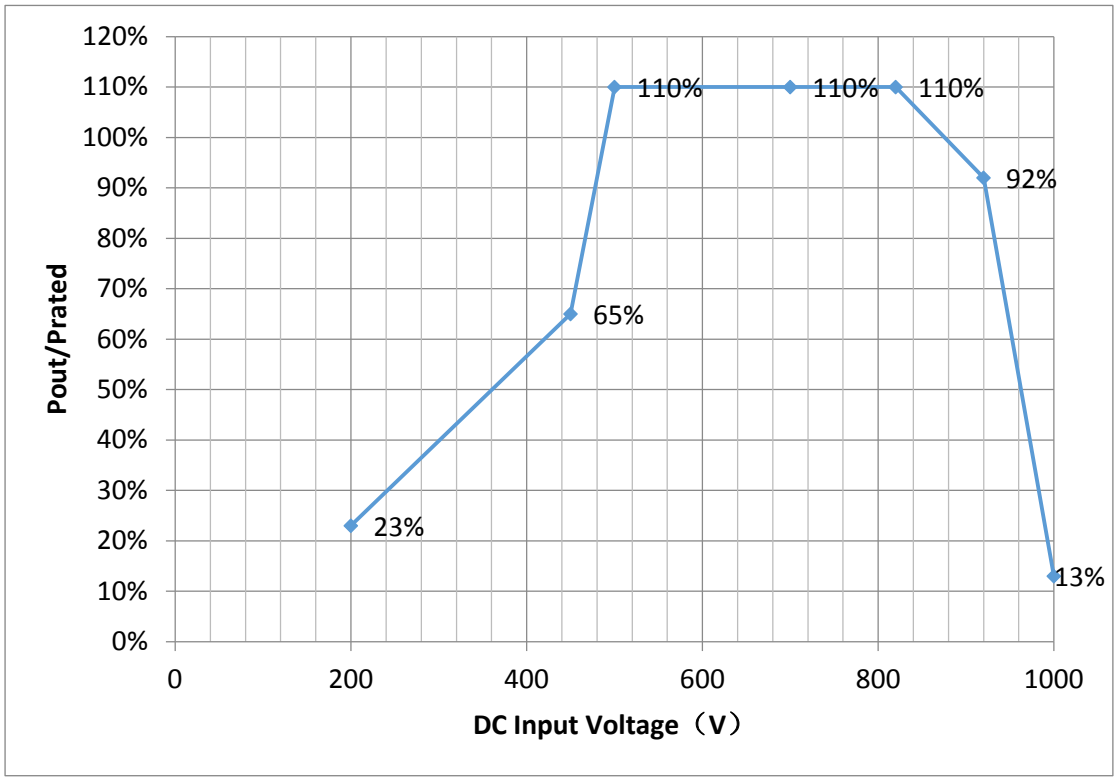
1. Temperature De-rating Curve of SUN2000-60KTL-M0 (380/400Vac)



Air speed: 0.5m/s, PF=1

Model	MPPT Input	-25°C	15°C	30°C	40°C	50°C	60°C
SUN2000-60KTL-M0	520 Vdc	66kW	66kW	66kW	60kW	50kW	40kW
	600 Vdc	66kW	66kW	66kW	62kW	54kW	44kW
	800 Vdc	66kW	66kW	60kW	53kW	43kW	33kW

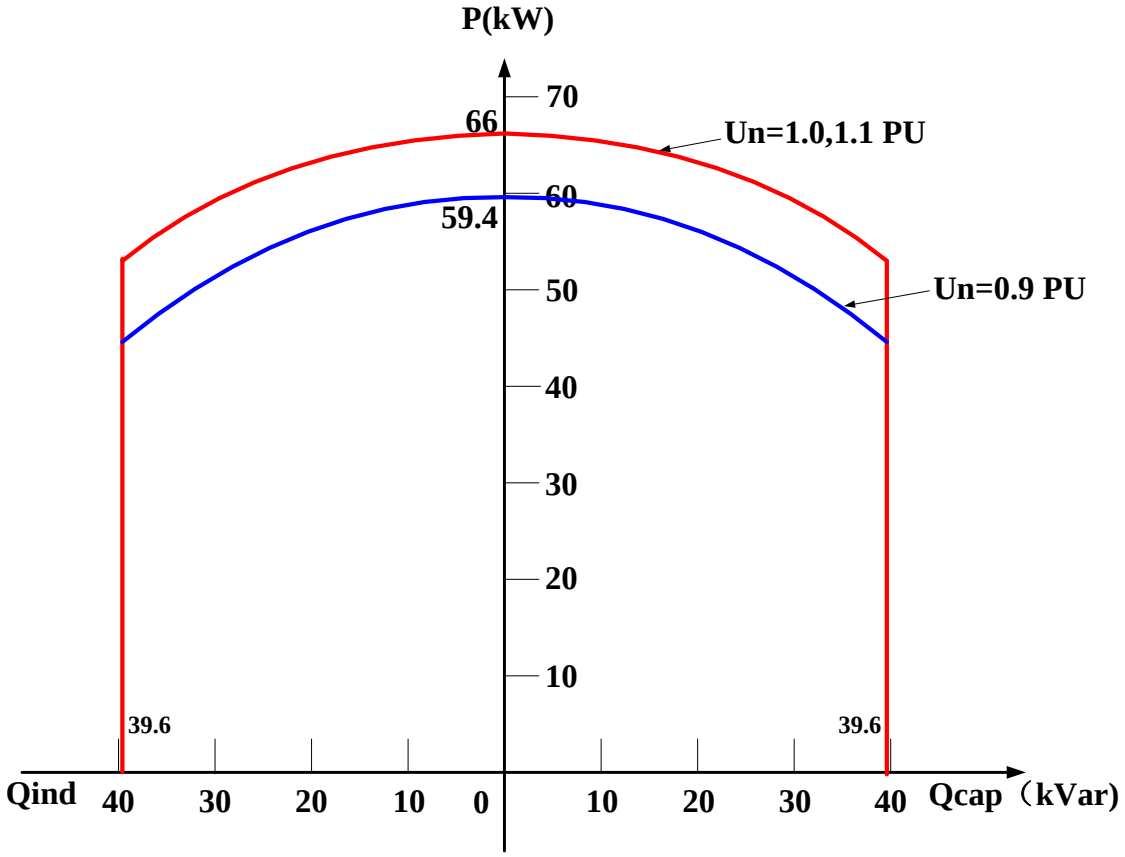
2. PV Input voltage De-rating Curve of SUN2000-60KTL-M0 (380/400Vac)



Note: The PV input voltage de-rating curve works under condition that PF=1.0.

DC Input Voltage (V)	200	450	500	700	820	920	1000
Pout/Prated	23%	65%	110%	110%	110%	92%	13%

3. PQ Curve of SUN2000-60KTL-M0 @ 1.0 p.u. voltage (380/400Vac)

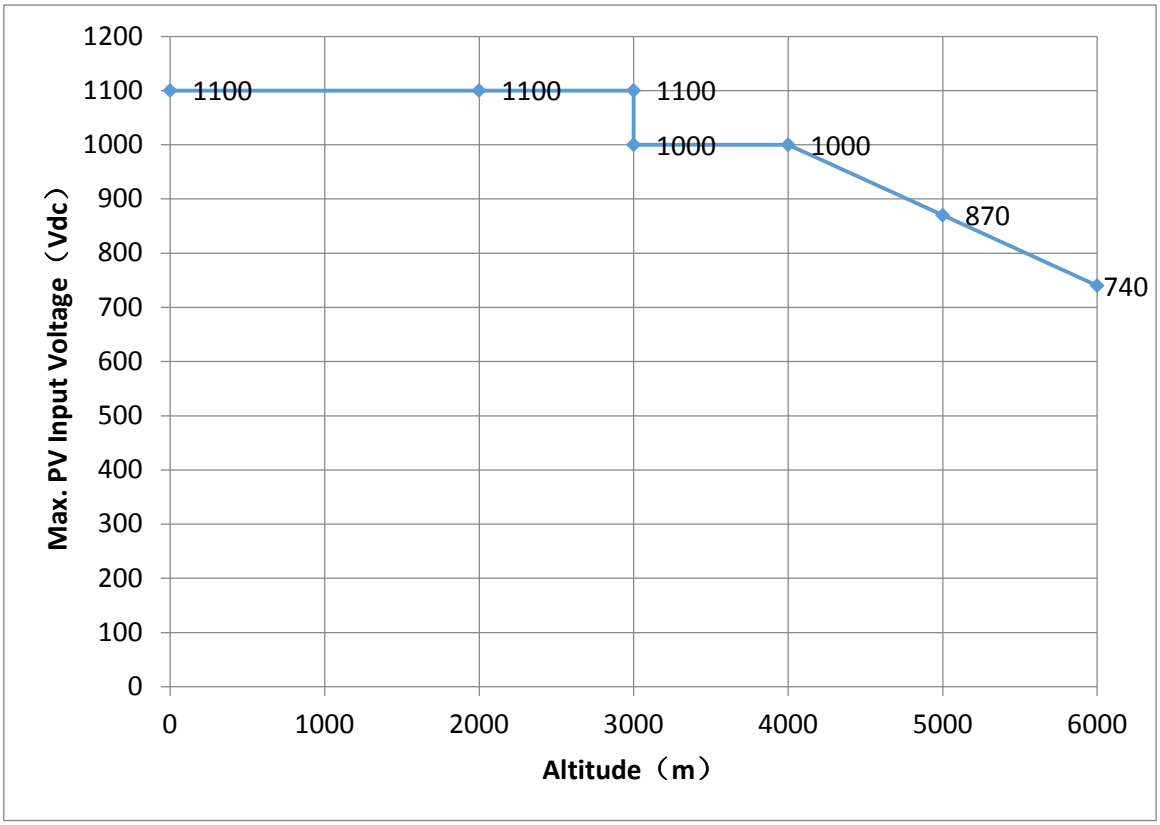


Note:

When SUN2000-60KTL-M0 is in the condition that it operates at rated and 1.1 rated output voltage, it can output 66kW (when PF=1) or 66kVA at most.

When SUN2000-60KTL-M0 is in the condition that it operates at 0.9 rated output voltage, it can output 59.4kW (when PF=1) or 59.4kVA at most.

4. Max. PV Input Voltage vs. Altitude of SUN2000-60KTL-M0 (380/400Vac)

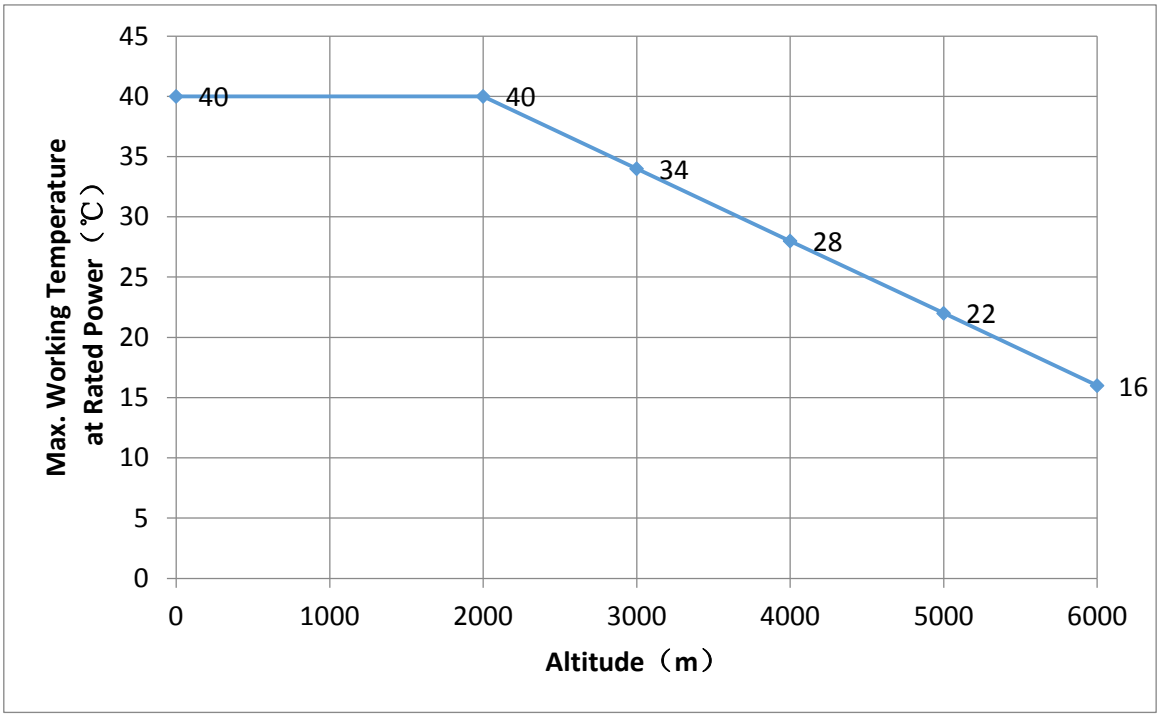


Note:

SUN2000 inverter design safety distance in accordance with running at the altitude of 4000m and below to avoid power de-rating. As altitude increases above 4000m, DC voltage de-rating of SUN2000 should be taken into consideration and DC voltage drop in accordance with 13V/100m.

For SUN2000 inverter, the rated AC voltage will not be affected by the altitude.

5. Maximum Working Temperature vs. Altitude of SUN2000-60KTL-M0 (380/400Vac)



Note:

The maximum working temperature is the ambient temperature below which SUN2000 can output rated power without de-rating.

When the altitude rises, the cooling capacity of the inverters de-rates. So the internal temperature of inverters in the high altitude area will be higher and severer than that in the low altitude area.

When altitude > 2000m, the maximum working temperature of SUN2000 should de-rate by altitude, and it de-rates in accordance with 6℃/1000m.

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