

INGECON® SUN 1Play REACTIVE POWER CAPABILITY

INGETEAM S.R.L. certifies that the inverters,

INGECON SUN 2.5TL M	INGECON SUN 2.7TL M	INGECON SUN 3TL M
INGECON SUN 3.3TL M	INGECON SUN 3.68TL M	INGECON SUN 4.6TL M
INGECON SUN 5TL M	INGECON SUN 5.5TL M	INGECON SUN 6TL M
INGECON SUN 2.5 HF	INGECON SUN 2.7 HF	INGECON SUN 3 HF
INGECON SUN 3.3 HF	INGECON SUN 3.68 HF	INGECON SUN 4.6 HF
INGECON SUN 5 HF	INGECON SUN 5.5 HF	INGECON SUN 6 HF

are designed to operate according with the reactive power capability shown in the Figure 1.

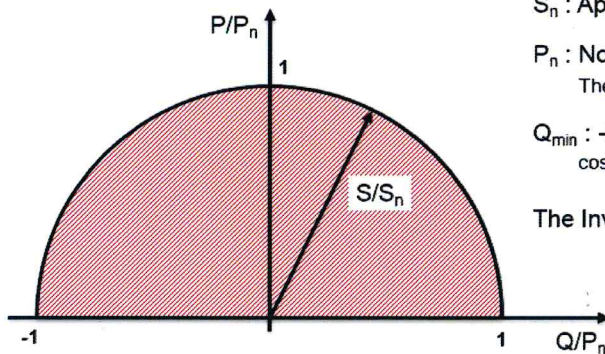


Figure 1

S_n : Apparent Power of the Inverter [kVA]

P_n : Nominal Power the Inverter [kW]

The Nominal Power is the Active Power with $\cos \varphi = 1$, so $P_n \equiv S_n$

$Q_{\min} : -S_n$ [kVAR] , $Q_{\max} : S_n$ [kVAR]

$\cos \varphi$: from 0 leading to 0 lagging

The Inverter can work anywhere in the red hatched area

In particular, the inverter can operate continuously anywhere within the red hatched area bounded by the value of the apparent power S_n , so that the maximum reactive power Q is defined by the equation:

$$Q_{\max} = \sqrt{S_n^2 - P^2}$$

due to the absence of any other constraints, the Inverter is then able to operate from $\cos \varphi = 0$ underexcited/leading to $\cos \varphi = 0$ overexcited/lagging.

Ingeteam

Stefano Domenicali
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Vice President

Stefano Domenicali
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