Snubber resistance and capacitance calculation in Banshee grid

– maximum power flowing through the coupling element [VA]

– voltage level (line voltage) [V]

– network angular frequency () [rad/s]

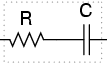
– snubber power as a fraction of maximum power (S) [-]; ; typically,

– snubber capacitance [F]

– snubber resistance [Ω]

– snubber time constant [s]; typically,

Snubber is implemented as an RC branch.



Snubber resistance and capacitance are calculated using the expressions below. If the calculated induce instabilities, increase capacitance twice, then recalculate resistance. This procedure is repeated until stability is achieved.

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Dually for R||L snubber option: