

ZGX/KGS Series – –Voltage Range Doubled in Reverse Mode

The ZGX and KGS series from BriPower offer an reverse output mode, which allows the output voltage range to be extended to double.

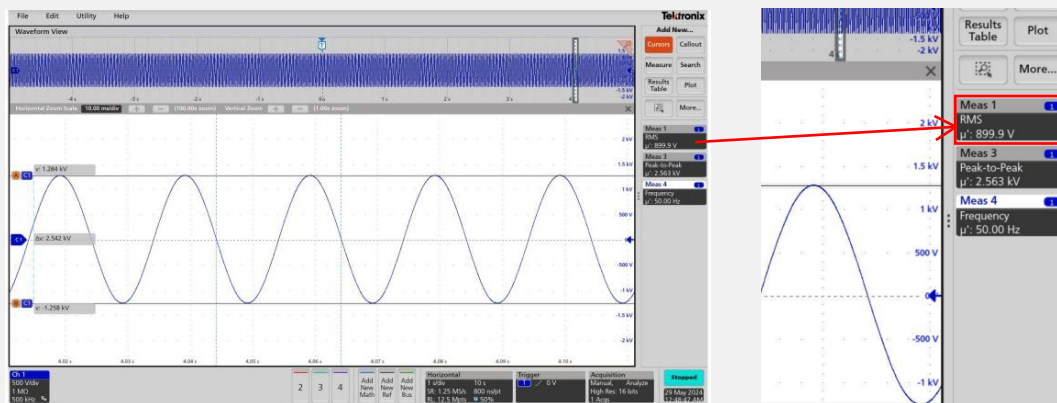
The reverse mode of BriPower refers to setting the phase angle between two phases to be 180 degrees apart.

For example: Under the AC voltage range of 450VL-N, through the reverse mode, the output voltage will be maximum 900V L-N.

Under the DC voltage range of 636V, through the reverse mode, the output voltage will be maximum 1272V.

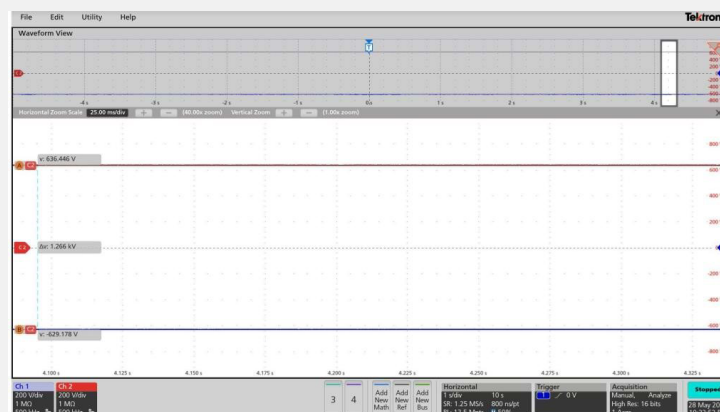
Taking the ZGX 15 series as an example: Select phases A and B.

1. In AC mode, phase A is set to 90 degrees phase angle with 450V voltage, and phase B is set to 270 degrees phase angle with 450V voltage. The output waveform between A and B is shown in the figure below:



Pic1: Set to 450VL-N, through the reverse mode, the output voltage is 900V L-N.

2. In AC mode, with the frequency set to 0 to get DC output, phase A is set to 90 degrees phase angle with 450V L-N voltage, which is 636V DC at 0Hz, and phase B is set to 270 degrees phase angle with 450V L-N voltage, which is 636V DC at 0Hz. The output waveform between A and B is shown in the figure below:



Pic2: the output is 1272V DC through the reverse mode

The ZGX and KGS series are modular AC/DC source and load, which use SiC as the main circuit power device, providing a variety of power electronics simulation functions. The power supply can be used as a power grid simulator, regenerative AC/DC electronic load, bidirectional DC power supply, bipolar DC power supply, regenerative RLC electronic load, and a power amplifier for hardware-in-loop testing.