The invention relates to the electric engineering and is destined for the regulable resonance constant-toalternating voltage conversion in the powerful and efficient voltage converters of diverse application, in particular in the stations of cathodic protection, functioning at high temperatures and natural cooling.

The process for regulable resonance constant-to-alternating voltage conversion consists in the:

- creation of oscillations with proper period T_0 and commutation period $T_k(T_k>2T_0)$ using a capacitive and inductive power accumulator, consuming power from a constant voltage source and transmitting a part of the power into the rectifier load;

- return of the capacitive accumulator power excess back into the voltage source;

- regulation of the load tension by T_k modification;

– creation concomitantly with the first oscillations of the second oscillations with properperiod T_0 and commutation T_k using the same capacitive accumulator and a second inductive accumulator, consuming power from the capacitive accumulator and transmitting a part of the power into the rectifier load.

Claims: 1 Fig.: 7