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COMMUTATION OF A CAPACITIVE ENERGY BANK BY PSEUDOSPARK SWITCHER IN SELF-BREAKDOWN MODE

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Dependence curves of self-breakdown voltage from heat power of the hydrogen generators were obtained for capacitive power bank (45 nF, $40 \, kV$, charge time $12 \, \mu s$) commutated by pseudospark switch TPI1-10K/50. Special settings for the hydrogen generators have been found when the pulse-to-pulse fluctuations of the breakdown voltage less than 1 %. The value of the voltage fluctuations stayed the same after 0.1 million of 10 pps shoots.

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Keywords: pulse power generator, pseudospark switch, self-breakdown voltage fluctuations.