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CHARACTERISTIS OF ELECTRICAL JET ENGINE OF HALL-TYPE FOR CORRECTION OF MICROSATELLITES ORBITS

The research aim is to define the degree of influence of the discharge voltage on thrust performance and power characteristics of the ITM-31 Hall low-powered engine developed at the Institute of Technical Mechanics of the National Academy of Sciences of Ukraine and State Space Agency of Ukraine. Control characteristics in a power range of 18-304 W are presented. The evaluation of an allowable operating range of the discharge voltage is pioneered. The practical importance is to increase the efficiency of the Hall engine for minimizing the power consumption.

Keywords: discharge voltage, thrust and power characteristics, electrical jet engine of Hall-type, control characteristics, microsatellites orbits.

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