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DETERMINATION OF CONTROL SYSTEM INFORMATION COORDINATES OF HIGH VOLTAGE INSTALLATIONS FOR ELECTRODISCHARGE TREATMENT OF CARBON-CONTAINING GASES

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Abstract

The information coordinates of the control system for the automatic control of the output characteristics of the high-voltage discharge currents former of the high-voltage installations of electrodischarge treatment of carbon-containing gases are determined. The peculiarities of the work that are inherent in high-voltage electric discharge installations are analyzed and it is shown that the information coordinate of the control system is the input power of the power source of the installations for the discharge of carbon-containing gases, and with a stable input voltage, the current value at the input. This allows to fast determination of the current value of the length of the electrode gap to maintain the mode of operation of high-voltage installations for the discharge of carbon-containing gases with maximum productivity at minimum specific energy consumption per unit mass of the product. References 9.

Key words: information coordinate, power, operating current, interelectrode gap, operating mode, productivity, specific energy consumption.

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