Methodology for Assessing the Reliability of an Electric Generator Set With a Gasoline Engine

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key words

reliability, non-failure operation, electric generator, gasoline engine, technique I have reviewed the methodology for assessing the reliability of an electric generator set with a gasoline engine, such indicators as reliability; maintainability; durability; persistence. The assessment of the compliance of the product with the requirements for reliability is carried out by the calculation-experimental method using statistical data obtained from the results of factory, autonomous and integrated tests. The maintainability of electric generators is understood as the suitability of the systems and units included in it to maintain and restore operability during repair and maintenance. The durability is the ability to maintain operability until the limit state occurs in the presence of maintenance and repair, and the storability is the ability of the product to perform the required functions during and after storage. The determination of reliability indicators is carried out by methods of the statistical theory of reliability. Quantitative reliability analysis is based on the statistical parameters of reliability, determined by the results of testing and operation of products. Based on its results, the quantitative indicators of the reliability of newly developed products are evaluated and corrected.

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