HIGH FREQUENCY VECTORIAL MEASUREMENT CHARACTERIZATION OF THE GIANT MAGNETO-IMPEDANCE SENSORS

BY

EMIL VREMERĂ and CRISTIAN FOŞALĂU

Abstract. A method of testing magnetic field sensors having as sensitive element a magnetic amorphous wire is proposed. The sensor characterization is performed by vectorial measurements at high frequency, based on a Helmholtz coils system calibrated in dc current. The results are statistically analysed, being credited with the associated statistical parameters.

Keywords: Amorphous Wire; Giant Magneto-Impedance; Magnetic Field Sensor; Vectorial Measurement.

THE THREE-PHASE INVERTER CONTROLLED BY ANGULAR PULSE WIDTH MODULATION TECHNIQUE, USED IN AC MOTORS SUPPLY

BY

CRISTIAN AGHION, M. LUCANU, OVIDIU URSARU, CRISTIAN PAVEL and COSTEL PETREA

Abstract. The modulation strategy has the role to modify the ratio between the fundamental magnitude voltage from the inverter output and the power supply value and also to improve the harmonic content of the voltage and load current. The various modulation techniques differ by the method of calculation of the switching time moments of the switching device. This paper studies, by comparison, the results obtained from the simulation of the three-phase inverter controlled by PWMA (Angular Pulse Width Modulation) technique and the results obtained from the practical design of the circuit tested by simulation.

Keywords: Converter; Microcntroller; Software; Control.

THE STRENGTH VARIABLES OF THE ELEMENTS SUBJECTED TO THE FLUCTUATING STRESS

BY

CIPRIAN NEMEŞ

Abstract. The probability of an item can be estimated using the probabilistic stress–strength model, but in this case we need to know the magnitude of both stress and strength of item and that can be represented by random variables. Usually, the items worked under different external and internal stress. Also, the strength depends on many number of parameters, hence the stress and strength distributions have various forms.

Keywords: Stress and Strength Distribution; Quasy-Stationary Process Lifeteme.