

# About Monitoring of Joint Coils from Electric Traction Railway

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**Abstract**— The general structure of the electric traction system highlights the complexity and diversity of electrical equipment from the power supply. The return circuit, part of electric traction railway, consists of the running rails, the joint coils and the return feeder to the traction substation. Monitoring of the electrical equipment, existent in the electric traction railway, is a newest concept. The paper presents aspects about monitoring of some parameters of joint coils used in electricity supply systems from traction electric. Also, it is presented the monitored parameters considered important for knowledge of technical condition of a joint coil, in normal situation and in case of abnormal operating conditions, when are comparing them with similar records considered of reference. Data acquiring and them analysis was performed with an acquisition card, respectively by using a software application developed in LabVIEW programming environment.  
**Keywords**— joint coils; return circuit; monitoring; diagnosis

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