Abstract
This paper presents a review of the state of art of characterization, identification and location of voltage sags. The methods presented are the product of different analyzes on electromagnetic disturbance, specifically on voltage and current waveforms. Electrical circuits theory, electromagnetic transients and knowledge of the phenomenon are used to propose attributes and descriptors to characterize the disturbances according to some interest characteristic. A review of basic characterizations and methodologies that integrate complex classifiers and descriptor is performed. Emphasis is performed on characterization methods, together with attributes and descriptors, where the limitations and possible improvements are included. According at development level in these studies, new methodologies are needed to integrate characterization, diagnosis of causes, localization, assessment and information extraction modules. The methodologies are oriented towards a tool for automatic management of power systems disturbances.

Keywords
Power quality, voltage sag, descriptors, voltage sags causes, relative location, exact location.