

Call for Papers for the Special Session on:

Adjustable Speed Drives And Power Quality

HE HIGH demand for electric motor driven applications has made them to consume significant share of global electrical energy. Introducing Adjustable Speed Drive (ASD) based on power electronics technology leads to more energy efficient motor drive systems. However, from grid point of view ASD systems are known as one of the major source of power quality issues. Although vast of harmonic mitigation methods have been introduced for threephase rectifier systems, but high cost, low efficiency and high complexity have made majority of the prior-art solutions to become unsuccessful in ASD industry. Moreover, the power quality issues can be further elevated when multiple of ASD units are connected to the Point of Common Coupling (PCC). Finally, with the rapid growth of power electronic applications, the standard recommendations are continuously updating and becoming more stringent. Therefore, in order to accelerate deployment of ASD systems as an energy efficient technology it calls for cost-effective, efficient, simple and robust harmonic reduction solutions.

This special session is devoted to cover the latest developments of mitigation technologies, harmonic modelling and energy efficiency in power electronics based ASD systems. Applications involving intelligent and smart harmonic reduction techniques in multi-drive systems and using Wide-Band Gap (WBG) power devices to improve energy efficiency and power density are especially welcome

Topics of interest include, but are not limited to:

- Power factor correction in three-phase rectifier systems
- Harmonics modeling of front-end rectifiers
- Improving partial loading efficiency in ASD systems
- System control of multi-drive configurations for harmonic mitigation
- Harmonics stability and resonance in multi-drive systems
- Interharmonics generation and mitigation in threephase ASD systems
- Application of Wide-Band Gap (WBG) devices and efficiency improvement method for harmonic reduction

Manuscript Preparation and Submission:

As an author, it is crucial to follow the rules and formatting instructions to submit your paper to IECON2016. Please prepare your manuscript following the instructions described in the guidelines "Information for Authors" on the web site: http://www.iecon2016.org/index.php/welcome/for-authors

Please submit your manuscript in electronic form through: http://cms.iecon2016.org

Once you registered successfully by filling all the required fields, you should select the appropriate Special Session from the list. Then you could upload your manuscript (PDF file format) following the instructions given on the screen.

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Timetable

and authors' registration:

April 15, 2016 May 31, 2016 July 15, 2016