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Dynamic Voltage Restorer Control Strategies: An Overview

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Abstract : Power quality is an important parameter for today's consumers. Various custom power devices are in use to give a proper supply of power quality. Dynamic Voltage Restorer is one such custom power device. DVR is a static VAR device which is used for series compensation. It is a power electronic device that is used to inject a voltage in series and in synchronism to compensate for the sag in voltage. Inductive Loads are a major source of power quality distortion. The induction furnace is one such typical load. A typical induction furnace is used for melting the scrap or iron. At the time of starting the melting process, the power quality is distorted to a large extent especially with the induction of harmonics. DVR is one such approach to mitigate these harmonics. This paper is an attempt to overview the various control strategies being followed for control of power quality by using DVR. An overview of control of harmonics using DVR is also presented.

Keywords: DVR, power quality, harmonics, harmonic mitigation

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