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POWER FACTOR CORRECTION OF DRIVE WITH ELECTROMAGNETIC VIBRATORY FEEDER

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Abstract: *In this paper will be proposed a possible solution for a transistor converter for electromagnetic vibrators. These electromagnetic vibrators are used in dose and heave systems for scraped material. Earlier standard solution with thyristors and triacs are with phase angle control. This type of converter have poor power factor and they produce a harmful harmonics in the main power network. The new class converter now works in pulse domain and they have power factor correction and also the possibility to eliminate a harmful harmonics. It is possible to produce any frequency of vibration independently of main power network frequency. In this paper will be described a solution to avert maintained defects.*

Key words: Electromagnetic vibrator, transistor converter, power factor

KOREKCIJA FAKTORA SNAGE U POGONU ELEKTROMAGNETNIH VIBRATORA

Sadržaj rada: *U radu će biti predloženo jedno moguće rešenje tranzistorskog pretvarača za pobudu elektromagnetnih vibratora koji se koriste u sistemima za izvlačenje i doziranje rasutih materijala. Standardna rešenja su realizovana sa tiristorima i trijacima gde se uglavnom koristi fazna kontrola. Pretvarači sa faznom kontrolom imaju jako lošfaktor snage i generišu štetne harmonike u napojnu mrežu. Zato se u novije vreme radi na razvoju pretvarača koji rade u prekidačkom režimu, a koji u sebi obuhvataju korekciju faktora snage i eliminaciju viših harmonika. Takođe je moguće ostvariti proizvoljnu učestanost vibracija nezavisno od mrežne učestanosti. U nasatvku rada }e biti detaljnije opisani pretvarači koji otklanjaju pomenute nedostatke.*

Ključne reči**: **Elektromagnetni vibrator, tranzistorski pretvarač, faktor snage