

## عنوان مقاله:

Effect of Harmonic on Oil- Filled and Dry-Type Distribution Transformer

## محل انتشار:

پنجمین کنفرانس ملی مهندسی برق و الکترونیک ایران (سال: 1392)

تعداد صفحات اصل مقاله: 6

## نویسندگان:

Alireza Bakhshinejad - *Department of Electrical engineering, sowmesara Branch, Islamic Azad University, sowmesara, Iran*

S.Mohammad Bagher Sadati - *Department of Electrical and Computer Engineering, University of Kurdistan, Sanandaj, Kurdistan, Iran*

Saeed Ahmadi - *Department of Electrical engineering, sowmesara Branch, Islamic Azad University, sowmesara, Iran*

Mehdi Tabasi - *Department of Electrical engineering, sowmesara Branch, Islamic Azad University, sowmesara, Iran*

## خلاصه مقاله:

According to validity of available statistics on total losses in power system including generation, transmission and distribution system, distribution system has the highest amount of total losses. On the one hand, expansion of electricity network and on the other hand, using nonlinear loads in distribution system will result in losses growth. In addition, transformers are one of the most important and populous equipments in distribution systems and have significant role in network losses. So, evaluation of their losses based on the harmonics produced by nonlinear loads is essential. In this paper, by measuring a 500 KVA oil-filled transformer loading, its losses are calculated. Then, by using a dry-type transformer instead of mentioned oil-filled transformer, losses are calculated again under the same distorted condition. Also, according to programs written in MATLAB environment, the load ability of two transformers has been investigated. In addition, the cost of energy losses has been calculated, too, and finally, results have been compared

## کلمات کلیدی:

Harmonic, Losse and Load Ability, Oil-Filed and Dry-Type transformer

## لینک ثابت مقاله در پایگاه سیویلیکا:

<https://civilica.com/doc/219511>

