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**Operation and Maintenance, Electrical Facilities**

**Data Centers, Demanding Application**

**מגמת העלייה בדרישה להעברת המידע**

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Data centers

This is the age of data, there are millions of internet-connected device and this continue growing. A massive number of data are captured, measured and controlled in order to enhance operations, to increase productivity and safety and look for cost-effective solutions.

The internet of the things, artificial intelligence, data analytics, cloud storage are some of the major drivers for this unstoppable growth of data centers. And they also need reliable solutions and high-efficient equipment.

Demanding application.

Data Centre is a highly demanding application. Standard designs of dry type transformers are not enough to cope with the requirements.

The non-linear of their switched-mode power supplies generate harmonics currents that create overheating in the transformers and deterioration of the insulation systems. Up to K20 factor might happen in data center electrical installation.

Due to special designs of data centers with high density of equipment installed in the available space, there are in & out costs in case of any incident.

It is important to ensure functionality and reliability of the transformers.

TMC Transformers solutions

The H-ART180 dry type transformer developed by TMC Transformers SpA is ideal for this type of application: An upgraded class H insulation system that is based on advanced resin technology combined with lower temperature rise, improves the performance of the transformer and the lifetime expectancy.

This technology is the ideal one to face harmonic content and reach high efficiency levels.

The constraints of physical space in data centers makes the compact design of TMC Transformers the perfect solution.

The portfolio includes a variety of accessories such as snubbers, combination of capacitors and surge arresters, or pre-magnetization transformers, and any kind of pads or dumpers to mitigate noise level and transmission of vibration.

All transformers are designed according to international standards with rigorous criteria, validating the designs through finite element analysis in both the electrical and mechanical parts.

Complementing the portfolio

TMC Transformers SpA completes the portfolio for data centers with insulation dry type transformers.

Low voltage transformers with designs able to cope with harmonic distortion equivalent up to K20 factor.



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