Transient Voltage Protection for transformers
Eliminate network switching failures in data centers

• Consistent and reliable power is the essence of any data center operation
• To ensure this, data center employ a complex and specialized power distribution network
• Circuit breakers are integral part of this network, so are distribution transformers

Impact of switching on transformers

The Solution

• Switching of vacuum and SF6 circuit breakers can produce fast transient over-voltages inside transformer windings that cause irreparable damage
• This repeated deterioration of transformer winding eventually leads to unwarned transformer failure resulting in an unplanned downtime
• To resolve this challenge for Data Centers, ABB has developed a dry-type transformer with Transient Voltage Protection (TVP) that can operate safely with vacuum circuit breakers
• This specially designed transformers utilize winding varistors that are strategically placed on the transformer to protect it from transient voltages

ABB’s Dry type Transformers with Transient Voltage Protection (TVP) Technology

ABB’s transformers with Transient Voltage Protection (TVP) provides a wide range of effective benefits to the system it is installed within.

- Works on nearly the entire scope of ABB distribution dry-type transformers
- Works in all systems; eliminates need for system studies
- Completely dry solution
- Does not affect size of transformer
- Capable of protecting downstream magnetic equipment
- No additional maintenance

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