



FerroView™

Ferroresonance Analysis Software

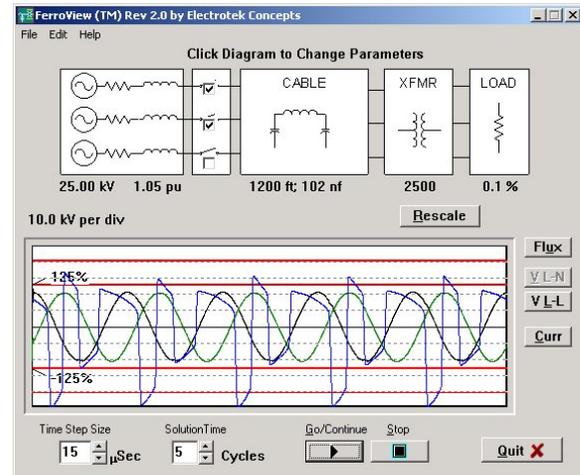
FerroView is a powerful analytical and educational tool that addresses the often-misunderstood phenomenon of ferroresonance in cable-fed 3-phase distribution transformers. Ferroresonance is responsible for numerous transformer failures each year. Customer load equipment can also be damaged. At the least, it can be very frightening to line personnel when it occurs.

Electrotek Concepts® developed FerroView to enable you to analyze specific incidents or simply to learn about ferroresonance.

The program analyzes the common problem where the transformer becomes isolated on a length of cable with one or two phases open. This can happen after a fault or when the unloaded transformer is being manually switched one phase at a time.

This analysis requires a very complicated model of the transformer and cable. However, FerroView has done the hard part for you. The simple user interface consists of just one screen with the circuit model already built. You just click on the circuit diagram to set up the parameters for your problem and then click the Go button. The computed voltage waveform immediately begins to display. You can clearly see the distorted waveforms that accompany ferroresonance. Sometimes it takes several cycles for ferroresonance to develop or for the voltage waveform to settle out. You simply click on the Go button again to continue to the solution. If the voltage stays above 125 percent, the ferroresonant condition is generally considered problematic.

FerroView handles 3-legged and 5-legged core designs as well as three uncoupled cores (triplex or bank of transformers). The primary connection can be grounded wye, ungrounded wye, or delta. The models cover typical modern designs, with customized versions available for an additional fee.



You can do some customization on your own by entering particular cable types and transformer sizes that are not already defined. An extensive Help system is included that also provides an excellent tutorial on ferroresonance.

You can adjust the following parameters:

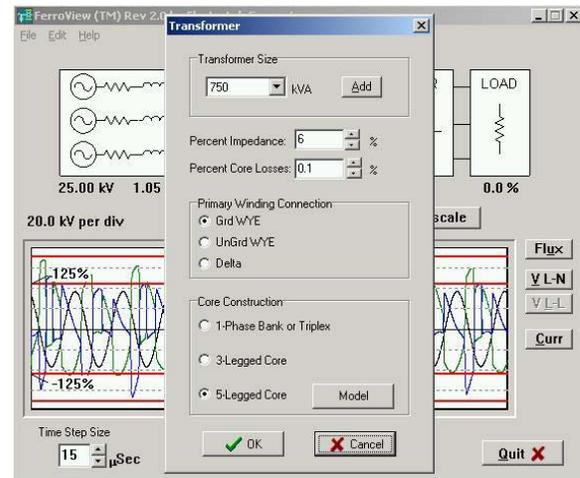
- Transformer core design and winding connection
- Transformer size, impedance, and core losses
- Cable capacitance and length
- Open phase(s)
- Voltage class
- Per unit voltage
- Starting voltage phase angle
- Short circuit impedance
- Resistive load

Support Options

Electrotek provides support for FerroView through PQSoft® Support Service, a comprehensive support offering for power system simulation and analytical tools. Features include upgrades, specialized models, and online resources. To learn more, send e-mail to pqsoft@electrotek.com, visit www.pqsoft.com, or call 865-470-9222.

Availability

FerroView can be purchased directly from Electrotek. Pricing for multi-user installations and support options is quoted upon request. For more information, send e-mail to info@electrotek.com or call 865-470-9222.



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