



Transformer Fault Calculator Help Documentation

This tool has been developed to calculate the short circuit current values for faults on the secondary side of a transformer. The tool has been designed to allow for the selection of numerous different winding configurations and to utilize either an infinite source calculation or thevenin equivalent impedance values for the source on the high voltage side of the transformer.

The infinite source calculation method assumes a generating source on the high voltage side of the transformer with a voltage magnitude of 1 per unit and an impedance value of zero. For applications where the Thevenin Equivalent (Driving point impedance) is known for the source it can be entered by depressing the Thevenin Equivalent radio button and entering the impedance. For non-utility customers, the Thevenin Equivalent value can usually be obtained from the serving utility.

Once these selections have been made, the data for the transformer of interest must be entered. Note that all fields must be filled in for the calculator to work properly. The applicable transformer type may be selected from the list and the transformer display will dynamically change as the selection is made.

Once all of the input data has been entered, the Calculate button may be depressed to perform the short circuit calculations. The calculated short circuit quantities are displayed in tabular format at the bottom of the screen and displayed graphically next to the transformer graphical symbol.

For a hardcopy of the results, the printing function of the internet browser may be used.

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