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## **User Guide for the OPTImizer Settings Calculator**

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The OPTImizer Settings Calculator can assist you in determining the values you need to properly program your OPTImizer circuit breaker monitor. The calculations are based upon formulas given in the OPTImizer Users Guide (000-0500) pages 42 through 49. The more accurate the information you provide, the more accurate the calculated values will be. There will be some breaker ratings that you may not know. In these cases the Settings Calculator will automatically make the assumptions recommended in the manual.

Remember that the OPTImizer is meant to be a tool for predicting when circuit breaker maintenance will be needed, much like the odometer in a car generally predicts when the oil needs to be changed. It is not meant to be a precision measuring instrument. The alarm settings do not need to be calculated exactly. As long as they are generally accurate the OPTImizer will perform its designated function, to predict when to schedule maintenance.

### **Procedure:**

1. Open the OPTImizer Settings Calculator file by browsing to it with the Windows Explorer or by clicking on the OPTImizer Settings Calculator button in the PRS Showcase CD program. This will automatically open the Microsoft Excel program.
2. Enter the circuit breaker information in the proper fields;

Rated Breaker Voltage (kV)\*

Rated Load Breaker Current (Amps)\*

Rated Fault Breaker Current (Amps)\*

Rated Number of Fault Breaks or Load Breaks

Primary (Bushing) CT Ratio (X:Y)\*

INCON Pickup Coil Current (Amps)\*

Warning = N % of Danger (%)

\* Required information, without these the calculations cannot be made.

- The Settings Calculator will automatically produce the values that you will need to program into your OPTImizer. Type the following commands based upon the calculated values to program your OPTImizer. (The “\_” indicates a space.)

Example:

Arctime_48	<b>ARCTIME=</b> <u>48</u>
Auxtime_60	<b>AUXTIME=</b> <u>60</u>
Danger_8.6+07	<b>DANGER=</b> <u>8.6E+07</u>
Warning_75	<b>WARNING=</b> <u>75</u>
CTR_160	<b>CTR=</b> <u>160</u>
PCR_32	<b>PCR=</b> <u>32</u>

- Proceed with the remainder of the program entry as described in the Users Guide on pages 32 through 50.
- You may save the calculated values if you wish by using the “Save As” function in Excel.