Eniscope Phase / Voltage Check

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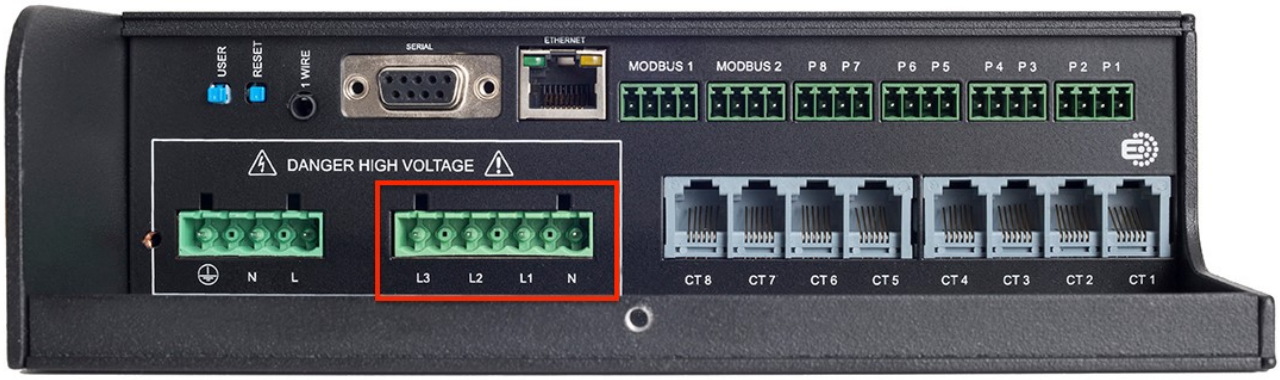
When installing the Eniscope it is so important that your supplied Voltage reference is correct. This means that you have Phase 1 connected to L1, Phase 2 connected to L2 & Phase 3 connected to L3 in the correct order at the Eniscope terminals. This is vital because if the Phases become swapped then all the Meter readings will be incorrect.



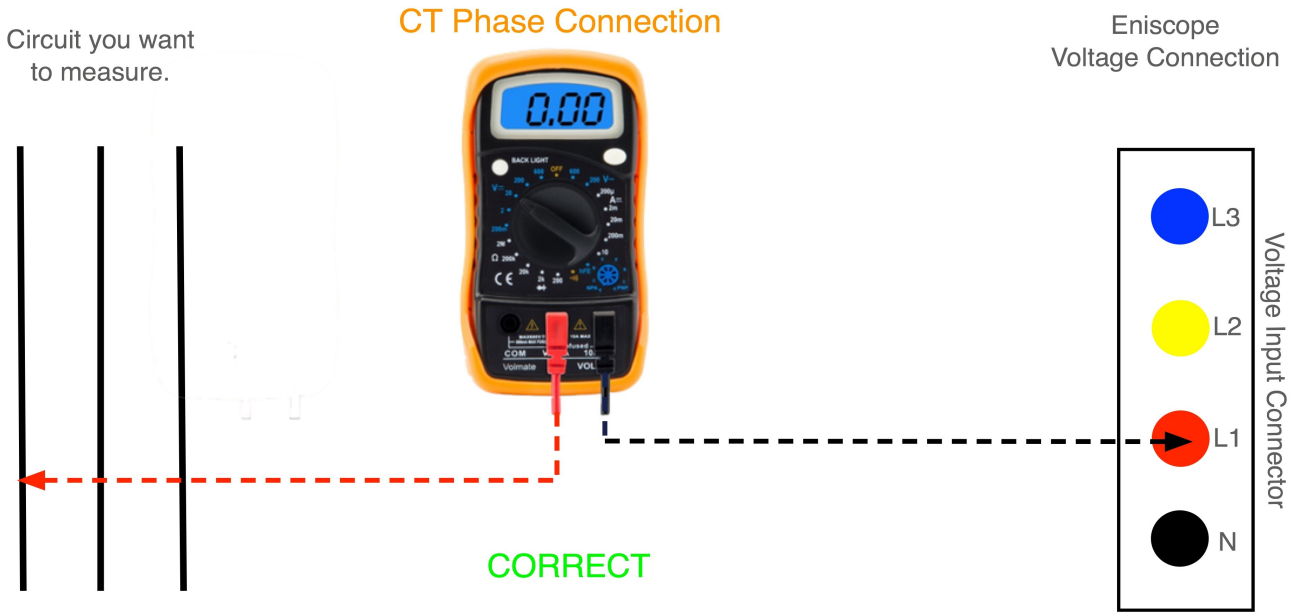
Once you are absolutely confident that your reference voltage is correct you can then use this as a guide to help you with your CT installation. If after reading the article **How to double check an Eniscope installation (http://help.bestsupportdesk.com/solution/articles/4000046587-how-to-double-check-an-eniscope-installation)** you identify a circuit that has a very poor PF and it's not what you expect you can run a very quick check that will confirm if you have the CT on the correct phase or the incorrect phase.

We do this using a voltage check.

Voltage is the potential difference between 2 points. So if you measure between L1 & N the difference will be your single phase voltage supply eg 240V if you have a three phase supply and measure between L1 & L2, L2 & L3, L3 &L1 the difference will be your three phase voltage eg 415v. However if you measure the same phases eg L1 & L1 there is no difference in potential and so your reading will be Zero (0). This can be very helpful to use in checking your phase configuration.

As you have already determined that the Voltage to the Eniscope is 100% correct we will use this as the reference source. So using a volt meter you can put one probe from your volt meter on the L1 terminal block on the Eniscope. The second probe should now be placed on the breaker or terminal connection of the cable you are monitoring that you believe to be the corresponding L1.

If you get the reading below this is correct and you have the correct phase. This has been proved as the potential difference is only possible when measured between the same phases.



If however, you have a reading as below this shows you are measuring the potential between 2 different phases and proves you have the CT on the wrong phase. You can then simply move the second probe to the next phase until you get a zero reading indicating the correct phase and then place the CT on that phase.