MP-13 : MPS VOLTAGE SEQUENCE - TWO PT CONNECTION

The MPS requires an A-B-C sequence with PT's connected as shown in Fig. 1.
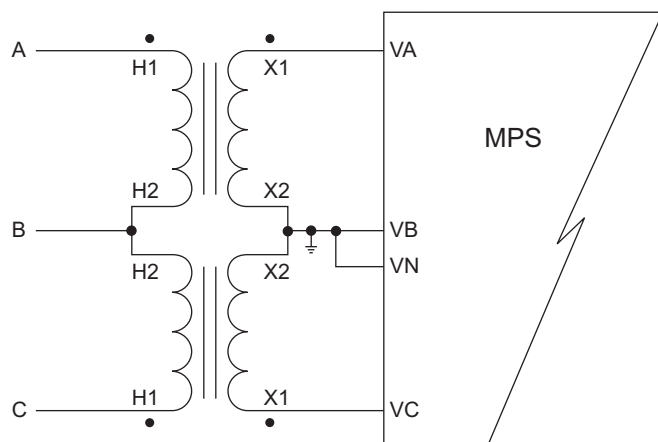
Note: No overcurrent protection shown.

Figure 1

In this configuration, the following display conditions are observed:

- Vab, Vbc, and Vca are balanced.
- +Sequence voltage reading indicates a per-unit value based on the input voltage rating. If the voltage-input is 120 Vac and the PT voltage is 120 V, then the per-unit value is 1.0.
- -Sequence reading is small indicating a balanced system.
- The voltage unbalance reading is a small positive value.

If the phase sequence is not A-B-C, the following display conditions are observed:

- Vab, Vbc, and Vca are balanced.
- +Sequence voltage reading is low.
- -Sequence voltage reading indicates a per-unit value based on the input voltage rating. If the voltage input is 120 Vac and the PT voltage is 120 V, then the per-unit value is 1.0.
- The voltage unbalance reading is a small negative value.
- The MPS trips on phase sequence if this feature is enabled.

The MPS does not have a software selectable phase sequence setting. The preferred method for changing the sequence is to swap two of the phases; however, if this is not possible, the sequence can be corrected by swapping the VA and VC voltage inputs on the MPS as shown in Fig. 2.
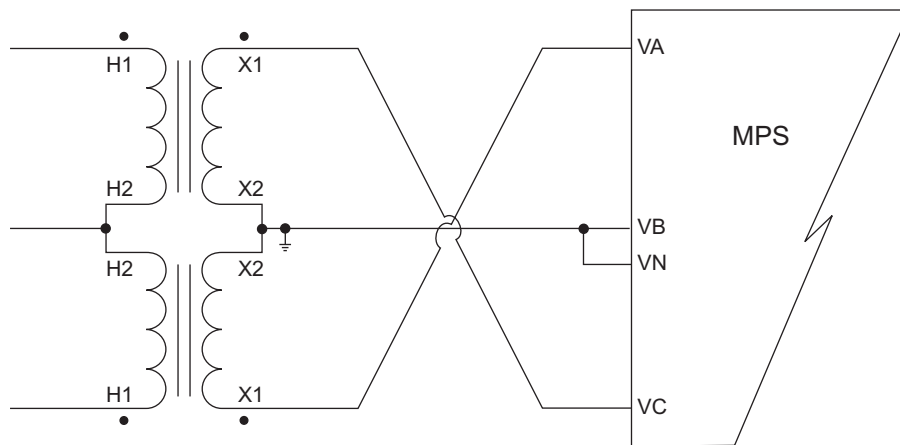

Figure 2

Phase CT inputs may need to be changed for correct power readings. There are a number of causes for incorrect power readings, please consult factory for solutions on specific applications.