

CT-09: SENSITIVE GROUND-FAULT PROTECTION USING SPLIT-CORE CT'S

A zero-sequence CT is optimized by using a symmetrical core and windings that are evenly spaced around the core. The symmetry allows the CT to operate in the presence of high load currents.

In a split-core CT, both the core and the secondary winding are not symmetrical which may result in nuisance tripping during high load-current conditions.

By using two split-core CT's, CT symmetry is improved allowing for reduced trip levels. The CT's should be fastened together as shown in Figure 1 with no gap between CT's and electrically connected as shown in Figure 2.

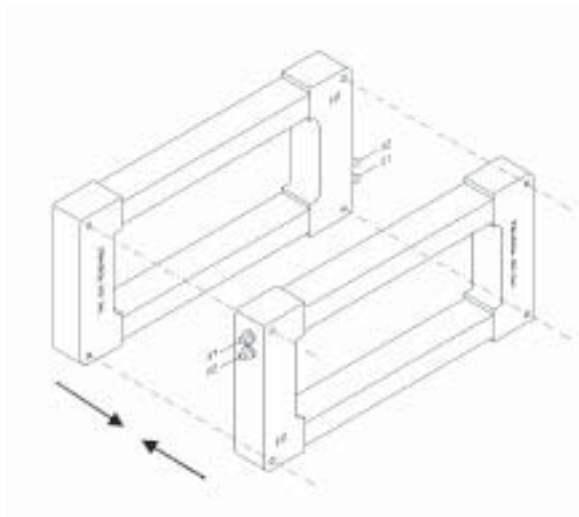


Figure 1: Mechanical Connection

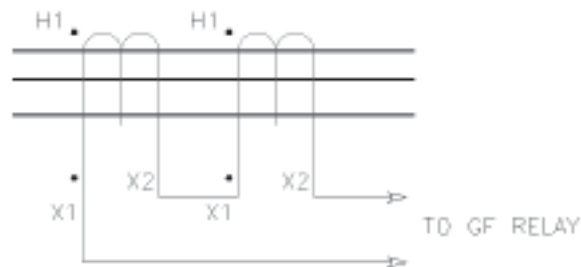


Figure 2: Electrical Connection