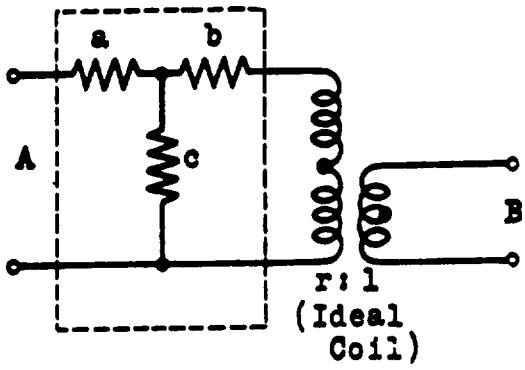
Equivalent T-Networks for Equipment

46, 62, 75, 91, 93 TYPE REPEATING COILS

Method of Using 1: 1 T-Networks of Repeating Coils For Impedance Computations

Networks Referred to High Impedance Side



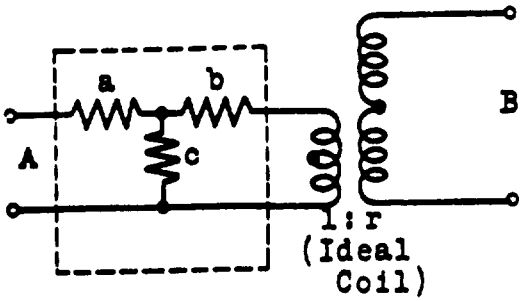
For Impedance at A: Multiply the impedance connected at B by r (the impedance ratio of the coil involved, greater than 1) and combine the resultant with the T-Network.

For Impedance at B: Combine the impedance connected at A with the T-Network and divide the resultant by r.

Note: The T-Network assumes nothing to be connected at the mid-point of the repeating coil windings. If an impedance z is connected at the mid-point of the:

1. High impedance winding, add z (vectorially) in series with arm a.
2. Low impedance winding, add z (vectorially) in series with the impedance connected at B or with that computed at B.

Networks Referred to Low Impedance Side



For Impedance at A: Divide the impedance connected at B by r (the impedance ratio of the coil involved, greater than 1) and combine the resultant with the T-Network.

For Impedance at B: Combine the impedance connected at A with the T-Network and multiply the resultant by r.

Note: The T-Network assumes nothing to be connected at the mid-point of the repeating coil windings. If an impedance z is connected at the mid-point of the:

1. High impedance winding, add z (vectorially) in series with the impedance connected at B, or with that computed at B.
2. Low impedance winding, add z (vectorially) in series with arm a.