

Line Relays ZLINW

Distance Relay with 2 Zones (ZLINW)

Relays are assigned to the system. The relay will be applied to all of the branches in the case that meet the KV_{min} and KV_{max} specified in the parameters.

The relay will look for the apparent impedance at both ends of the branch. When this relay's conditions are met, both Relay Ends are opened. If the relay is inside the Zone 1 it will automatically open the branch. The Zone 2 will open after the $Td2$ pickup time is satisfied. The relays will reclose at the specified Trc reclose time. If the faults persists it will open the relay one more time but it will remain open for the rest of the simulation.

Other field results include signals associated with a particular zone which have the following meanings.
 0 : not picked up (not in Zone)
 1 : Picked up, not timed out
 2 : Picked up, timeout complete

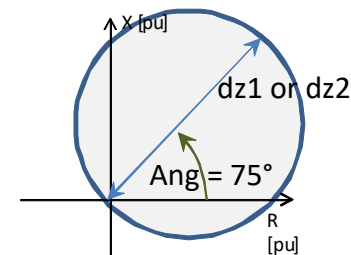
Other field results include signals associated with a breaker. For breach signals, the values have the following meanings.
 0 : Trip not initiated
 1 : Trip initiated, CB timer running
 2 : Breaker has tripped

Type: Active - ZLINW ID=1 ☒ Active
 Device ID: 1

	From Name	To Name	Type	Default Data Set	Criteria	MSLine From Name_Nominal kV	MSLine To Name_Nominal kV	Device Status
1	System	System	System			System	System	Active
2	System	System	System Default			System	System	Active

Circle Shape [Wt = Rf+Rr]

Also used when $Wt = 0$



Parameter Meanings

Ang = 75°
 dz1 = Zone 1 circle diameter in p.u of line X ($dz1 * line_X$).
 dz2 = Zone 2 circle diameter in p.u of line X ($dz2 * line_X$).
 trip = 0 - Alarm; 1 - Trip'
 scline = 0 - Do not include lines with series capacitors.
 Td2 = Zone 2 time delay (pickup).
 Tcb = Breaker Time Delay in seconds.
 Trc = Reclosing Time in seconds.
 KVmin = Minimum base kV of lines to be included.
 KVmax = Maximum base kV of lines to be included.

Model supported by PSLF