



Schweitzer SEL 751 Power Factor Relay model description



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Power Factory
Relay model description

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1 Model general description

The following functionalities are modelled:

- ◆ 2 Inverse time 3 phase overcurrent elements: 2 protective elements ("51P1", "51P2" block)
- ◆ 3 Inverse time single phase overcurrent elements: 3 protective elements ("51A", "51B", "51C" block)
- ◆ 2 Inverse time ground overcurrent elements: 2 protective elements ("51G1", "51G2" block)
- ◆ 2 Inverse time neutral overcurrent elements: 2 protective elements ("51N1", "51N2" block)
- ◆ 1 Inverse time negative sequence overcurrent elements: 1 protective elements ("51Q1" block)
- ◆ 4 definite time phase overcurrent elements: 4 protective elements ("50P1", "50P2", "50P3", "50P4" block)
- ◆ 4 definite time ground overcurrent elements: 4 protective elements ("50G1", "50G2", "50G3", "50G4" block)
- ◆ 4 definite time neutral overcurrent elements: 4 protective elements ("50N1", "50N2", "50N3", "50N4" block)
- ◆ 4 definite time negative sequence overcurrent elements: 4 protective elements ("50Q1", "50Q2", "50Q3", "50Q4" block)
- ◆ 2 definite time phase overvoltage elements: 4 protective elements (2 sets: "59P1", "59P2" using the phase-ground voltages and "59PP1", "59PP2" using the phase-phase voltages, only a set can be enabled depending upon the VT connections)
- ◆ 2 definite time phase undervoltage elements: 4 protective elements (2 sets: "27P1", "27P2" using the phase-ground voltages and "27PP1", "27PP2" using the phase-phase voltages, only a set can be enabled depending upon the VT connections)
- ◆ 2 definite time ground overvoltage elements: 2 protective elements ("59G1", "59G2")
- ◆ 2 definite time negative sequence overvoltage elements: 2 protective elements ("59Q1", "59Q2")
- ◆ 6 over/under frequency elements: 6 protective elements ("81D1", "81D2", "81D3", "81D4", "81D5", "81D6" block)
- ◆ 4 rate of change of frequency elements: 4 protective elements ("81R1", "81R2", "81R3", "81R4" block)
- ◆ Reclosing feature: 4 protective elements are available ("Phase reclosing", "Ground reclosing", "Neutral reclosing", "Neg. Sequence reclosing" block). Please configure the "Tab page" of the reclosing blocks to set the reclosing/lockup logic.

2 Relay not supported features

The following features are not supported:

- Power factor element
- Synchronism check element
- Power elements
- Loss of potential