

GE Multilin DFP200

The following functionalities are not modelled:

1. The DFP200 has eight (8) setting groups. The model only contains one setting group. Of course the same model could be used more than once in a specific cubicle to represent multiple setting groups.
2. The High Impedance Fault Detection has complex algorithms that could not be modelled.
3. Overcurrent and earth fault elements can have user defined resetting to match electromechanical or digital relays with which it has to grade. These options are not modelled.
4. Adaptive time overcurrent protection changes the setting by averaging load over preset time duration. This function could not be modelled.
5. Cold load pick-up was not modelled.
6. The sequence coordinator is a function that delays IOC elements to allow downstream reclosers to operate first. This could be modelled with timers, but this is an optional function. As reclosing functionality is not included, this was not modelled either.
7. Torque control of ground elements was implemented with zero sequence voltage ($3xU_0$). This could also be modelled with dual or negative sequence torque control.
8. The distance to fault locator is obviously not modelled.
9. The power quality monitoring is not modelled.
10. The recloser functionality is not yet modelled.
11. The sync-check function is not modelled.
12. Directional OC and EF elements are included in the model. The user can set these out of service if so required. Of course, elements may also set as non-directional. The option to have undervoltage or digital input control was not modelled, though the user may make this modification to the relay if so required.
13. The outputs from the frequency units are not included in the logic trip equation, though the user could make this modification.
14. The voltage supervision threshold for the frequency elements are not modelled as the frequency block has no supervision.
15. Breaker failure logic is not modelled, but could be easily added with a timer and digital input from the breaker position.