



GE 469 PowerFactory Relay model description



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1 Model general description

The following functionalities are modelled:

- ◆ Three-phase thermal model ("Thermal model" and "K" block, simplified model)
- ◆ Short circuit trip ("Short circuit trip" and "Short circuit trip backup" block)
- ◆ Overload alarm ("Overload alarm" block)
- ◆ Mechanical jam ("Mechanical jam" block)
- ◆ Undercurrent ("Undercurrent trip" and "Undercurrent alarm" block)
- ◆ Current Unbalance ("Current Unbalance" block)
- ◆ Ground fault ("Ground fault trip" and "Ground fault alarm" block)
- ◆ Undervoltage ("Undervoltage alarm" and "Undervoltage trip" block)
- ◆ Overvoltage ("Overvoltage alarm" and "Overvoltage trip" block)
- ◆ Frequency ("Overfrequency trip", "Overfrequency alarm", ("Underfrequency trip", "Underfrequency alarm" block)
- ◆ Power factor ("Power factor alarm", "Power factor lead alarm", "Power factor lead trip", "Power factor lag alarm", "Power factor lag trip" block)
- ◆ Reactive power ("Reactive power alarm", "Reactive power lead alarm", "Reactive power lead trip", "Reactive power lag alarm", "Reactive power lag trip" block)
- ◆ Under power ("Under power alarm", "Under power lead alarm", "Under power lead trip", "Under power lag alarm", "Under power lag trip" block)
- ◆ Current differential ("Differential" block). Please note that to work correctly the "Remote Ct -3p" CT must be set to have the opposite "orientation" of the "Ct-3p" CT. Example: if the "Ct-3p" orientation is "-> branch", the "Remote Ct -3p" orientation must be "-> busbar".

2 Relay not supported features

The following features are not supported:

- Voltage dependent overload curves
- Acceleration timer
- Start inhibit
- Jogging block
- Restart block
- RTD features
- Phase reversal
- Overtorque
- Starter failure