

## 7SJ512

The following needs to be considered when using this relay model:

1. The relay type is split in four basic types.
  - a) 7SJ512\_DT\_DIR -> Directional, Definite Time  
Address 7812 (Charac. Ph) = Definite Time  
and Address 7815 (Charac. E) = Definite Time
  - b) 7SJ512\_IT\_DIR -> Directional, Inverse Time  
(Address 7812 (Charac Ph) = Inverse Time  
and Address 7815 (Charac. E) = Inverse Time .
  - c) 7SJ512\_DT -> Definite Time Address 7812 (Charac. Ph) = Definite Time  
and Address 7815 (Charac. E) = Definite Time
  - d) 7SJ512\_IT -> Inverse Time (Address 7812 (Charac Ph) = Inverse Time  
and Address 7815 (Charac. E) = Inverse Time .
2. Thermal Overload feature:
  - K-Factor (2702) = current setting
  - T-Constant (2703) = time dial
  - The preload current can be set with the “time shift” factor
3. there are three CT slots present:
  - 1) CT : CT for measuring the phase currents (Terminals: 1,2,3 and 5,6,7)
  - 2) CT-Ie : CT for measuring the earth/ground current ( Terminal: 4 and 8)
  - 3) CT-SEF: CT for measing the sensitive ground current (Terminal 17 and 18)

### ***Not Modelled Functionalities***

The following functionalities are not modelled:

1. CB failure protection
2. Measurement repetition
3. RMS Format
4. Faulted phase determination
5. Auto-reclosure
6. Inrush stabilization
7. Intermittent. earth fault protection
8. Thermal overload protection
  - Thermal warning stage (2704)
  - Current warning stage (2705)