Circuit Breaker Time/Current Curves (Ground Current)
Digitrip 1150 / 1150i - Ground (Earth) Curve

Notes:
1. The end of the curve is determined by the interrupting rating of the circuit breaker.
2. The curve is shown as a multiple of the Rating Plug (I₀).
3. The Ground Fault settings have conventional 100% ± 10% as their pick up points.
4. Except as noted, tolerances on current levels are ±10% of values shown in chart.
5. The Ground Fault Pickup is limited to 1200A setting for the Digitrip 1150 unit. The minimum Earth Pickup setting for the Digitrip 1150 is 0.1 x I₀.
6. With Zone Selective Interlocking enabled, max trip times w/o aux power are as follows:
- 3 Phase fault
  - 50 Hz: 75ms
  - 60 Hz: 95ms
When only one pole is carrying current and a fault occurs, trip times increase to 90ms at 60Hz and 95ms at 50Hz, however with Aux power these times would be reduced by 10%.
7. Ground Slope: FLAT
   - Time is ±0 / -80ms except
     - 0.10s setting band is 0.06 to 0.13
     - 0.15s setting band is 0.10 to 0.17
   - 0.20s setting band is 0.15 to 0.22
8. Ground Slope: IT
   - IT slope flattens out at 0.625x I₀ for top of band with FLAT time minimum value prevailing for bottom of band.
9. These curves are comprehensive for the complete family of Magnum breakers, including all frame sizes, ratings, and constructions. The total clearing times shown are conservative and consider the maximum response times of the trip unit, the circuit breaker opening, and the interruption of the current under factors that contribute to worst case conditions, like: maximum rated voltages, single phase interruption, and minimum power factor. Faster clearing times are possible depending on the specific system conditions, the type of Magnum Circuit Breaker applied, and if any arc reduction settings are employed. Contact Eaton for additional information.