Circuit Breaker Time/Current Curves (Phase Current)

Digitrip 1150 - IEEE Curves

Moderately Inverse

Available Sensors and Matching Rating Plug in Amperes

<table>
<thead>
<tr>
<th>200A</th>
<th>600A</th>
<th>1000A</th>
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<tbody>
<tr>
<td>250A</td>
<td>1000A</td>
<td>3200A</td>
</tr>
<tr>
<td>300A</td>
<td>1200A</td>
<td>3600A</td>
</tr>
<tr>
<td>400A</td>
<td>1200A</td>
<td>4000A</td>
</tr>
<tr>
<td>600A</td>
<td>1600A</td>
<td>5000A</td>
</tr>
<tr>
<td>800A</td>
<td>2000A</td>
<td>6000A</td>
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</tbody>
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Notes:
1. This curve is shown as a multiple of the PICKUP setting (I). The TimeDial setting combined with SHORT PU and SHORT TIME setting (shown in heavy lines), depict the IEEE Moderately Inverse response. The Instantaneous, shown as a separate response, can be set to OFF.
2. Curve Equation:
   - Trip = TimeDial * [0.0515 + 0.114(I)] - Where I is a multiple of I.
   - For current > 2.0 (tolerance of ±15%) or > 10% x I. In all cases, the entire TimeDial curve goes to flat response at 14xI with a shorter time of TimeDial function or SHORT TIME. function p.
   - The TimeDial function and the TimeDial function act independently and the entire TimeDial curves continue to be active even after the curve intersects.
3. With zone interlocking on Short Delay utilized and no restraining signal, the minimum SHORT TIME band (0.10s) applies regardless of the SHORT TIME setting.
4. The actual pick up point (indicated by rapid flashing of Unit Status LED on the product) occurs at 110% of the I, current, with a ±5% tolerance. The SHORT PU settings have conventional ±15% as their pickup point.
5. SHORT TIME (Max M1 setting). This is an additional setting, based on I (Plug), that can extend out where the SHORT PU will function.
6. The end of the curve is determined by the interrupting rating of the circuit breaker.
7. SHORT TIME: FLAT only
   - Tolerance is 5% of setting except
   - 0.10s setting is 0.06 to 0.13
   - 0.20s setting is 0.15 to 0.22
8. Curve applies from -20°C to +55°C ambient; temperatures above 95°C cause automatic trip. Breaker must be applied according to “Continuous Rating at Different Ambient” table.