Control Response Time
Phase and Ground Trip 50 amps and above
For on-line condition (10-amp min load):
   Read control response time directly from curve.
For line-energizing condition:
   Determine total response time by adding control arming
time (see page 3) to appropriate curve and interrupting
time.
Curve variations are ± 10% or 0.01 sec whichever is
greater.
For Cooper Power Systems Interrupters Having Nominal Interrupting Time of 0.025 Sec.

Interruption Clearing Time
Phase and Ground Trip 50 amps and above

For on-line condition (10-amp min load):
Read clearing time directly from curve.

For line-energizing condition:
Determine total clearing time by adding control arming time (see page 3) to appropriate curve.
Curve variations are ± 10% or 0.01 sec whichever is greater.
Fault Interrupters

Electronic Trip Control
Time-Current Curves

Control Arming Time

Time required to charge control power supply when line current starts to flow is dependent upon the magnitude of the line current.

Control arming time must be considered when line is being energized (closing into a fault) or during recovery after line current drops below 10 amps. Modify appropriate response or clearing time curve by adding arming time from curve below.

For 50-amp Min Trip Rating, Add:
0.35 sec @ 100%, 0.17 sec @ 200%
0.08 sec @ 400%, 0.04 sec @ 800%, etc.

For 200-amp Min Trip Rating, Add:
0.08 sec @ 100%, 0.04 sec @ 200%,
0.02 sec @ 400%, etc.

*These curves are based upon use of 1000:1 CTs. If 2000:1 CTs are used, current values must be doubled.

November 1991 * Supersedes 3/87
Printed in USA
Fault Interrupters

Electronic Trip Control
Time-Current Curves

For Cooper Power Systems Interrupters
Having Nominal Interrupting
Time of 0.025 Sec.

Maximum Clearing Time - Closing into aFault
Maximum Clearing Time - On Line with 10-amp Min Load
Minimum Response Time of Control

Ground Trip - Definite Time

Control response and interrupter clearing times.
(Ignore that portion of the curve to the left of the Min-Trip value being used).

For ground Min-Trip of 35 amps or lower, the following are the limits for ground definite time curves and phase trip ratings:

<table>
<thead>
<tr>
<th>Ground Min-Trip (amps)</th>
<th>Ground Definite Time Curve</th>
<th>Phase-Trip Rating (amps)</th>
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<tbody>
<tr>
<td>35</td>
<td>No. 11 or lower</td>
<td>800 Max</td>
</tr>
<tr>
<td>20</td>
<td>No. 9 or lower</td>
<td>560 Max</td>
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<td>10</td>
<td>No. 5 or lower</td>
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Reference Data
R280-91-31

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For Cooper Power Systems Interrupters Having Nominal Interrupting Time of 0.025 Sec.

Maximum Clearing Time - Closing into a Fault
Maximum Clearing Time - On Line with 10-amp Min Load
Minimum Response Time of Control

Ground Trip - Definite Time
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For Cooper Power Systems Interrupters
Having Nominal Interrupting
Time of 0.025 Sec.

Maximum Clearing Time - Closing into a Fault
Maximum Clearing Time - On Line with 10-amp Min Load
Minimum Response Time of Control

**Ground Trip - Definite Time**

Control response and interrupter clearing times.
(Ignore that portion of the curve to the left of the Min-Trip value being used).

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Fault Interrupters

Electronic Trip Control
Time-Current Curves

For Cooper Power Systems Interrupters
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Time of 0.025 Sec.

Maximum Clearing Time - Closing into a Fault
Maximum Clearing Time - On Line with 10-amp Min Load
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Ground Trip - Definite Time
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November 1991 - Supersedes 3/87
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Control Response Time
Phase and Ground Trip 50 amps and above

For on-line condition (10-amp min load):
Read control response time directly from curve.

For line-energizing condition:
Determine total response time by adding control arming
time (see page 3) to appropriate curve and interrupting
time.

Curve variations are ± 10% or 0.01 sec whichever is
greater.
Interrupter Clearing Time
Phase and Ground Trip 50 amps and above

For on-line condition (10-amp min load):
Read interrupter clearing time directly from curve.

For line-energizing condition:
Determine total clearing time by adding control arming time
(see page 3) to appropriate curve.

Curve variations are ± 10% or 0.01 sec whichever is
greater.