Series C L-Frame
125-600A, 240-600V

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Note:
Time/Current characteristic curves for Series C L-frame circuit breakers—voltages shown in curve headings are
maximum at which the breaker may be applied. Interrupting capacity of individual breaker is tabulated on each curve.

Note:
The following curves are UL489 Listed for use in North America.
The following circuit breakers are derived from Eaton, Westinghouse, or Cutler-Hammer history.

Time Current Curves are engineering reference documents for application and coordination purposes only.
For field testing molded case circuit breakers, refer to NEMA AB 4 guidelines.
Note: Unless noted below, all curves remain unchanged from their prior revision.

<table>
<thead>
<tr>
<th>Revision</th>
<th>Curve Number</th>
<th>Page</th>
<th>Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>Changed trip labels on page 5</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
**Catalog Number Selection**

This information is presented only as an aid to understanding catalog numbers. It is not to be used to build catalog numbers for circuit breakers or trip units.

### Table 1. Thermal-Magnetic Trip Unit

<table>
<thead>
<tr>
<th>Trip Unit Type</th>
<th>Number of Poles</th>
<th>Circuit Breaker/Frame Ampere Rating</th>
<th>Suffix</th>
</tr>
</thead>
<tbody>
<tr>
<td>LT</td>
<td>2, 3, 4</td>
<td>300, 400, 450, 500, 600</td>
<td>T, V</td>
</tr>
</tbody>
</table>

- **T** = Trip unit thermal-magnetic fixed
- **V** = 50°C calibration (thermal-magnetic trip units only)

### Table 2. Digitrip RMS 310 Trip Unit

<table>
<thead>
<tr>
<th>Trip Unit Type</th>
<th>Number of Poles</th>
<th>Trip Unit Ampere Rating</th>
<th>Suffix</th>
</tr>
</thead>
<tbody>
<tr>
<td>LES</td>
<td>3, 4</td>
<td>600</td>
<td>P, W</td>
</tr>
</tbody>
</table>

- **P** = 100% protected neutral on four-pole trip unit

### Table 3. OPTIM Circuit Breaker/Frame

<table>
<thead>
<tr>
<th>Circuit Breaker/Frame Type</th>
<th>Number of Poles</th>
<th>Circuit Breaker/Frame Ampere Rating</th>
<th>Suffix</th>
</tr>
</thead>
<tbody>
<tr>
<td>LD</td>
<td>3</td>
<td>125 (Available on Model 1050 only)</td>
<td>T5, 7</td>
</tr>
</tbody>
</table>

- **LS** = Model 550
- **LSI** = Model 1050
- **LSIG** = LSIA

### Table 4. Circuit Breaker/Frame

<table>
<thead>
<tr>
<th>Circuit Breaker/Frame Type</th>
<th>Number of Poles</th>
<th>Circuit Breaker/Frame Ampere Rating</th>
<th>Suffix</th>
</tr>
</thead>
<tbody>
<tr>
<td>LD</td>
<td>2, 3, 4</td>
<td>300, 350, 400, 450, 500, 600</td>
<td>C, F</td>
</tr>
</tbody>
</table>

- **C** = Copper terminals
- **F** = Frame only
- **K** = High magnetic molded case switch
- **V** = 50°C thermal-magnetic trip units only
- **W** = Without terminals
- **X** = Load side terminals only
- **Y** = Line side terminals only
Table 5. LD Breaker Assembly

<table>
<thead>
<tr>
<th>Frame Designation</th>
<th>Poles</th>
<th>Amperes</th>
<th>Features</th>
<th>Trip Unit</th>
</tr>
</thead>
<tbody>
<tr>
<td>LDB</td>
<td>3</td>
<td>600</td>
<td></td>
<td>T36 + B22ZG</td>
</tr>
<tr>
<td>HLD</td>
<td>3</td>
<td>600</td>
<td></td>
<td></td>
</tr>
<tr>
<td>LDCB</td>
<td>4</td>
<td>600</td>
<td></td>
<td></td>
</tr>
<tr>
<td>CLDB</td>
<td>4</td>
<td>600</td>
<td></td>
<td></td>
</tr>
<tr>
<td>CHLD</td>
<td>4</td>
<td>600</td>
<td></td>
<td></td>
</tr>
<tr>
<td>CLDCB</td>
<td>4</td>
<td>600</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

- **Performance at 480 Vac**:
  - LDB: 35 kAIC
  - HLD: 65 kAIC
  - LDCB: 100 kAIC
  - CLDB: 35 kAIC
  - CHLD: 65 kAIC
  - CLDCB: 100 kAIC

- **Frame Designation**:
  - F

- **Trip Unit**:
  - T33: 310+ Electronic LS
  - T32: 310+ Electronic LSI
  - T35: 310+ Electronic LSG
  - T36: 310+ Electronic LSIG
  - T38: 310+ Electronic LSIG with Maintenance Mode
  - T39: 310+ Electronic LSIG with Maintenance Mode

- **Features**:
  - Blank: No feature
  - B20: High load alarm
  - B21: Ground fault alarm, with trip
  - B22: Ground fault alarm, no trip
  - ZG: Zone selective interlocking

- **Terminals**:
  - W: No terminals

Table 6. LD Electronic Trip Unit

<table>
<thead>
<tr>
<th>Trip Unit Type</th>
<th>Poles</th>
<th>Amperes</th>
<th>Features</th>
<th>Trip Unit</th>
</tr>
</thead>
<tbody>
<tr>
<td>LES</td>
<td>3</td>
<td>600</td>
<td></td>
<td></td>
</tr>
<tr>
<td>LSI</td>
<td>4</td>
<td>600</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

- **Performance at 480 Vac**:
  - LDB: 35 kAIC
  - HLD: 65 kAIC
  - LDCB: 100 kAIC
  - CLDB: 35 kAIC
  - CHLD: 65 kAIC
  - CLDCB: 100 kAIC

- **Frame Designation**:
  - F

- **Trip Unit**:
  - T33: 310+ Electronic LS
  - T32: 310+ Electronic LSI
  - T35: 310+ Electronic LSG
  - T36: 310+ Electronic LSIG
  - T38: 310+ Electronic LSIG with Maintenance Mode
  - T39: 310+ Electronic LSIG with Maintenance Mode

- **Features**:
  - Blank: No feature
  - B20: High load alarm
  - B21: Ground fault alarm, with trip
  - B22: Ground fault alarm, no trip
  - ZG: Zone selective interlocking

Table 7. LD Frame Only

<table>
<thead>
<tr>
<th>Frame Designation</th>
<th>Poles</th>
<th>Amperes</th>
<th>Features</th>
</tr>
</thead>
<tbody>
<tr>
<td>LD</td>
<td>3</td>
<td>600</td>
<td></td>
</tr>
<tr>
<td>HLD</td>
<td>4</td>
<td>600</td>
<td></td>
</tr>
<tr>
<td>LDC</td>
<td>4</td>
<td>600</td>
<td></td>
</tr>
<tr>
<td>CLD</td>
<td>4</td>
<td>600</td>
<td></td>
</tr>
<tr>
<td>CHLD</td>
<td>4</td>
<td>600</td>
<td></td>
</tr>
<tr>
<td>CLDC</td>
<td>4</td>
<td>600</td>
<td></td>
</tr>
</tbody>
</table>

- **Performance at 480 Vac**:
  - LD: 35 kAIC
  - HLD: 65 kAIC
  - LDC: 100 kAIC
  - CLD: 35 kAIC
  - CHLD: 65 kAIC
  - CLDC: 100 kAIC

- **Frame Designation**:
  - F

Note

1. Maintenance Mode and ZSI are only available with LSI and LSIG trip units.
2. B21 and B22 features available only with LSG, LSIG and ALSIG trip units.
3. B2x suffixes cannot be combined with other B2x suffixes.
4. LSG, LSIG and ALSIG trip units are not available in four-pole breakers with neutral protection.
5. Four-pole trip units include fully protected neutral pole; contact Eaton for other four-pole requirements.
Figure 1. Digitrip 310+ Faceplates

- **ALSIG (With Maintenance Mode)**
- **ALSI (With Maintenance Mode)**
- **LSIG**
- **LSG**
- **LSI**
- **LS**
**Figure 2. Digitrip 310+ Trip Units (600A), Long Delay Response and Short Delay with I²T Response Curve and Override (LS, LSG) - TD012044EN, October 2014**

- **Available Long Delay Time (Seconds +0/-30%):**
  - 2, 4, 7, 10, 12, 15, 20, 24
  - *Shown below at 6x

- **Available Short Delay Pickup Settings:**
  - 2, 4, 7, 10, 12, 15, 20, 24

- **Available Sensors (Iu/Iu) Amperes 600A:**
  - A: 250A
  - B: 300A
  - C: 350A
  - D: 400A
  - E: 450A
  - F: 500A
  - G: 500A

- **Interrupting Rating:**
  - UL/CSA rms Sym. kA, 50/60 Hz
    - Breaker Type
    - UL/CSA 89
    - 86
    - 85
    - 480V
    - 240V
    - 220V
    - 600V

**Notes:**

1. Curve accuracy applies from -20°C to +55°C ambient. For possible continuous amperage derating for ambient above 40°C, refer to Eaton. Temperatures above +88°C cause an over-temperature protection trip.
2. Application frequency is 50/60 Hz.
3. There is a memory effect that can act to shorten the long delay. The memory effect comes into play if a current above the long delay pickup value exists for a time and then is cleared by the tripping of a downstream device or the circuit breaker itself. A subsequent overload will cause the circuit breaker to trip in shorter time than normal. The amount of time reduction is inverse to the amount of time that has elapsed since the previous overload. Approximately five minutes is required between overloads to completely reset the memory.
4. The right portion of the curve is determined by the interrupting rating of the circuit breaker.
5. The left portion of the curve is shown as a multiple of the Long Delay Setting (Long Delay Pickup = 115% of Iₜ). Range is 110%–120%.
6. Total clearing times shown include the response times of the trip unit, the breaker opening, and the interruption of the current.
7. The Short Delay Pick Up has 7 settings/positions, 2-8 Iₜ.
8. Short Delay I²T band has a tolerance of ±15%.
9. Breakpoint back to FLAT response occurs at 8x Iₜ, lower line of the I²T curve.
10. For high fault current levels, an additional fixed instantaneous hardware override is provided. Approximate five minutes is required between overloads to completely reset the memory.

**Applications:**

- For possible continuous amperage derating for ambient above 40°C, refer to Eaton. Temperatures above +88°C cause an over-temperature protection trip.
- Application frequency is 50/60 Hz.
- There is a memory effect that can act to shorten the long delay. The memory effect comes into play if a current above the long delay pickup value exists for a time and then is cleared by the tripping of a downstream device or the circuit breaker itself. A subsequent overload will cause the circuit breaker to trip in shorter time than normal. The amount of time reduction is inverse to the amount of time that has elapsed since the previous overload. Approximately five minutes is required between overloads to completely reset the memory.
- The right portion of the curve is determined by the interrupting rating of the circuit breaker.
- The left portion of the curve is shown as a multiple of the Long Delay Setting (Long Delay Pickup = 115% of Iₜ). Range is 110%–120%.
- Total clearing times shown include the response times of the trip unit, the breaker opening, and the interruption of the current.
- The Short Delay Pick Up has 7 settings/positions, 2-8 Iₜ.
- Short Delay I²T band has a tolerance of ±15%.
- Breakpoint back to FLAT response occurs at 8x Iₜ, lower line of the I²T curve.
- For high fault current levels, an additional fixed instantaneous hardware override is provided. Approximate five minutes is required between overloads to completely reset the memory.
Series C
L-Frame

Digitrip 310+ Circuit Breaker Time/Current Curves (Phase Current)
Series C L-Frame Circuit Breakers (600A)
Catalog Types: LD, HLD, CLD, LDB, HLDB, CLDB, CHLD, CHLDB
Trip Unit Types: 32 (LSI), 36 (LSIG), 38 (ALSI), and 39 (ALSIG)

Notes:
1. Curve accuracy applies from -20°C to +55°C ambient. For possible continuous ampere derating for ambient above 40°C, refer to Eaton. Temperatures above +88°C cause an over-temperature protection trip.
2. Application frequency is 50/60 Hertz.
3. There is a memory effect that can act to shorten the long delay. The memory effect comes into play if a current above the long delay pickup value exists for a time and then is cleared by the tripping of a downstream device or the circuit breaker itself. A subsequent overload will cause the circuit breaker to trip in shorter time than normal. The amount of time reduction is inverse to the amount of time that has elapsed since the previous overload. Approximately five minutes is required between overloads to completely reset the memory.
4. The right portion of the curve is determined by the interrupting rating of the circuit breaker.
5. The left portion of the curve is shown as a multiple of the Long Delay Setting (Long Delay). Range is 110%–120%.
6. Total clearing times shown include the response times of the trip unit, the breaker Pickup = 115% of Ir opening, and the interruption of the current.
7. The Short Delay Pick Up has 7 settings/positions, 2–8 Ir.
8. For high fault current levels, an additional fixed instantaneous hardware override is provided at 5620A (Tolerance ±15%).

Available Sensors
<table>
<thead>
<tr>
<th>(Ir/Ir)</th>
<th>Amperes</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>250A</td>
</tr>
<tr>
<td>B</td>
<td>300A</td>
</tr>
<tr>
<td>C</td>
<td>350A</td>
</tr>
<tr>
<td>D</td>
<td>400A</td>
</tr>
<tr>
<td>E</td>
<td>450A</td>
</tr>
<tr>
<td>F</td>
<td>500A</td>
</tr>
<tr>
<td>G</td>
<td>550A</td>
</tr>
<tr>
<td>H</td>
<td>600A</td>
</tr>
</tbody>
</table>

Digitrip 310+ Trip Units (600A), Long Delay Response and Short Delay with Flat Response Curve and Override (LSI, LSIG, ALSI, ALSIG) - TD012043EN, October 2014
Figure 4. Ground Fault Delay Response Curve (LSG, LSIG, ALSIG) - Curve Number TD012045EN
Time Current Curves
td012035en
Effective December 2015
Series C
L-Frame
Eaton www.eaton.com

Current in Multiples of (I_r)

Available Short Delay Pickup Settings
2–8 x I_r ±5%
(See Notes 7 and 10)

Breakpoint back to FLAT response occurs at 8x I_r for upper line of the I^2T curve.
For high fault current levels, an additional fixed instantaneous hardware override is provided at 5620A (Tolerance ±15%).

Notes:
2. Application frequency is 0/60 Hertz.
3. There is a memory effect that can act to shorten the long delay. The memory effect comes into play if a current above the long delay pickup value exists for a time and then is cleared by the tripping of a downstream device or the circuit breaker itself. A subsequent overload will cause the circuit breaker to trip in shorter time than normal. The amount of time reduction is inverse to the amount of time that has elapsed since the previous overload. Approximately five minutes is required between overloads to completely reset the memory.
4. The right portion of the curve is determined by the interrupting rating of the circuit breaker.
5. The left portion of the curve is shown as a multiple of the Long Delay Setting. Long Delay Pickup = 115% of I_r. Range is 110%–120%.
6. Total clearing times shown include the response times of the trip unit, the breaker opening, and the interruption of the current.
7. The Short Delay Pick Up has 7 settings/positions, 2–8 I_r
8. Short Delay I^2T band has a tolerance of ±15%.
9. Breakpoint back to FLAT response occurs at 8x I_r for upper line of the I^2T curve.
10. For high fault current levels, an additional fixed instantaneous hardware override is provided at 5620A (Tolerance ±15%).

Figure 5. Digitrip 310+ Trip Units (600A), Long Delay Response and Short Delay with I^2T Response Curve and Override (LS, LSG) - TD012046EN, October 2014
Figure 6. Digitrip 310+ Trip Units (600A), Long Delay Response and Short Delay with Flat Response Curve and Override (LSI, LSIG, ALSI, ALSIG) - TD012047EN, October 2014
Digitrip 310+ Circuit Breaker Time/Current Curves

Maintenance Mode Setting

Trip Unit Types: 38 (ALSI) and 39 (ALSIG)

Series C L-Frame Trip Unit Nameplates

Notes:

1. The Maintenance Mode feature must be ENABLED via application of 24 Vdc for these curves to apply. The blue LED is lit when in Maintenance Mode.
2. The end of the curve is determined by the interrupting rating of the circuit breaker.
3. Total clearing times shown include the response times of the trip unit, the breaker opening, and the interruption of the current.
4. Nominal Values (Pickup) (Tolerance is ±15%) 5 \times I_n.
5. The total clearing times shown are conservative and consider the maximum response time of the trip unit, the circuit breaker opening, and the interruption of the current in the worst case conditions such as: maximum rated voltages, single-phase interruption, and minimum power factor. Faster clearing times are possible depending on the specific system conditions.

Contact Eaton for additional information.

Maintenance Mode Trip

Figure 7. Maintenance Mode Setting (ALSI, ALSIG) - Curver Number - TD012049EN, October 2014
Effective December 2015

Time Current Curves

Series C L-Frame

Types LD, HLD, CLD, and CHLD Equipped With Type LES Digitrip RMS 310 Trip Units, Types LES3600LS, LES3600LSG, LES4600LS, LES4600LSE, LES4600LSE, LES4600LSP

Figure 8. Catalog Types LES3600LS, LES3600LSG, LES4600LS, LES4600LSE, LES4600LSP - Curve Number SC-5653-93, June 2007
Circuit Breaker Time/Current Curves (Phase Current)
Series C L-Frame Circuit Breakers
Equipped With Type LES Digitrip RMS 310 Trip Units
Catalog Types: LES3600LSI, LES3600LSIG, LES4600LSI, and LES4600LSIP Digitrip RMS 310 Trip Units for use with Circuit Breaker Types LD, HLD, CLD, and CHLD 3 and 4 Poles.

Available Rating Plugs

<table>
<thead>
<tr>
<th>Ampere Rating</th>
<th>Type</th>
<th>Rating Plug Catalog Number</th>
<th>Short Delay Pickup Range Amps</th>
</tr>
</thead>
<tbody>
<tr>
<td>600</td>
<td>Fixed</td>
<td>LES1201</td>
<td>1200-2400</td>
</tr>
<tr>
<td>500</td>
<td>Fixed</td>
<td>LES1201</td>
<td>1000-2000</td>
</tr>
<tr>
<td>450</td>
<td>Fixed</td>
<td>LES1201</td>
<td>900-1800</td>
</tr>
<tr>
<td>400</td>
<td>Fixed</td>
<td>LES1201</td>
<td>800-1600</td>
</tr>
<tr>
<td>300</td>
<td>Fixed</td>
<td>LES1201</td>
<td>600-1200</td>
</tr>
</tbody>
</table>

Interrupting Rating

UL/CSA rms Sym. kA, 50/60 Hz

<table>
<thead>
<tr>
<th>Breaker Type</th>
<th>240V</th>
<th>480V</th>
<th>600V</th>
</tr>
</thead>
<tbody>
<tr>
<td>LD, HLD</td>
<td>65</td>
<td>35</td>
<td>35</td>
</tr>
<tr>
<td>HLD, CLD</td>
<td>105</td>
<td>65</td>
<td>65</td>
</tr>
</tbody>
</table>

IEC 60947-2 rms Sym. kA, 50/60 Hz

<table>
<thead>
<tr>
<th>Breaker Type</th>
<th>IEC 3600V</th>
<th>IEC 415V</th>
</tr>
</thead>
<tbody>
<tr>
<td>LD, HLD</td>
<td>65</td>
<td>35</td>
</tr>
<tr>
<td>HLD, CLD</td>
<td>105</td>
<td>65</td>
</tr>
</tbody>
</table>

Notes:
1. Curve accuracy applies from 20°C to 55°C ambient. For possible continuous amperere derating for ambient above 40°C, refer to Eaton.
2. For high fault current levels a fixed instantaneous override is provided at 115% of \(I_{cu}\). (Tolerance ±15%).
3. The end of the curve is determined by the interrupting rating of the circuit breaker. See above tabulation.
4. Long Delay Pickup is 115% of \(I_{cu}\) ± 5%.

Time Current Curves TD012035EN
Effective December 2015

Figure 9. Catalog Types LES3600LSI, LES3600LSIG, LES4600LSI, LES4600LSIP - Curve Number SC-5654-93, June 2007
EATON

Types LDC and CLDC Equipped With Type LES Digitrip RMS 310 Trip Units, Types LES3600LS, LES3600LSG, LES4600LS, LES4600LSE, LES4600LSP

Figure 10. Catalog Types LES3600LS, LES3600LSG, LES4600LS, LES4600LSE, LES4600LSP - Curve Number SC-5657-93, June 2007
Circuit Breaker Time/Current Curves (Phase Current)
Series C L-Frame Circuit Breakers
Equipped With Type LES Digitrip RMS 310 Trip Units
Catalog Types: LES3600LSI, LES3600LSIG, LES4600LSI, and LES4600LSIP Digitrip RMS 310 Trip Units for use with Circuit Breaker Types LDC and CLDC 3 and 4 Poles.

Available Rating Plugs

<table>
<thead>
<tr>
<th>Ampere Rating</th>
<th>Type</th>
<th>Rating Plug Catalog Number</th>
<th>Short Delay Pickup Range Amperes</th>
</tr>
</thead>
<tbody>
<tr>
<td>600</td>
<td>Fixed</td>
<td>6ELES600T1</td>
<td>0-2000</td>
</tr>
<tr>
<td>100</td>
<td>Fixed</td>
<td>6ELES300T1</td>
<td>0-1000</td>
</tr>
<tr>
<td>100</td>
<td>Adjustable</td>
<td>6ELES600T1</td>
<td>0-2000</td>
</tr>
</tbody>
</table>

Interrupting Rating

- UL/CSA rms Sym. kA, 50/60 Hz
- IEC 60947-2 rms Sym. kA, 50/60 Hz

Notes:
- Calibration response in short delay pick-up range is same for 1, 2 or 3 poles in series.
- There is a memory effect that can act to shorten the long delay. The memory effect comes into play if a current above the long delay pick-up value exists for a time and then is cleared by the tripping of a downstream device or the circuit breaker itself. A subsequent overload will cause the circuit breaker to trip in shorter time than normal. The amount of time delay reduction is inverse to the amount of time that has elapsed since the previous overload. Approximately five minutes is required between overloads to completely reset the memory.
- Curve accuracy applies from –20°C to +55°C ambient. For possible continuous ampere derating for ambient above 40°C, refer to Eaton.
- Long Delay Pickup is 115% of $I_{pu}$ +/− 5%.

Figure 11. Catalog Types LES3600LSI, LES3600LSIG, LES4600LSI, LES4600LSIP - Curve Number SC-5658-93, June 2007
Types LD, LCD, HLD, CLD, CHLD, and CLDC Equipped With Type LES Digitrip RMS 310 Trip Units, Ground Fault Protection

Figure 12. Ground Fault Protection - Curve Number SC-5661-93, June 2007
L-Frame Circuit Breakers Equipped with Digitrip OPTIM 550/1050 Trip Units; Long Delay $I^2t$, Short Delay $I^2t$

Circuit Breaker Time/Current Curves (Phase Current)
Series C L-Frame Circuit Breakers
Equipped With Digitrip OptiTrip Units

Response: LONG DELAY $I^2t$, SHORT DELAY $I^2t$

Available Rating Plugs

<table>
<thead>
<tr>
<th>Maximum Ampere Rating</th>
<th>Ampere Rating</th>
<th>Catalog Rating Plug</th>
<th>Short Delay Pickup Range</th>
<th>Long Delay Pickup Range</th>
</tr>
</thead>
<tbody>
<tr>
<td>$I_{n}$</td>
<td>$I_{n}$</td>
<td>$I_{n}$</td>
<td>$I_{n}$</td>
<td>$I_{n}$</td>
</tr>
<tr>
<td>$I_{n}$</td>
<td>$I_{n}$</td>
<td>$I_{n}$</td>
<td>$I_{n}$</td>
<td>$I_{n}$</td>
</tr>
</tbody>
</table>

Interrupting Rating

UL/CSA rms Sym. kA, 50/60 Hz

<table>
<thead>
<tr>
<th>Breaker Type</th>
<th>240V</th>
<th>480V</th>
<th>600V</th>
</tr>
</thead>
<tbody>
<tr>
<td>LDC, CHDC</td>
<td>90</td>
<td>95</td>
<td>95</td>
</tr>
<tr>
<td>HLD, CHDC</td>
<td>100</td>
<td>95</td>
<td>95</td>
</tr>
<tr>
<td>LDC, CLODC</td>
<td>200</td>
<td>105</td>
<td>100</td>
</tr>
</tbody>
</table>

IEC 60947-2 rms Sym. kA, 50/60 Hz

<table>
<thead>
<tr>
<th>Breaker Type</th>
<th>240V</th>
<th>415V</th>
<th>690V</th>
</tr>
</thead>
<tbody>
<tr>
<td>LDC, LLOD</td>
<td>85</td>
<td>85</td>
<td>85</td>
</tr>
<tr>
<td>LLOD, CHDC</td>
<td>100</td>
<td>70</td>
<td>70</td>
</tr>
<tr>
<td>LDC, CLODC</td>
<td>200</td>
<td>100</td>
<td>100</td>
</tr>
</tbody>
</table>

Notes:

1. For field testing primary injection methods, follow NEMA A84 guidelines.
2. Calibration response in short delay pickup range is the same for 1, 2, or 3 poles in series.
3. There is a memory effect that can act to shorten the long delay. This memory effect comes into play if a current above the long delay pickup value exists for a time and then is cleared by the tripping of a downstream device or the circuit breaker itself. A subsequent overload will cause the circuit breaker to trip in shorter time than normal. The amount of time reduction is inverse to the amount of time that has elapsed since the previous overload. Approximately five minutes is required between overloads to completely reset the memory.
4. The end of the curve is determined by the interrupting rating of the circuit breaker. See above tabulation.
5. This curve is shown as a multiple of the Long Delay Trip Setting, ($I_{n}$). This $I_{n}$ setting is programmed in primary value amperes via a Breaker Interface Module, or BIM, or a Remote PC (IMPACC System).
6. Long Delay Trip Point (indicated by a flashing LED on the product) nominally occurs above 115% of the $I_{n}$ current, with a +5% tolerance. The short delay settings have conventional 100%, +5% as the pickup points.
7. For additional curve tolerances contact Eaton.
8. Total clearing times shown include the response times of the trip unit, the breaker opening, and the quenching of the arcing current.

Figure 13. Long Delay $I^2t$, Short Delay $I^2t$ - Curve Number SC-6323-96, June 2007
L-Frame Circuit Breakers Equipped with Digitrip OPTIM 550/1050 Trip Units; Long Delay $I^2t$, Short Delay Flat

**Circuit Breaker Time/Current Curves (Phase Current)**
Series C L-Frame Circuit Breakers
Equipped With Digitrip Optimum Trip Units
Response: LONG DELAY $I^2t$, SHORT DELAY FLAT
Available Rating Plugs

<table>
<thead>
<tr>
<th>Maximum Ampere Rating</th>
<th>Ampere Rating ($I_n$)</th>
<th>Rating Plug Catalog Number</th>
<th>Long Delay Pickup Range 0.4 to 1 x $I_n$ in Amperes</th>
<th>Short Delay Pickup Range 1.5 to 8 x $I_n$ in Amperes</th>
</tr>
</thead>
<tbody>
<tr>
<td>125</td>
<td>125</td>
<td>ORPL125A125</td>
<td>90 - 125</td>
<td>75 - 1000</td>
</tr>
<tr>
<td>125</td>
<td>110</td>
<td>ORPL125A110</td>
<td>44 - 110</td>
<td>69 - 880</td>
</tr>
<tr>
<td>125</td>
<td>100</td>
<td>ORPL125A100</td>
<td>40 - 100</td>
<td>80 - 800</td>
</tr>
<tr>
<td>125</td>
<td>90</td>
<td>ORPL125A090</td>
<td>38 - 90</td>
<td>94 - 720</td>
</tr>
<tr>
<td>125</td>
<td>70</td>
<td>ORPL125A070</td>
<td>28 - 70</td>
<td>42 - 560</td>
</tr>
<tr>
<td>125</td>
<td>63</td>
<td>ORPL125A063</td>
<td>25 - 63</td>
<td>37.5 - 504</td>
</tr>
<tr>
<td>250</td>
<td>250</td>
<td>ORPL250A250</td>
<td>190 - 250</td>
<td>170 - 2000</td>
</tr>
<tr>
<td>250</td>
<td>225</td>
<td>ORPL250A225</td>
<td>160 - 225</td>
<td>150 - 1800</td>
</tr>
<tr>
<td>250</td>
<td>200</td>
<td>ORPL250A200</td>
<td>140 - 200</td>
<td>120 - 1600</td>
</tr>
<tr>
<td>250</td>
<td>175</td>
<td>ORPL250A175</td>
<td>120 - 175</td>
<td>105 - 1400</td>
</tr>
<tr>
<td>250</td>
<td>150</td>
<td>ORPL250A150</td>
<td>100 - 150</td>
<td>90 - 1200</td>
</tr>
<tr>
<td>250</td>
<td>125</td>
<td>ORPL250A125</td>
<td>90 - 125</td>
<td>75 - 1000</td>
</tr>
<tr>
<td>400</td>
<td>400</td>
<td>ORPL400A400</td>
<td>190 - 1800</td>
<td>180 - 2000</td>
</tr>
<tr>
<td>400</td>
<td>375</td>
<td>ORPL400A375</td>
<td>150 - 375</td>
<td>140 - 2400</td>
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<tr>
<td>400</td>
<td>350</td>
<td>ORPL400A350</td>
<td>120 - 350</td>
<td>110 - 2400</td>
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<tr>
<td>400</td>
<td>325</td>
<td>ORPL400A325</td>
<td>100 - 325</td>
<td>90 - 2000</td>
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<tr>
<td>400</td>
<td>275</td>
<td>ORPL400A275</td>
<td>75 - 275</td>
<td>69 - 1600</td>
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<tr>
<td>400</td>
<td>250</td>
<td>ORPL400A250</td>
<td>50 - 250</td>
<td>40 - 1600</td>
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<tr>
<td>400</td>
<td>225</td>
<td>ORPL400A225</td>
<td>35 - 225</td>
<td>28 - 1200</td>
</tr>
<tr>
<td>400</td>
<td>200</td>
<td>ORPL400A200</td>
<td>25 - 200</td>
<td>20 - 800</td>
</tr>
<tr>
<td>400</td>
<td>175</td>
<td>ORPL400A175</td>
<td>15 - 175</td>
<td>13.5 - 500</td>
</tr>
<tr>
<td>400</td>
<td>150</td>
<td>ORPL400A150</td>
<td>10 - 150</td>
<td>9 - 375</td>
</tr>
<tr>
<td>400</td>
<td>125</td>
<td>ORPL400A125</td>
<td>5 - 125</td>
<td>4.5 - 225</td>
</tr>
<tr>
<td>400</td>
<td>100</td>
<td>ORPL400A100</td>
<td>2.5 - 100</td>
<td>2 - 50</td>
</tr>
<tr>
<td>400</td>
<td>25</td>
<td>ORPL400A25</td>
<td>1.5 - 25</td>
<td>1 - 15</td>
</tr>
<tr>
<td>400</td>
<td>20</td>
<td>ORPL400A20</td>
<td>1 - 20</td>
<td>0.5 - 10</td>
</tr>
<tr>
<td>400</td>
<td>15</td>
<td>ORPL400A15</td>
<td>0.75 - 15</td>
<td>0.5 - 7.5</td>
</tr>
<tr>
<td>400</td>
<td>10</td>
<td>ORPL400A10</td>
<td>0.5 - 10</td>
<td>0.5 - 5</td>
</tr>
<tr>
<td>400</td>
<td>5</td>
<td>ORPL400A5</td>
<td>0.25 - 5</td>
<td>0.25 - 2.5</td>
</tr>
</tbody>
</table>

**Interruption Rating**

**Breaker Type**
- UL/CSA rms Sym. kA, 50/60 Hz
- IEC 60947-2 rms Sym. kA, 50/60 Hz

**Notes**
1. For field testing primary injection methods, follow NEMA A4-B guidelines.
2. Calibration response in short delay pickup range is the same for 1, 2, or 3 poles in series.
3. There is a memory effect that can act to shorten the long delay. The memory effect comes into play if a current above the long delay pickup value exists for a time and then is cleared by the tripping of a downstream device or the circuit breaker itself. A subsequent overload will cause the circuit breaker to trip in shorter time than normal. The amount of time reduction is inverse to the amount of time that has elapsed since the previous overload. Approximately five minutes is required between overloads to completely reset the memory.
4. The end of the curve is determined by the interrupting rating of the circuit breaker. See above tabulation.
5. This curve is shown as a multiple of the Long Delay Pick-up Setting ($I_l$). This $I_l$ setting is programmed in primary value amperes via a Breaker Interface Module, or OPTIMizer, or a Remote PC (IMPCSC System).
6. The Long Delay Pick-up Point (indicated by a flashing LED on the product) nominally occurs above 115% of the $I_l$ current, with a +/- 5% tolerance. The short delay settings have conventional 100%, +/- 5% as the pickup points.
7. For additional curve tolerances contact Eaton.
8. Total clearing times shown include the response times of the trip unit, the breaker opening, and the quenching of the arcing current.

Figure 14. Long Delay $I^2t$, Short Delay Flat - Curve Number SC-6324-96, June 2007
Figure 15 Long Delay I₄T, Short Delay Flat Curve Number SC-6325-96, June 2007
L-Frame Circuit Breakers Equipped with 125A Digitrip OPTIM 550/1050 Trip Units; Instantaneous and Override

Circuit Breaker Time/Current Curves (Phase Current)
Series C L-Frame Circuit Breakers
Equipped With 125A Digitrip Optim Trip Units
Response: INSTANTANEOUS AND OVERRIDE

Available Rating Plugs

<table>
<thead>
<tr>
<th>Maximum Ampere Rating</th>
<th>Ampere Rating (I_n)</th>
<th>Rating Plug Catalog Number</th>
<th>Long Delay Pickup Range 2 to 8 x I_n Amperes</th>
<th>Override Amperes</th>
</tr>
</thead>
<tbody>
<tr>
<td>125</td>
<td>125</td>
<td>RP125A125</td>
<td>250 - 1000</td>
<td>2100 +/-15%</td>
</tr>
<tr>
<td>110</td>
<td>110</td>
<td>RP125A110</td>
<td>220 - 880</td>
<td>2100 +/-15%</td>
</tr>
<tr>
<td>100</td>
<td>100</td>
<td>RP125A100</td>
<td>200 - 800</td>
<td>2100 +/-15%</td>
</tr>
<tr>
<td>90</td>
<td>90</td>
<td>RP125A90</td>
<td>180 - 720</td>
<td>2100 +/-15%</td>
</tr>
<tr>
<td>70</td>
<td>70</td>
<td>RP125A70</td>
<td>140 - 560</td>
<td>2100 +/-15%</td>
</tr>
</tbody>
</table>

Interrupting Rating

UL/CSA rms Sym. kA, 50/60 Hz

<table>
<thead>
<tr>
<th>Breaker Type</th>
<th>240V</th>
<th>480V</th>
<th>600V</th>
</tr>
</thead>
<tbody>
<tr>
<td>LD, CLO</td>
<td>65</td>
<td>85</td>
<td>100</td>
</tr>
<tr>
<td>HLD, CHDC</td>
<td>100</td>
<td>65</td>
<td>35</td>
</tr>
<tr>
<td>LDC, CLDC</td>
<td>200</td>
<td>100</td>
<td>50</td>
</tr>
</tbody>
</table>

IEC 60947-2 rms Sym. kA, 50/60 Hz

<table>
<thead>
<tr>
<th>Breaker Type</th>
<th>240V</th>
<th>415V</th>
<th>690V</th>
</tr>
</thead>
<tbody>
<tr>
<td>LD, CLO</td>
<td>65</td>
<td>85</td>
<td>100</td>
</tr>
<tr>
<td>HLD, CHDC</td>
<td>100</td>
<td>65</td>
<td>35</td>
</tr>
<tr>
<td>LDC, CLDC</td>
<td>200</td>
<td>100</td>
<td>50</td>
</tr>
</tbody>
</table>

Notes

1. For field testing primary injection methods, follow NEMA AB4 guidelines.
2. For high fault current levels, a fixed instantaneous override is provided at 2100 amps, +/- 15%.
3. Calibration response in short delay pickup range is the same for 1, 2, or 3 poles in series.
4. There is a memory effect that can act to shorten the long delay. The memory effect comes into play if a current above the long delay pickup value exists for a time and then is cleared by the tripping of a downstream device or the circuit breaker itself. A subsequent overload will cause the circuit breaker to trip in shorter time than normal. The amount of time reduction is inverse to the amount of time that has elapsed since the previous overload. Approximately five minutes is required between overloads to completely reset the memory.
5. The end of the curve is determined by the interrupting rating of the circuit breaker. See above tabulation.
6. The instantaneous settings have conventional 100%, +/- 10% of the pickup points.
7. For additional curve tolerances contact Eaton.
8. Total clearing times shown include the response times of the trip unit, the breaker opening, and the quenching of the arcing current.

Figure 16. Instantaneous and Override, 125 Amperes - Curve Number SC-6329-96, June 2007
There is a memory effect that can act to shorten the long delay. The memory effect comes into play if a current above the long delay pickup value exists for a time and then is cleared by the tripping of a downstream device or the circuit breaker itself. A subsequent overload will cause the circuit breaker to trip in shorter time than normal. The amount of time reduction is inverse to the amount of time that has elapsed since the previous overload. Approximately five minutes is required between overloads to prevent shortening of the long delay.

The end of the curve is determined by the interrupting rating of the circuit breaker. See above tabulation.

The instantaneous settings have conventional 100%, +/-10% of the pickup points.

For additional curve tolerances contact Eaton.

Total clearing times shown include the response times of the trip unit, the breaker opening, and the extinction of the arcing current.

Figure 17. Instantaneous and Override, 250 Amperes - Curve Number SC-6328-96, June 2007

EATON www.eaton.com
L-Frame Circuit Breakers Equipped with 400A Digitrip OPTIM 550/1050 Trip Units; Instantaneous and Override

Available Rating Plugs

<table>
<thead>
<tr>
<th>Maximum Ampere Rating (Iₚ)</th>
<th>Ampere Rating (Iₚₜₜ)</th>
<th>Rating Plug</th>
<th>Catalog Number</th>
<th>Long Delay Pickup Range 2 to 8 x Iₚ Amperes</th>
<th>Override Ampere</th>
</tr>
</thead>
<tbody>
<tr>
<td>600</td>
<td>100</td>
<td>ORPL400A000</td>
<td>200</td>
<td>800 x 15%</td>
<td></td>
</tr>
<tr>
<td>400</td>
<td>200</td>
<td>ORPL400A200</td>
<td>400</td>
<td>800 x 15%</td>
<td></td>
</tr>
<tr>
<td>200</td>
<td>400</td>
<td>ORPL400A400</td>
<td>600</td>
<td>800 x 15%</td>
<td></td>
</tr>
</tbody>
</table>

Interrupting Rating

- UL/CSA rms Sym. kA, 50/60 Hz
- Breaker Type
  - 240V
    - LD, CLD 100
    - HD, LDH 100
    - LG, CLO, LDH 100
  - 480V
    - 230 35
    - 350 35
    - 400 35
  - 600V
    - 200 40
    - 250 40
    - 300 40

- IEC 60947-2 rms Sym. kA, 50/60 Hz
- Breaker Type
  - 240V
    - LD, HD, LG, LDH 100
    - HD, HDH 100
    - LG, LGH 100
  - 415V
    - 230 40
    - 250 40
    - 300 40
  - 600V
    - 200 40
    - 250 40
    - 300 40

Notes

1. For field testing primary injection methods, follow NEMA AB4-2003 guidelines.
2. For high fault current levels, a fixed instantaneous override is provided at 6800 amps, +/- 15%.
3. Calibration response in short delay pickup range is the same for 1, 2, or 3 poles in series.
4. There is a memory effect that can act to shorten the long delay. The memory effect comes into play if a current above the long delay pickup value exists for a time and then is cleared by the tripping of a downstream device or the circuit breaker itself. A subsequent overload will cause the circuit breaker to trip in shorter time than normal. The amount of time reduction is inverse to the amount of time that has elapsed since the previous overload. Approximately five minutes is required between overloads to completely reset the memory.
5. The end of the curve is determined by the interrupting rating of the circuit breaker. See above tabulation.
6. The instantaneous settings have conventional 100%, +/- 10% of the pickup points.
7. For additional curve tolerances contact Eaton.
8. Total clearing times shown include the response times of the trip unit, the breaker opening, and the quenching of the arcing current.

Figure 18. Instantaneous and Override, 400 Amperes - Curve Number SC-6327-96, June 2007
The memory effect that can act to shorten the long delay time/Current Curves (Phase Current) comes into play if a current above the long delay pickup value exists for a time and then the extinction of the arcing current.

Total clearing times shown include the response times of the trip unit, the breaker opening, and the quenching of the arcing current.

For high fault current levels, a fixed instantaneous override is provided at 6800 amps, +/- 15%.

Approximately five minutes is required between overloads to completely reset the memory.

The end of the curve is determined by the interrupting rating of the circuit breaker.

The instantaneous settings have conventional 100%, +/- 10% of the pickup points.

For additional curve tolerances contact Eaton.

The amount of time reduction is inverse to the amount of time that has elapsed since the subsequent overload will cause the circuit breaker to trip in shorter time than normal.

For additional curve tolerances contact Cutler-Hammer.

For field testing primary injection methods, follow NEMA A84 guidelines.

For high fault current levels, a fixed instantaneous override is provided at 6800 amps, +/- 15%.

Calibration response in short delay pickup range is the same for 1, 2, or 3 poles in series.

There is a memory effect that can act to shorten the long delay. The memory effect comes into play if a current above the long delay pickup value exists for a time and then is cleared by the tripping of a downstream device or the circuit breaker itself. A subsequent overload will cause the circuit breaker to trip in shorter time than normal. The amount of time reduction is inverse to the amount of time that has elapsed since the previous overload. Approximately five minutes is required between overloads to completely reset the memory.

The end of the curve is determined by the interrupting rating of the circuit breaker. See above tabulation.

The instantaneous settings have conventional 100%, +/- 10% of the pickup points.

For additional curve tolerances contact Eaton.

Total clearing times shown include the response times of the trip unit, the breaker opening, and the quenching of the arcing current.

Figure 19. Instantaneous and Override, 600 Amperes - Curve Number SC-6326-96, June 2007
Available Ground Fault Ranges

<table>
<thead>
<tr>
<th>Ground Fault</th>
<th>Maximum Ampere Rating</th>
<th>Pickup Range</th>
</tr>
</thead>
<tbody>
<tr>
<td>125</td>
<td>29,125</td>
<td>0.2 to 1.0 x Ic</td>
</tr>
<tr>
<td>250</td>
<td>50,250</td>
<td>0.2 to 1.0 x Ic</td>
</tr>
<tr>
<td>400</td>
<td>80,400</td>
<td>0.2 to 1.0 x Ic</td>
</tr>
<tr>
<td>600</td>
<td>120,600</td>
<td>0.2 to 1.0 x Ic</td>
</tr>
</tbody>
</table>

Interrupting Rating

<table>
<thead>
<tr>
<th>Breaker Type</th>
<th>UL/CSA rms Sym. kA, 50/60 Hz</th>
</tr>
</thead>
<tbody>
<tr>
<td>LDC, CLDC</td>
<td>200</td>
</tr>
<tr>
<td>HLD, CHDC</td>
<td>600</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Breaker Type</th>
<th>IEC 60947-2 rms Sym. kA, 50/60 Hz</th>
</tr>
</thead>
<tbody>
<tr>
<td>LDC, CLDC</td>
<td>200, 100</td>
</tr>
</tbody>
</table>

Notes

1. For field testing primary injection methods, follow NEMA A84 guidelines.
2. Calibration response in short delay pickup range is the same for 1, 2, or 3 poles in series.
3. There is a memory effect that can act to shorten the long delay. The memory effect comes into play if a current above the long delay pickup value exists for a time and then is cleared by the tripping of a downstream device or the circuit breaker itself. A subsequent overload will cause the circuit breaker to trip in shorter time than normal. The amount of time reduction is inversely proportional to the amount of time that has elapsed since the previous overload. Approximately five minutes is required between overloads to completely reset the memory.
4. The end of the curve is determined by the interrupting rating of the circuit breaker. See above tabulation.
5. The ground fault settings have conventional 100%, +/- 10% of the pickup points.
6. For additional curve tolerances contact Eaton.
7. Total clearing times shown include the response times of the trip unit, the breaker opening, and the extinction of the arcing current.

Figure 20. Ground Fault of Ground Fault Alarm Only - Curve NumberSC-6330-96, June 2007
Types LDB, LD, HLD Equipped With Type LT Thermal-Magnetic Trip Unit

Figure 21. LDB, LD, HLD - Curve Number SC-4547-89B, June 2007

Circuit Breaker Time/Current Curves
Series C L-Frame Circuit Breakers
Equipped With Type LT Thermal-Magnetic Trip Unit

Catalog Types: LDB, LD, HLD Circuit Breakers, 2, 3 and 4 Poles.

For application and coordination purposes only. Thermal calibration based on 40°C ambient, cold start. Connected with four (4) feet of rated wire (75°C) per terminal. Tested in open air with current in all poles. Instantaneous calibration based on single-pole tests.

Maximum Voltage: 600V, AC (50/60 Hz) 250V, DC.

Breaker Rating
Rated Amperes (I_n)

<table>
<thead>
<tr>
<th>Breaker Type</th>
<th>Curves</th>
<th>Rated Amperes (I_n)</th>
<th>Instantaneous Trip Amperes</th>
</tr>
</thead>
<tbody>
<tr>
<td>LDB</td>
<td>UL/CSA</td>
<td>60</td>
<td>50 to 100% of trip unit rating (DC values are approximately 40% higher)</td>
</tr>
<tr>
<td>LD</td>
<td>UL/CSA</td>
<td>60</td>
<td>50 to 100% of trip unit rating (DC values are approximately 40% higher)</td>
</tr>
<tr>
<td>HLD</td>
<td>UL/CSA</td>
<td>100</td>
<td>50 to 100% of trip unit rating (DC values are approximately 40% higher)</td>
</tr>
</tbody>
</table>

Interrupting Rating
UL/CSA rms Sym. kA, 50/60 Hz kA, DC

<table>
<thead>
<tr>
<th>Breaker Type</th>
<th>240V, (Ue)</th>
<th>480V, (Ue)</th>
<th>600V, (Ue)</th>
<th>250V, (Ue)</th>
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</thead>
<tbody>
<tr>
<td>LDB</td>
<td>17</td>
<td>40</td>
<td>10</td>
<td>10</td>
</tr>
<tr>
<td>LD</td>
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<td>10</td>
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<tr>
<td>HLD</td>
<td>25</td>
<td>65</td>
<td>17</td>
<td>17</td>
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</table>

IEC 60947-2 rms Sym. kA, 50/60 Hz kA, DC

<table>
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<tr>
<th>Breaker Type</th>
<th>240V, (Ue)</th>
<th>415V, (Ue)</th>
<th>690V, (Ue)</th>
<th>250V, (Ue)</th>
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<td>LDB</td>
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<td>17</td>
<td>17</td>
<td>17</td>
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<tr>
<td>LD</td>
<td>17</td>
<td>17</td>
<td>17</td>
<td>17</td>
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<tr>
<td>HLD</td>
<td>25</td>
<td>65</td>
<td>65</td>
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</tbody>
</table>

Utilization Category A

Notes:
- For additional information on the trip unit, see IL 29C606.
Type LDC Equipped With Type LT Thermal-Magnetic Trip Unit

**Circuit Breaker Time/Current Curves**
Series C L-Frame Circuit Breakers
Equipped With Type LT Thermal-Magnetic Trip Unit

*Catalog Types:* LDC Circuit Breakers, 2, 3 and 4 Poles.

*For application and coordination purposes only. Thermal calibration based on 40°C ambient, cold start. Connected with four 3/0 feet of rated wire (75°C) per terminal. Tested in open air with current in all poles. Instantaneous calibration based on single-pole tests.*

**Maximum Voltage:** 600V, AC (50/60 Hz) 250V, DC

**Breaker Rating**

*Instantaneous Trip Amperes (I\textsubscript{IP}) (See Figure Below)*

<table>
<thead>
<tr>
<th>Breaker Type</th>
<th>240V</th>
<th>480V</th>
<th>600V</th>
<th>250V</th>
</tr>
</thead>
<tbody>
<tr>
<td>UL/CSA rms</td>
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<td>150</td>
<td>50</td>
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<td>kA, DC</td>
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</table>

**Interrupting Rating**

- UL/CSA rms Sym. kA, 50/60 Hz
- UL/CSA rms DC

<table>
<thead>
<tr>
<th>Breaker Type</th>
<th>240V</th>
<th>480V</th>
<th>600V</th>
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</thead>
<tbody>
<tr>
<td>kA, DC</td>
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</tbody>
</table>

**Notes:** For additional information on the trip unit, see IL 29C606.

- Single pole data at 25°C based on NEMA Procedures (AB 4) for verifying performance of molded case circuit breakers.

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**Figure 22. LDC - Curve Number SC-5760-94, June 2007**
Figure 23. Peak Let-Through $I^2t$ Curve — 240 V - Curve Number AD-29-166A

Figure 24. Peak Let-Through Current Curve — 240 V - Curve Number AD-29-166A
Figure 25. Peak Let-Through I^2t Curve — 480 V - Curve Number AD-29-166B

Figure 26. Peak Let-Through Current — 480 V - Curve Number AD-29-166B
Figure 27. Peak Let-Through $I^2t$ — 600 V - Curve Number AD-29-166C

Figure 28. Peak Let-Through Current — 600 V - Curve Number AD-29-166C