Series C L-Frame

125-600A, 240-600V

Contents

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.

Powering Business Worldwide

Note: Unless noted below, all curves remain unchanged from their prior revision.

Revision	Curve Number	Page	Date
Changed trip labels on page 5			

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

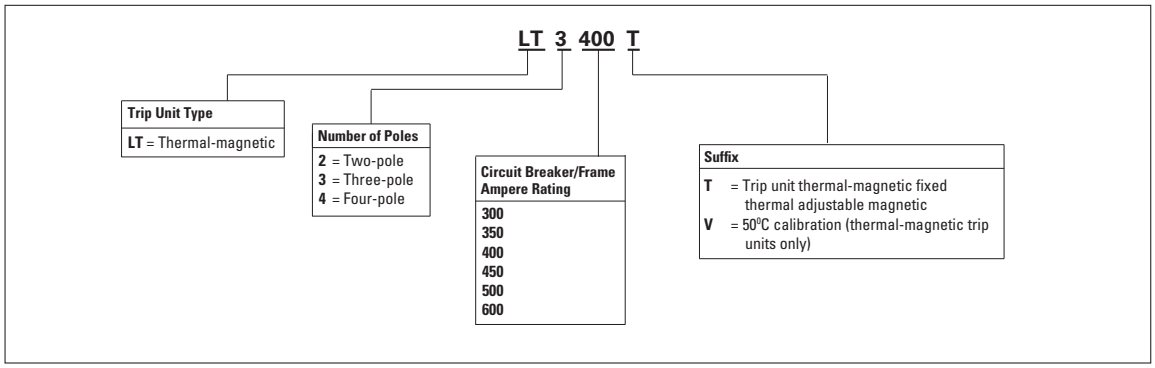


Table 2. Digitrip RMS 310 Trip Unit

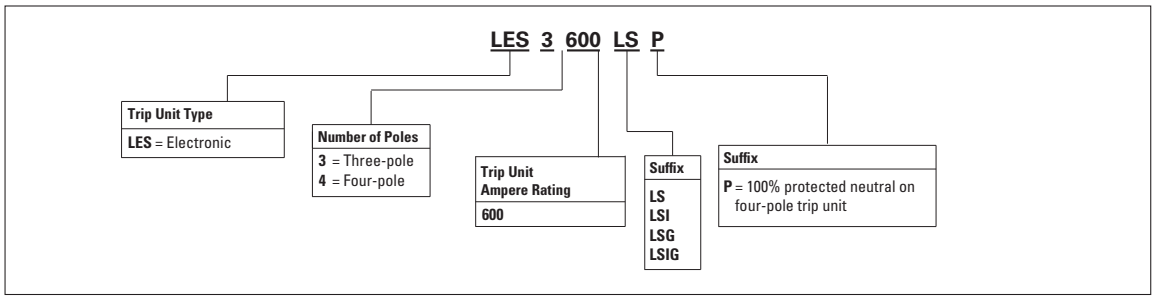


Table 3. OPTIM Circuit Breaker/Frame

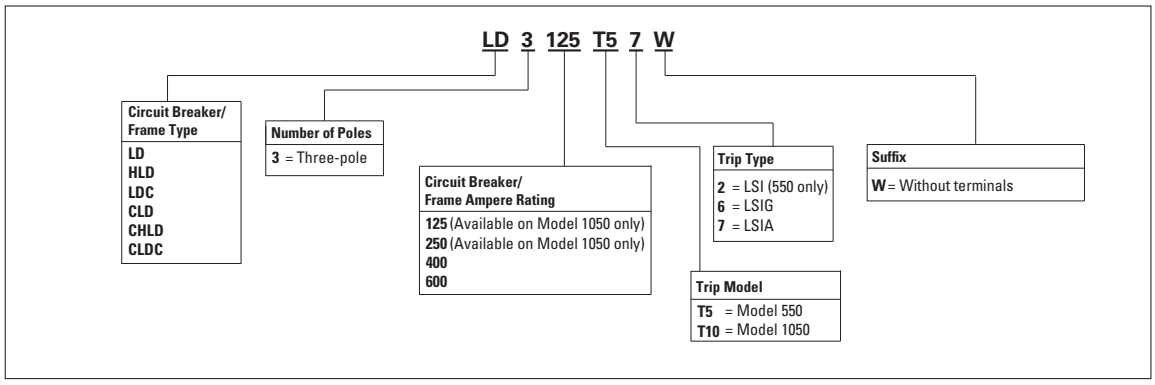


Table 4. Circuit Breaker/Frame

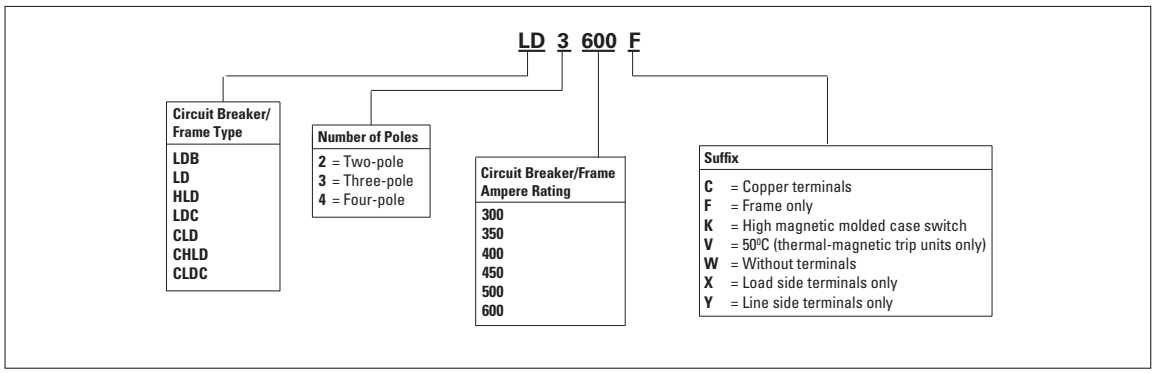


Table 5. LD Breaker Assembly

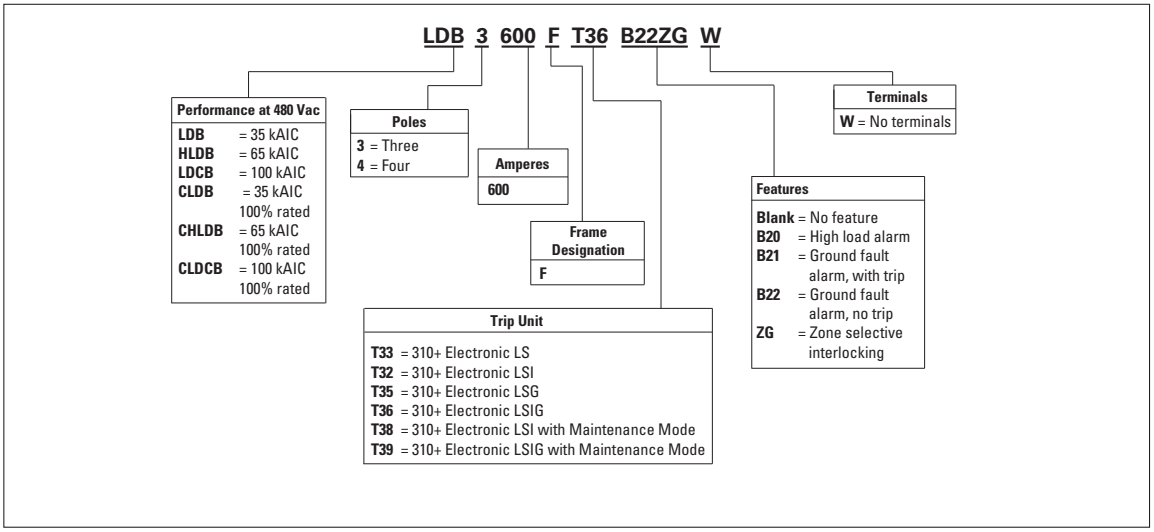


Table 6. LD Electronic Trip Unit

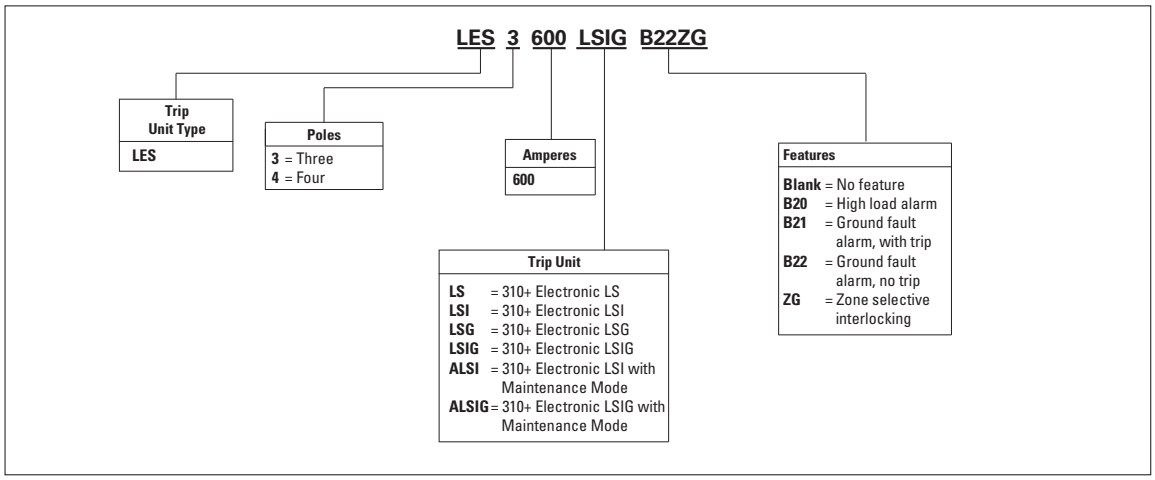
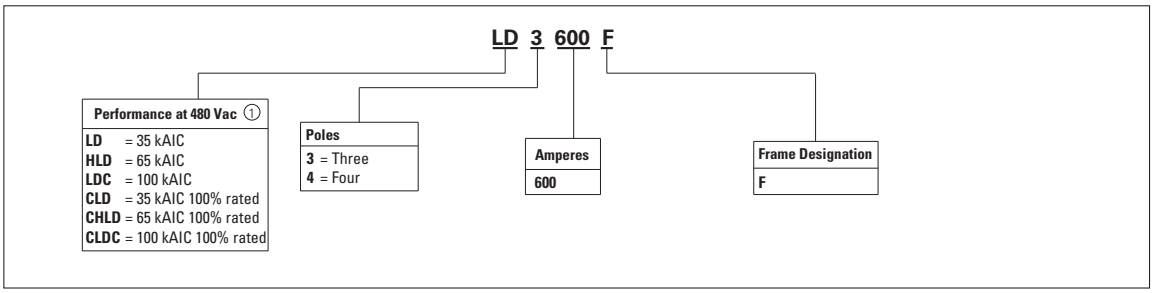


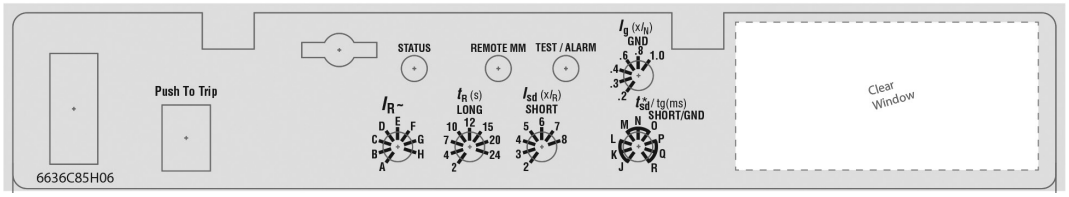
Table 7. LD Frame Only



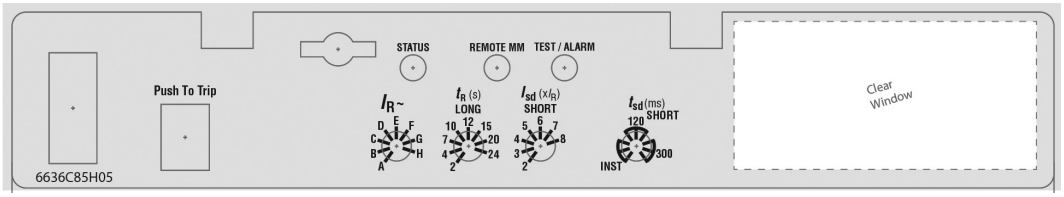
Note

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.

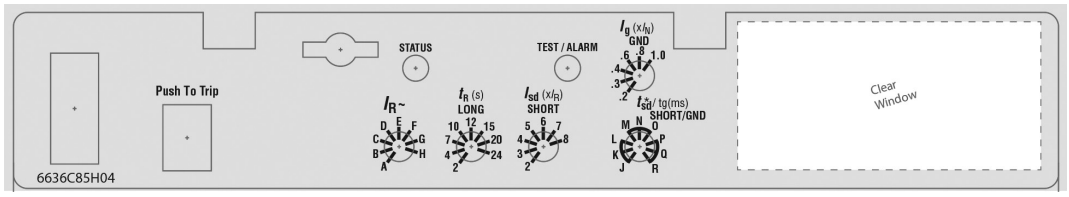
ALSIG (With Maintenance Mode)



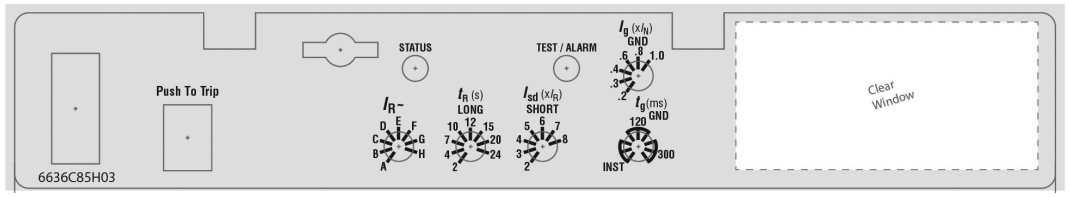
ALSI (With Maintenance Mode)



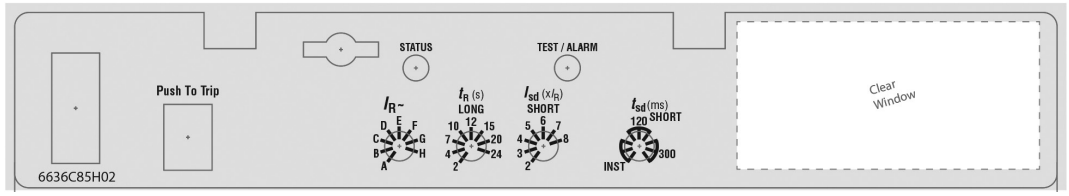
LSIG



LSG



LSI



LS

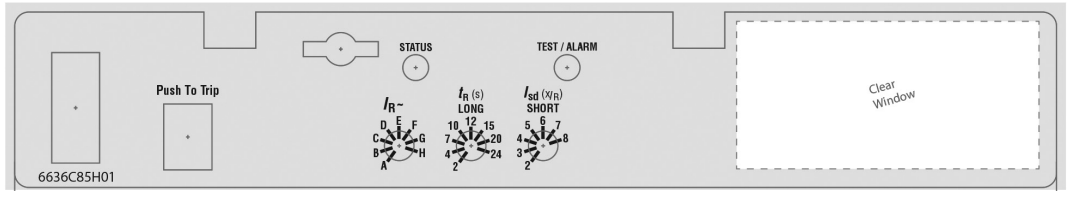
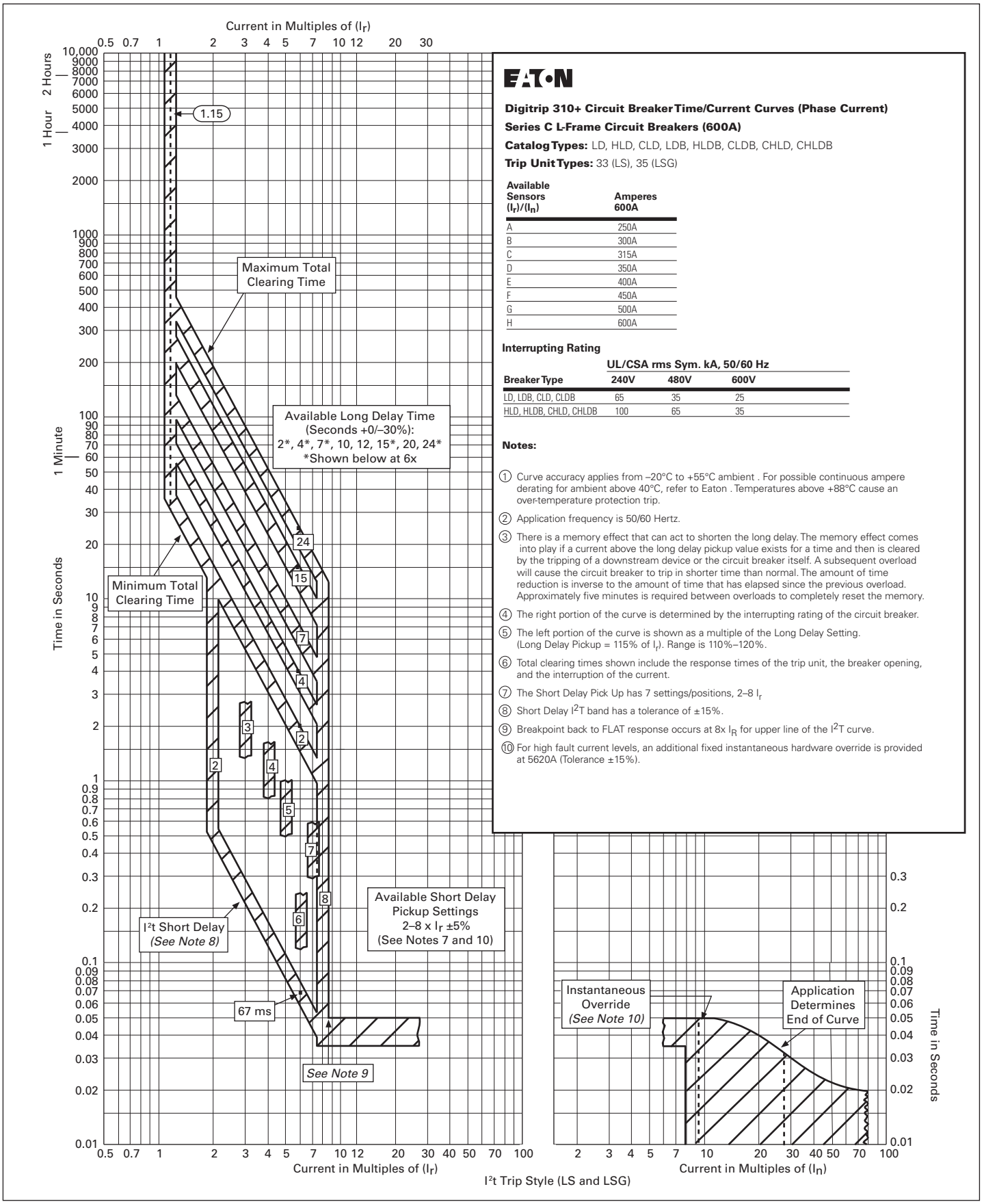


Figure 1. Digitrip 310+ Faceplates



EATON

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: 33 (LS), 35 (LSG)

Available Sensors (I_r)/(I_n)	Amperes 600A
A	250A
B	300A
C	315A
D	350A
E	400A
F	450A
G	500A
H	600A

Interrupting Rating

	UL/CSA rms Sym. kA, 50/60 Hz		
Breaker Type	**240V**	**480V**	**600V**
LD, LDB, CLD, CLDB	65	35	25
HLD, HLDB, CHLD, CHLDB	100	65	35

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 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.

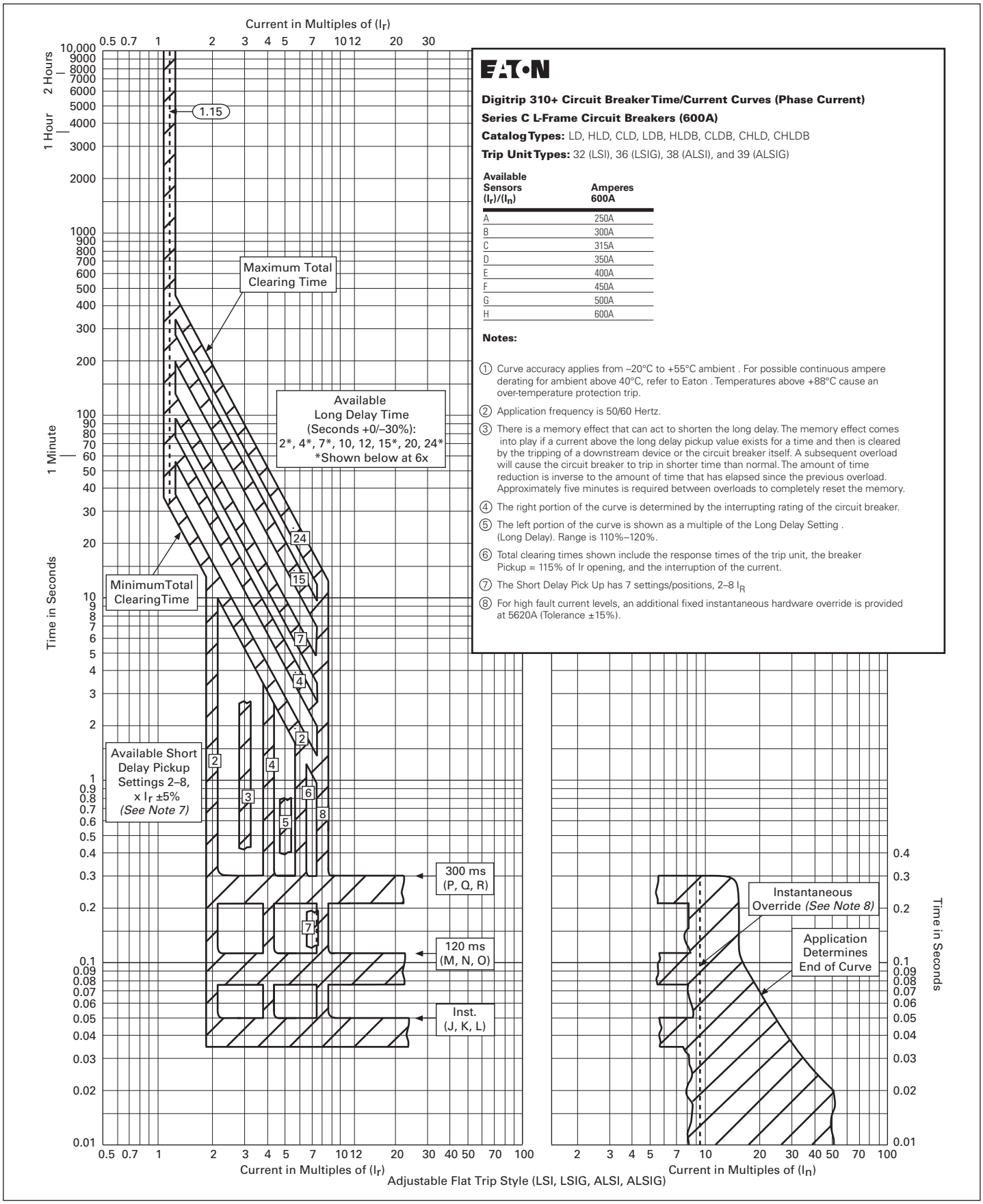
⑦ The Short Delay Pick Up has 7 settings/positions, 2–8 I_r

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 2. Digitrip 310+ Trip Units (600A), Long Delay Response and Short Delay with I^2T Response Curve and Override (LS, LSG) - TD012044EN, October 2014



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)

Available Sensors (I_r)/(I_n)	Amperes 600A
A	250A
B	300A
C	315A
D	350A
E	400A
F	450A
G	500A
H	600A

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 I_R
8. For high fault current levels, an additional fixed instantaneous hardware override is provided at 5620A (Tolerance ±15%).

Figure 3. Digitrip 310+ Trip Units (600A), Long Delay Response and Short Delay with Flat Response Curve and Override (LSI, LSIG, ALSI, ALSIG) - TD012043EN, October 2014

Types LD, LCD, HLD, CLD, CHLD, and CLDC Equipped With Type LES Digitrip RMS 310 Trip Units, Ground Fault Protection

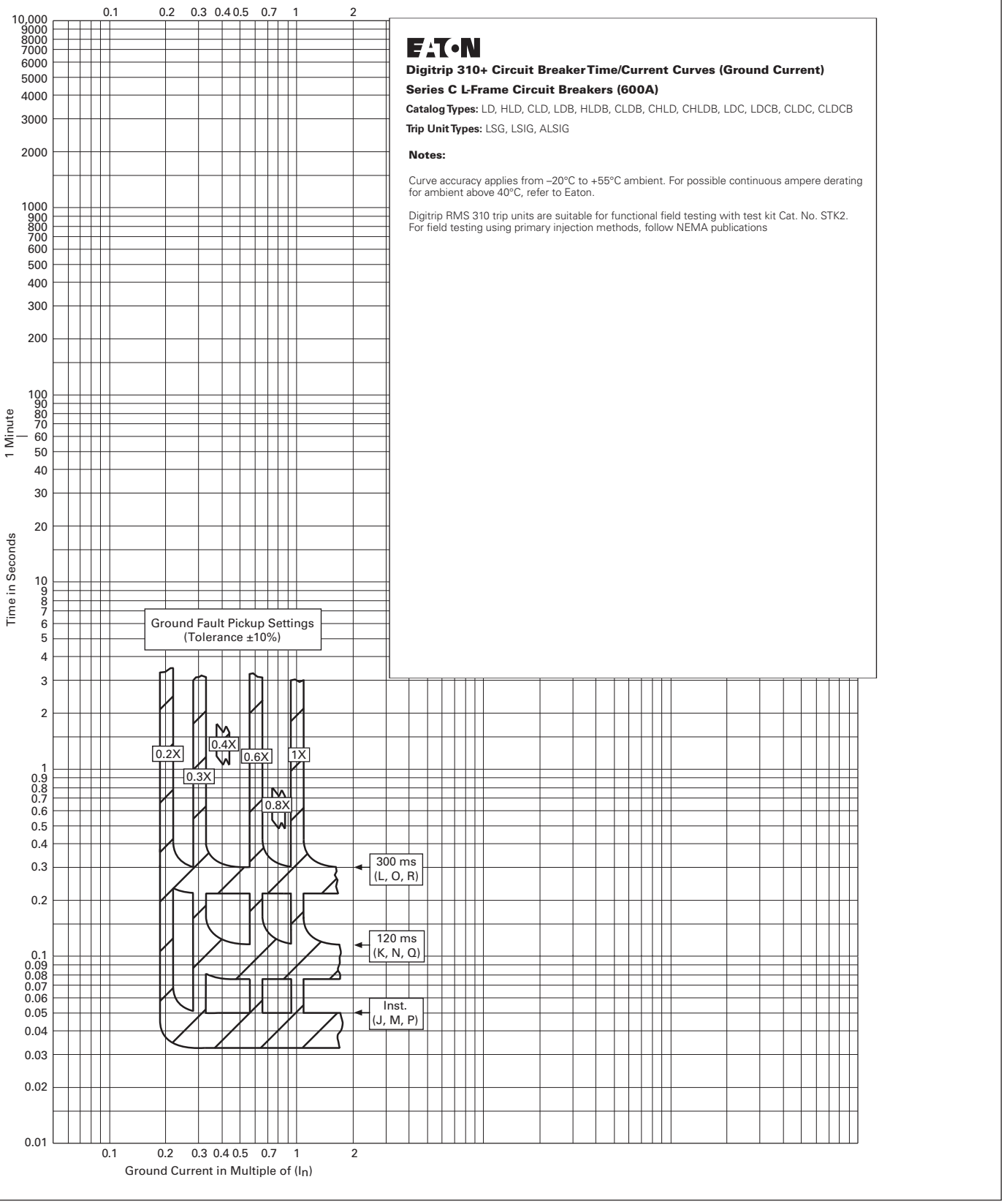


Figure 4. Ground Fault Delay Response Curve (LSG, LSIG, ALSIG) - Curve Number TD012045EN

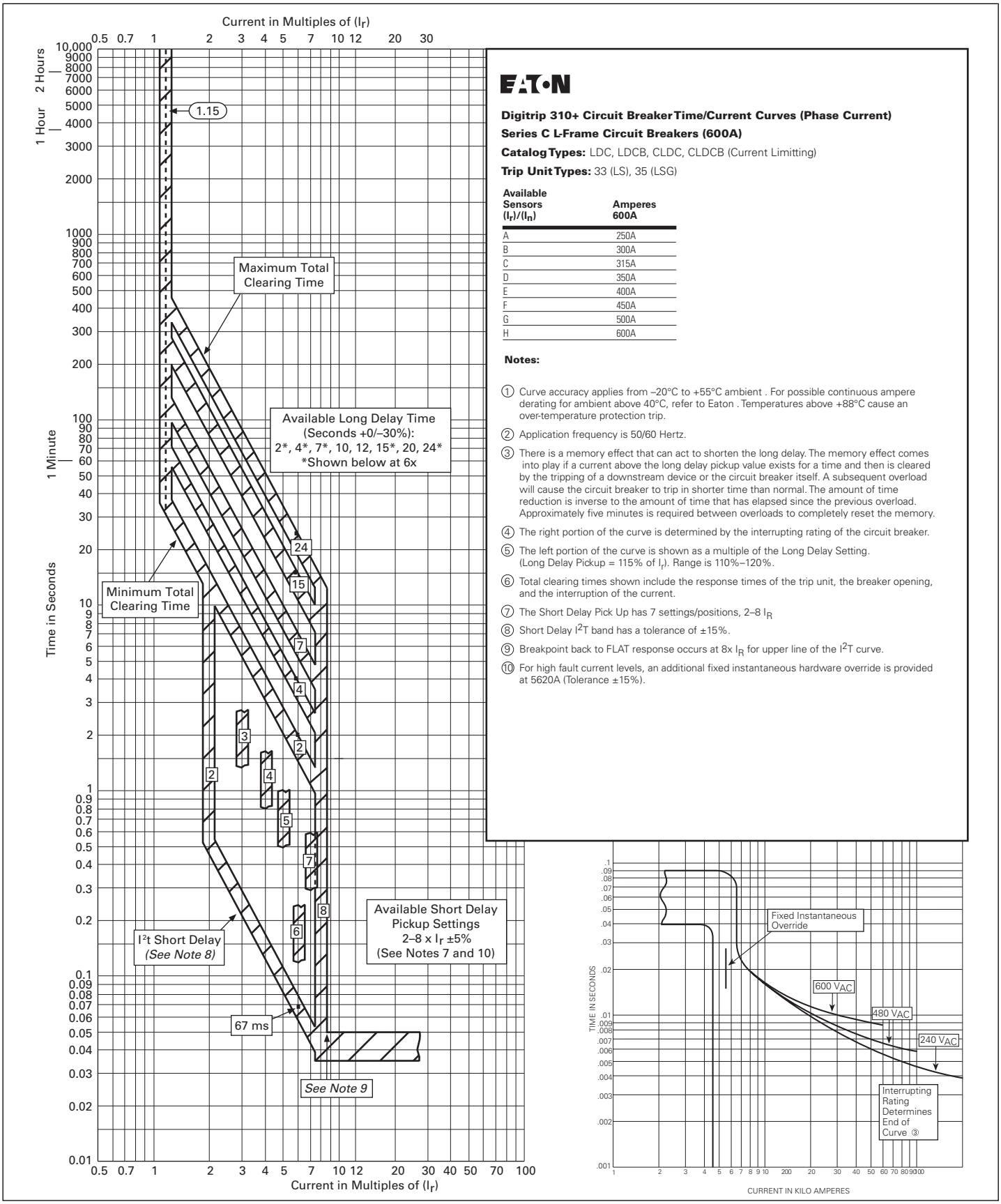
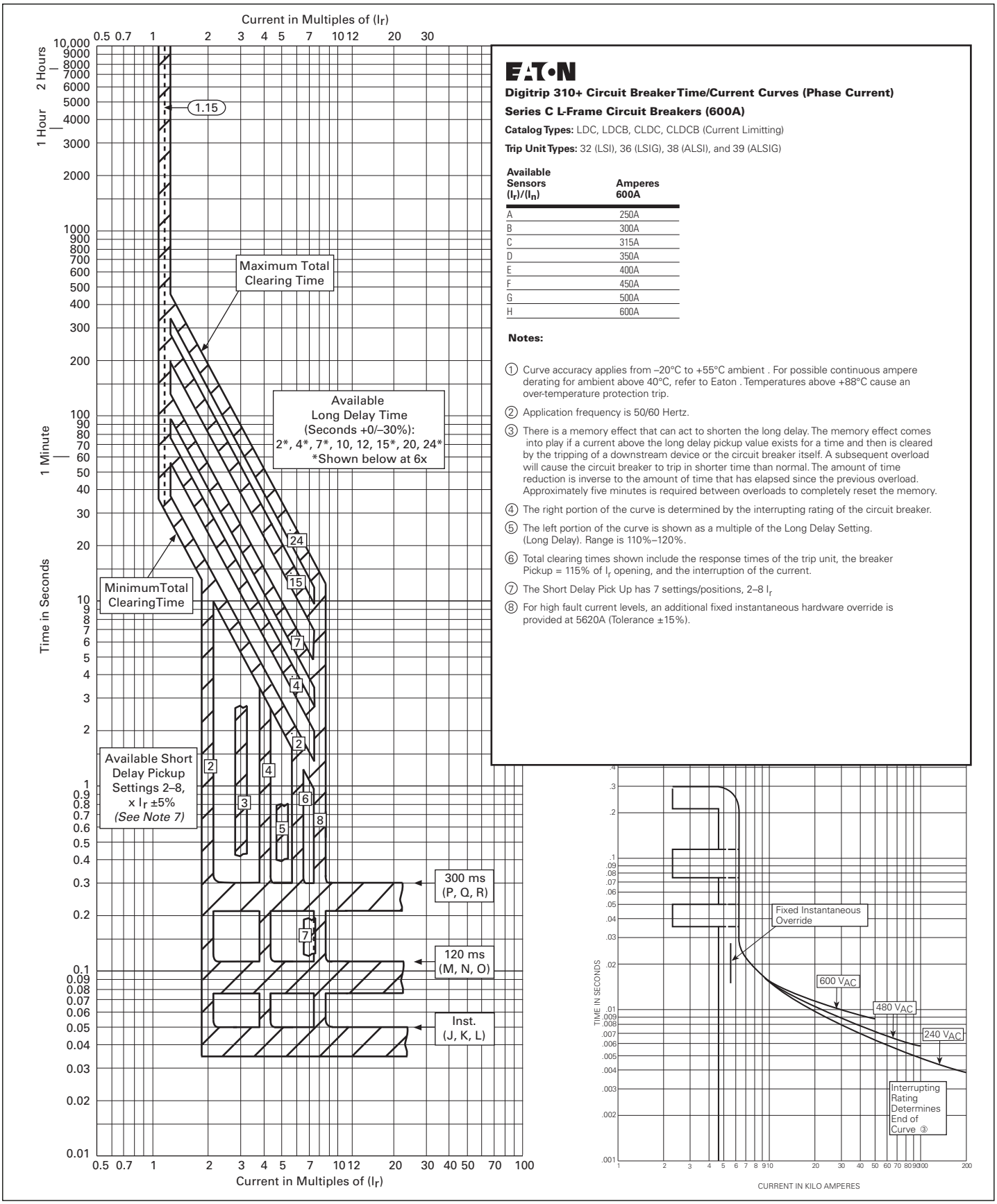


Figure 5. Digitrip 310+ Trip Units (600A), Long Delay Response and Short Delay with I2T Response Curve and Override (LS, LSG) - TD012046EN, October 2014



Digitrip 310+ Circuit Breaker Time/Current Curves (Phase Current)

Series C L-Frame Circuit Breakers (600A)

Catalog Types: LDC, LDCB, CLDC, CLDCB (Current Limitting)

Trip Unit Types: 32 (LSI), 36 (LSIG), 38 (ALSI), and 39 (ALSIG)

Available Sensors (I_r)/(I_n)	Amperes 600A
A	250A
B	300A
C	315A
D	350A
E	400A
F	450A
G	500A
H	600A

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 I_r opening, and the interruption of the current.

⑦ The Short Delay Pick Up has 7 settings/positions, 2–8 I_r

⑧ For high fault current levels, an additional fixed instantaneous hardware override is provided at 5620A (Tolerance ±15%).

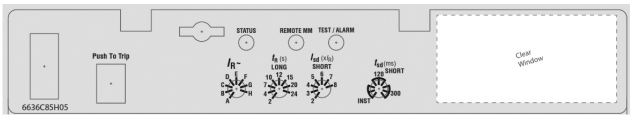
Figure 6. Digitrip 310+ Trip Units (600A), Long Delay Response and Short Delay with Flat Response Curve and Override (LSI, LSIG, ALSI, ALSIG) - TD012047EN, October 2014

Digitrip 310+ Circuit Breaker Time/Current Curves

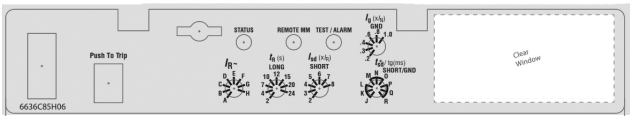
Maintenance Mode Setting

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

Series C L-Frame Trip Unit Nameplates



ALSI



ALSIG

I_r = Continuous Current Setting or Rating Plug Value, I_s = Current Sensor Frame Rating, I_n = Rating Plug Value, I_g = Ground Current Pickup Multiplier, I_i = Instantaneous Override Pickup.

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.

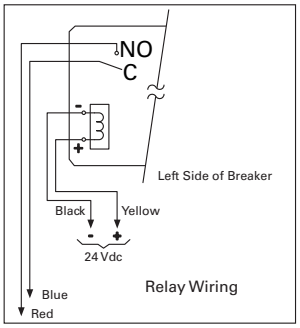
2 The end of the curve is determined by the interrupting rating of the circuit breaker.

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%) 2.5 x In.

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.



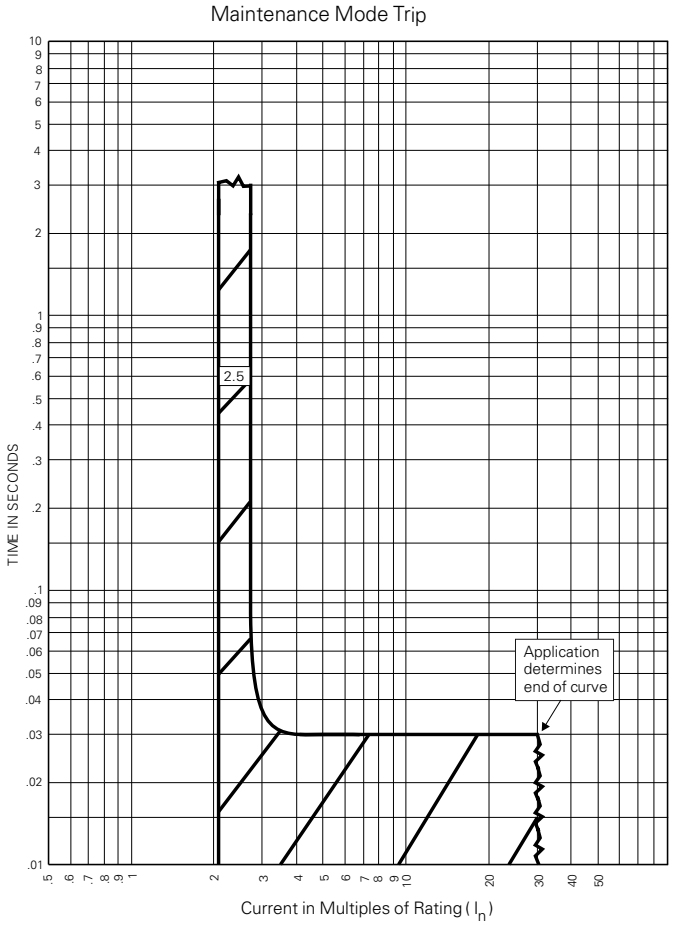
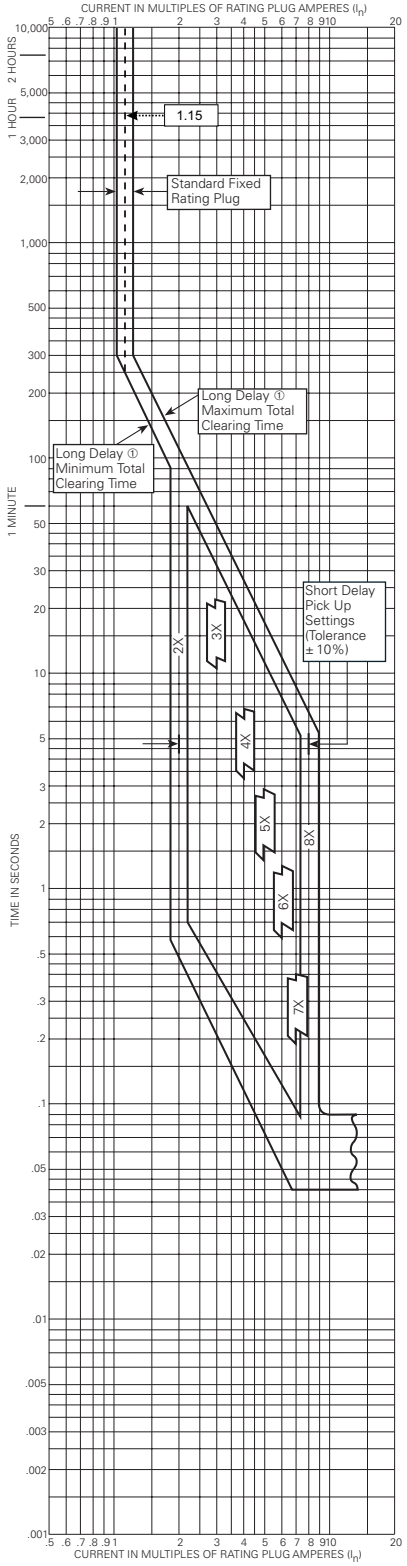


Figure 7. Maintenance Mode Setting (ALSI, ALSIG) - Curver Number - TD012049EN, October 2014

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



EATON

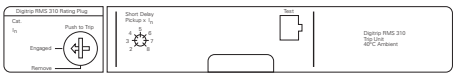
Circuit Breaker Time/Current Curves (Phase Current)

Series C L-Frame Circuit Breakers

Equipped With Type LES Digitrip RMS 310 Trip Units

Catalog Types: LES3600LS, LES3600LSG, LES4600LS, LES4600LSE, and LES4600LSP Digitrip RMS 310 Trip Units for use with Circuit Breaker Types LD, HLD, CLD, and CHLD 3 and 4 Poles.

Fixed Short Delay Time **Typical Trip Unit Nameplate**



Available Rating Plugs

Ampere Rating	Type	Rating Plug Catalog Number	Short Delay Pickup Range Amperes
600	Fixed	6LES600T	1200-4800
500	Fixed	6LES500T	1000-4000
450	Fixed	6LES450T	900-3600
400	Fixed	6LES400T	800-3200
350	Fixed	6LES350T	700-2800
300	Fixed	6LES300T	600-2400
300, 400, 500, 600	Adjustable	A6LES600T1	600-4800

Interrupting Rating

	UL/CSA rms Sym. kA, 50/60 Hz		
Breaker Type	**240V**	**480V**	**600V**
LD, CLD	65	35	25
HLD, CHLD	100	65	35

	IEC 60947-2 rms Sym. kA, 50/60 Hz					
Breaker Type	**240V**		**380V**		**415V**	
	Icu	Ics	Icu	Ics	Icu	Ics
LD, CLD	65	33	40	20	40	20
HLD, CHLD	100	50	65	33	65	33

Utilization Category A
U_{IMP} = 8 kV

Notes:

Digitrip RMS 310 trip units are suitable for functional field testing with test kit Cat. No. STK2. For field testing using primary injection methods, follow NEMA AB4 guidelines.

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.

① Curve accuracy applies from –20°C to +55°C ambient. For possible continuous ampere derating for ambient above 40°C, refer to Eaton.

② For high fault current levels a fixed instantaneous override is provided at 5620A. (Tolerance ±15%).

③ The end of the curve is determined by the interrupting rating of the circuit breaker. See above tabulation.

⑤ Long Delay Pickup is 115% of I_n, +/- 5%.

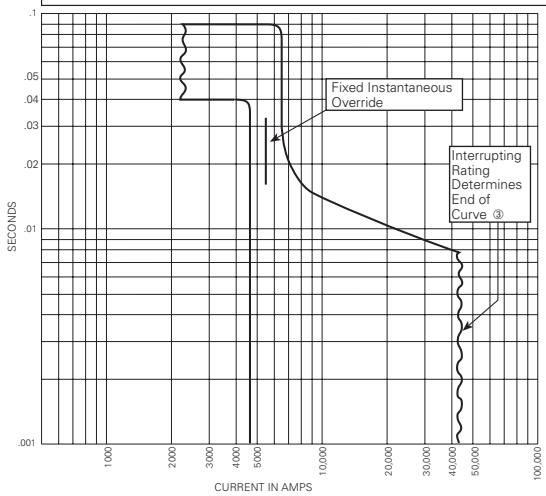
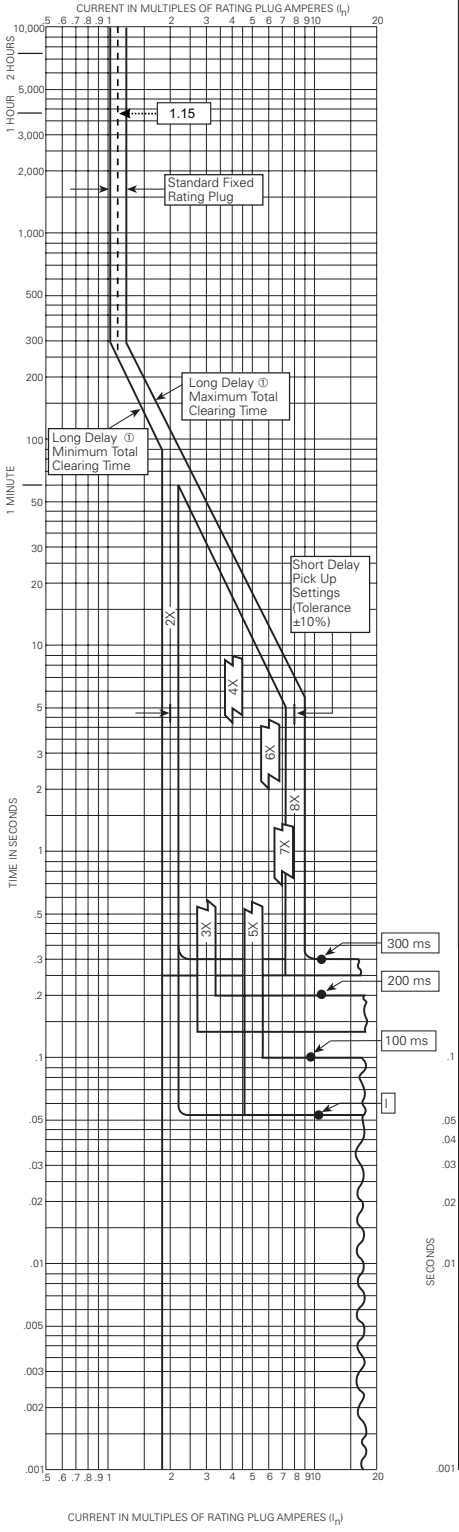
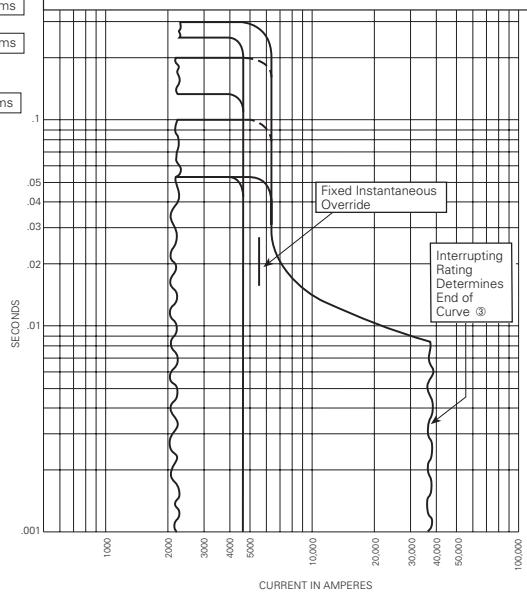


Figure 8. Catalog Types LES3600LS, LES3600LSG, LES4600LS, LES4600LSE, LES4600LSP - Curve Number SC-5653-93, June 2007

Types LD, HLD, CLD, and CHLD Equipped With Type LES Digitrip RMS 310 Trip Units, Types LES3600LSI, LES3600LSIG, LES4600LSI, LES4600LSIP





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.

Adjustable Short Delay Time **Typical Trip Unit Nameplate**

Available Rating Plugs

Ampere Rating	Type	Rating Plug Catalog Number	Short Delay Pickup Range Amperes
600	Fixed	6LES600T	1200-4800
500	Fixed	6LES500T	1000-4000
450	Fixed	6LES450T	900-3600
400	Fixed	6LES400T	800-3200
350	Fixed	6LES350T	700-2800
300	Fixed	6LES300T	600-2400
300, 400, 500, 600	Adjustable	A6LES600T1	600-4800

Interrupting Rating

Breaker Type	UL/CSA rms Sym. kA, 50/60 Hz 240V	480V	600V
LD, CLD	65	35	25
HLD, CHLD	100	65	35

Breaker Type	IEC 60947-2 rms Sym. kA, 50/60 Hz 240V		380V		415V	
	Icu	Ics	Icu	Ics	Icu	Ics
LD, CLD	65	33	40	20	40	20
HLD, CHLD	100	50	65	33	65	33

Utilization Category A
U_{IMP} = 8 kV

Notes:

Digitrip RMS 310 trip units are suitable for functional field testing with test kit Cat. No. STK2. For field testing using primary injection methods, follow NEMA AB4 guidelines.

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.

① Curve accuracy applies from –20°C to +55°C ambient. For possible continuous ampere derating for ambient above 40°C, refer to Eaton.

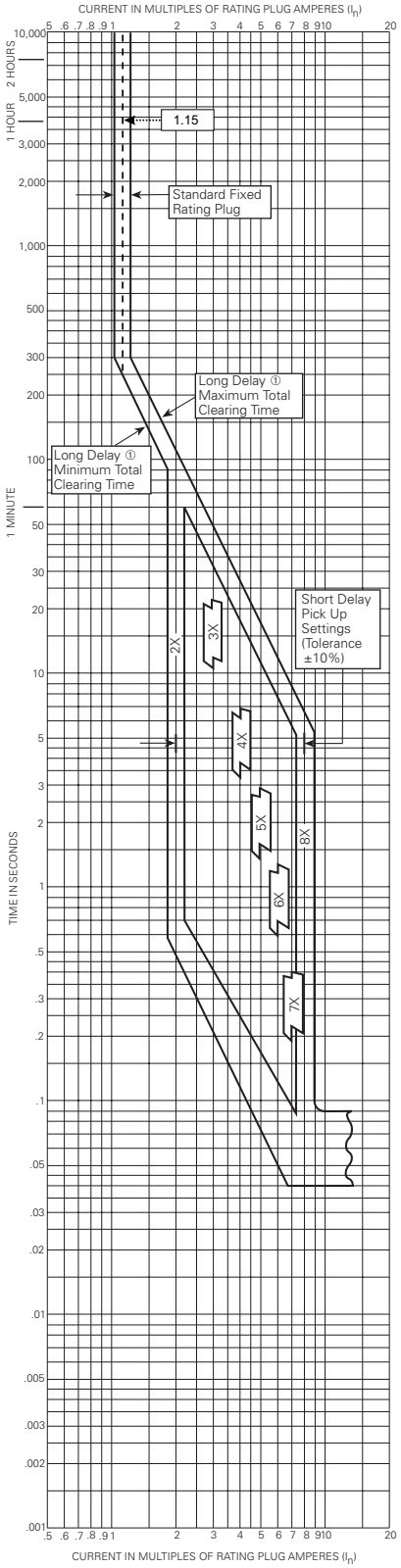
② For high fault current levels a fixed instantaneous override is provided at 5620A. (Tolerance ±15%).

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_n, +/- 5%.

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

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



EATON

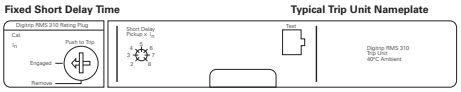
Circuit Breaker Time/Current Curves (Phase Current)

Series C L-Frame Circuit Breakers

Equipped With Type LES Digitrip RMS 310 Trip Units

Catalog Types: LES3600LS, LES3600LSG, LES4600LS, LES4600LSE, and LES4600LSP
Digitrip RMS 310 Trip Units for use with Circuit Breaker Types LDC and CLDC 3 and 4 Poles.

Fixed Short Delay Time **Typical Trip Unit Nameplate**



Available Rating Plugs

Ampere Rating	Type	Rating Plug Catalog Number	Short Delay Pickup Range Amperes
600	Fixed	6LES600T	1200-4800
500	Fixed	6LES500T	1000-4000
450	Fixed	6LES450T	900-3600
400	Fixed	6LES400T	800-3200
350	Fixed	6LES350T	700-2800
300	Fixed	6LES300T	600-2400
300, 400, 500, 600	Adjustable	A6LES600T1	600-4800

Interrupting Rating

	UL/CSA rms Sym. kA, 50/60 Hz		
Breaker Type	**240V**	**480V**	**600V**
LDC, CLDC	200	100	50

	IEC 60947-2 rms Sym. kA, 50/60 Hz					
Breaker Type	**240V**		**380V**		**415V**	
	Icu	Ics	Icu	Ics	Icu	Ics
LDC, CLDC	200	100	100	50	100	50

Utilization Category A
U_{IMP} = 8 kV

Notes:

Digitrip RMS 310 trip units are suitable for functional field testing with test kit Cat. No. STK2. For field testing using primary injection methods, follow NEMA AB4 guidelines.

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.

① Curve accuracy applies from –20°C to +55°C ambient. For possible continuous ampere derating for ambient above 40°C, refer to Eaton.

② For high fault current levels a fixed instantaneous override is provided at 5620A. (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_n, +/- 5%.

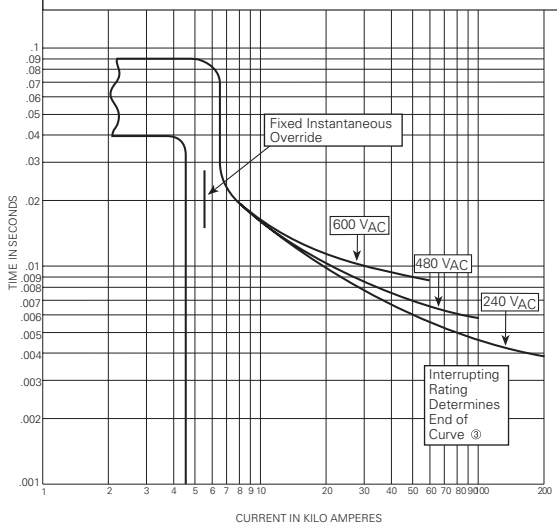
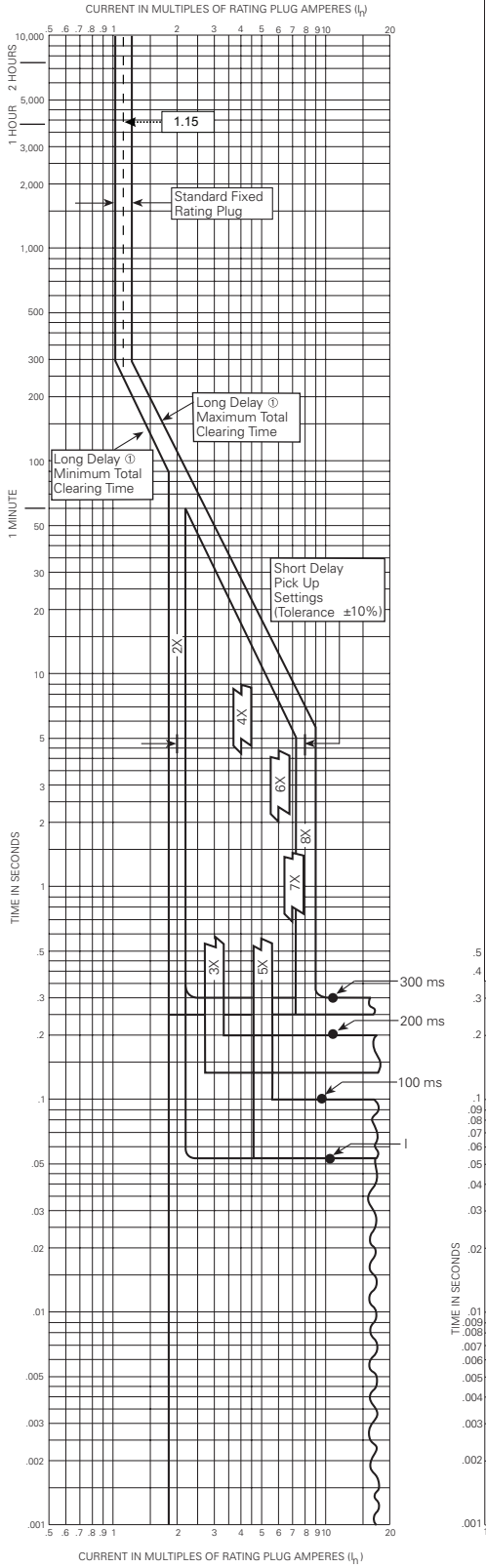
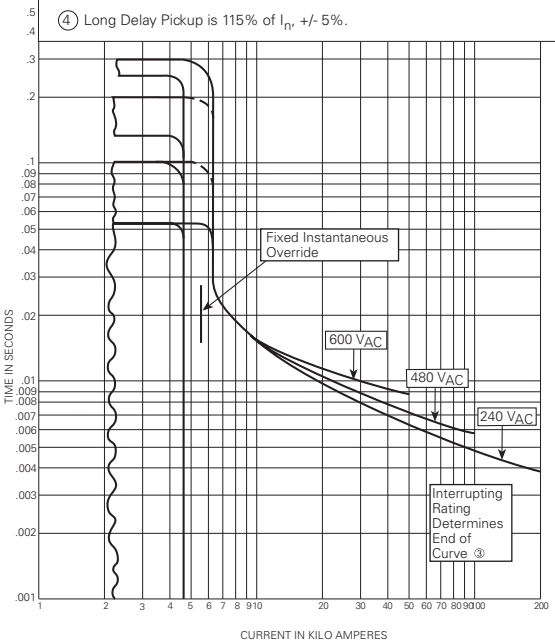


Figure 10. Catalog Types LES3600LS, LES3600LSG, LES4600LS, LES4600LSE, LES4600LSP - Curve Number SC-5657-93, June 2007

Types LDC and CLDC Equipped With Type LES Digitrip RMS 310 Trip Units, Types LES3600LSI, LES3600LSIG, LES4600LSI, LES4600LSIP





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.

Fixed Short Delay Time **Typical Trip Unit Nameplate**

Available Rating Plugs

Ampere Rating	Type	Rating Plug Catalog Number	Short Delay Pickup Range Amperes
600	Fixed	6LES600T	1200-4800
500	Fixed	6LES500T	1000-4000
450	Fixed	6LES450T	900-3600
400	Fixed	6LES400T	800-3200
350	Fixed	6LES350T	700-2800
300	Fixed	6LES300T	600-2400
300, 400, 500, 600	Adjustable	A6LES600T1	600-4800

Interrupting Rating

	UL/CSA rms Sym. kA, 50/60 Hz		
Breaker Type	**240V**	**480V**	**600V**
LDC, CLDC	200	100	50

	IEC 60947-2 rms Sym. kA, 50/60 Hz					
Breaker Type	**240V**		**380V**		**415V**	
	Icu	Ics	Icu	Ics	Icu	Ics
LDC, CLDC	200	100	100	50	100	50

Utilization Category A
U_{IMP} = 8 kV

Notes:

Digitrip RMS 310 trip units are suitable for functional field testing with test kit Cat. No. STK2. For field testing using primary injection methods, follow NEMA AB4 guidelines.

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.

① Curve accuracy applies from –20°C to +55°C ambient. For possible continuous ampere derating for ambient above 40°C, refer to Eaton.

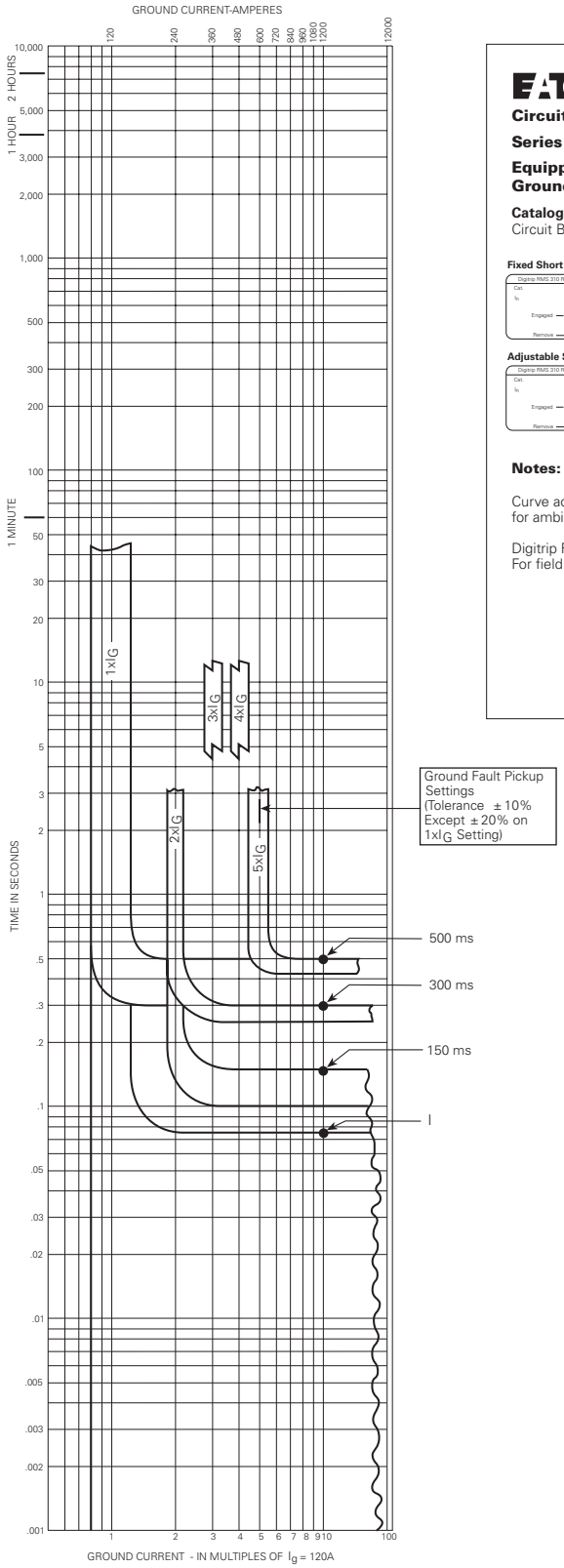
② For high fault current levels a fixed instantaneous override is provided at 5620A. (Tolerance ±15%).

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_n, +/- 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



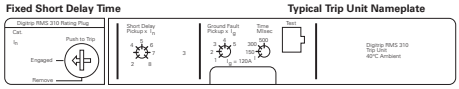
Circuit Breaker Time/Current Curves (Ground Current)

Series C L-Frame Circuit Breakers

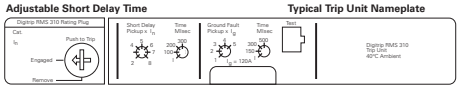
Equipped With Type LES Digitrip RMS 310 Trip Units for Ground Fault Protection

Catalog Types: LES3600LSG and LES3600LSIG Digitrip RMS 310 Trip Units for use with Circuit Breaker Types LD, HLD, LDC, CLD, CHLD, and CLDC.

Fixed Short Delay Time — **Typical Trip Unit Nameplate**



Adjustable Short Delay Time — **Typical Trip Unit Nameplate**



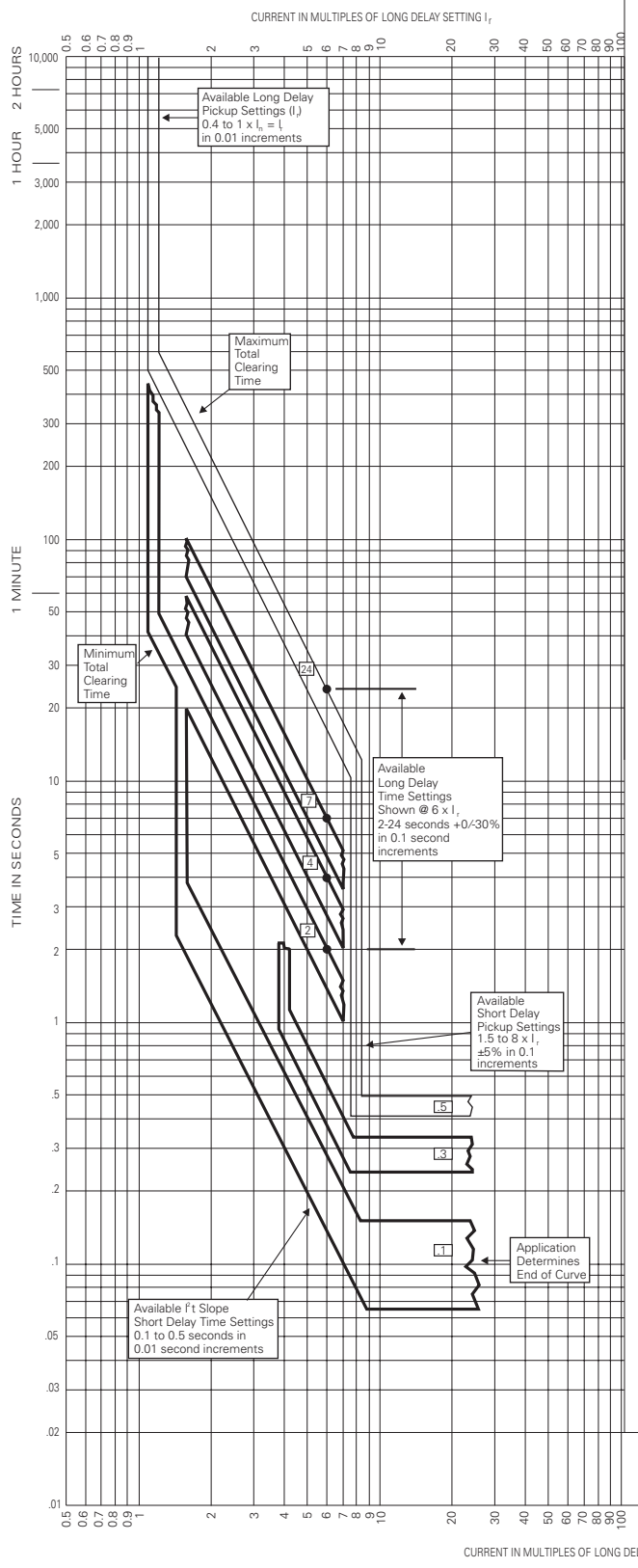
Notes:

Curve accuracy applies from –20°C to +55°C ambient. For possible continuous ampere derating for ambient above 40°C, refer to Eaton.

Digitrip RMS 310 trip units are suitable for functional field testing with test kit Cat. No. STK2. For field testing using primary injection methods, follow NEMA publications.

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 Optim Trip Units

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

Available Rating Plugs

Maximum Ampere Rating	Ampere Rating (I_n)	Rating Plug Catalog Number	Long Delay Pickup Range 0.4 to 1 x I_n Amperes	Short Delay Pickup Range 1.5 to 8 x I_r Amperes
125	125	ORPL125A125	50 -125	75 -1000
125	110	ORPL125A110	44 -110	66 - 880
125	100	ORPL125A100	40 -100	60 - 800
125	90	ORPL125A090	36 - 90	54 - 720
125	70	ORPL125A070	28 - 70	42 - 560
125	63	ORPL125A063	25 - 63	37.5 - 504
250	250	ORPL250A250	100 - 250	150 - 2000
250	225	ORPL250A225	90 - 225	135 - 1800
250	200	ORPL250A200	80 - 200	120 - 1600
250	175	ORPL250A175	70 - 175	105 - 1400
250	160	ORPL250A160	64 - 160	96 - 1280
250	150	ORPL250A150	60 - 150	90 - 1200
250	125	ORPL250A125	50 - 125	75 - 1000
400	400	ORPL400A400	160 - 140	240 - 3200
400	350	ORPL400A350	140 -350	210 - 2800
400	300	ORPL400A300	120 - 300	180 - 2400
400	250	ORPL400A250	100 - 250	150 - 2000
400	225	ORPL400A225	90 - 225	135 -1800
400	200	ORPL400A200	80 - 200	120 -1600
600	600	ORPL600A600	240 -600	360 - 4800
600	500	ORPL600A500	200 -500	300 - 4000
600	400	ORPL600A400	160 -400	240 - 3200
600	350	ORPL600A350	140 -350	210 - 2800
600	300	ORPL600A300	120 -300	180 - 2400

Interrupting Rating

Breaker Type	UL/CSA rms Sym. kA, 50/60 Hz 240V	480V	600V
LD, CLD	65	35	25
HLD, CHDC	100	65	35
LDC, CLDC	200	100	50

Breaker Type	IEC 60947-2 rms Sym. kA, 50/60 Hz 240V		415V		690V	
	Icu	Ics	Icu	Ics	Icu	Ics
LD, CLD	85	85	45	45	20	10
HLD, CHDC	100	100	70	70	25	13
LDC, CLDC	200	150	100	75	35	18

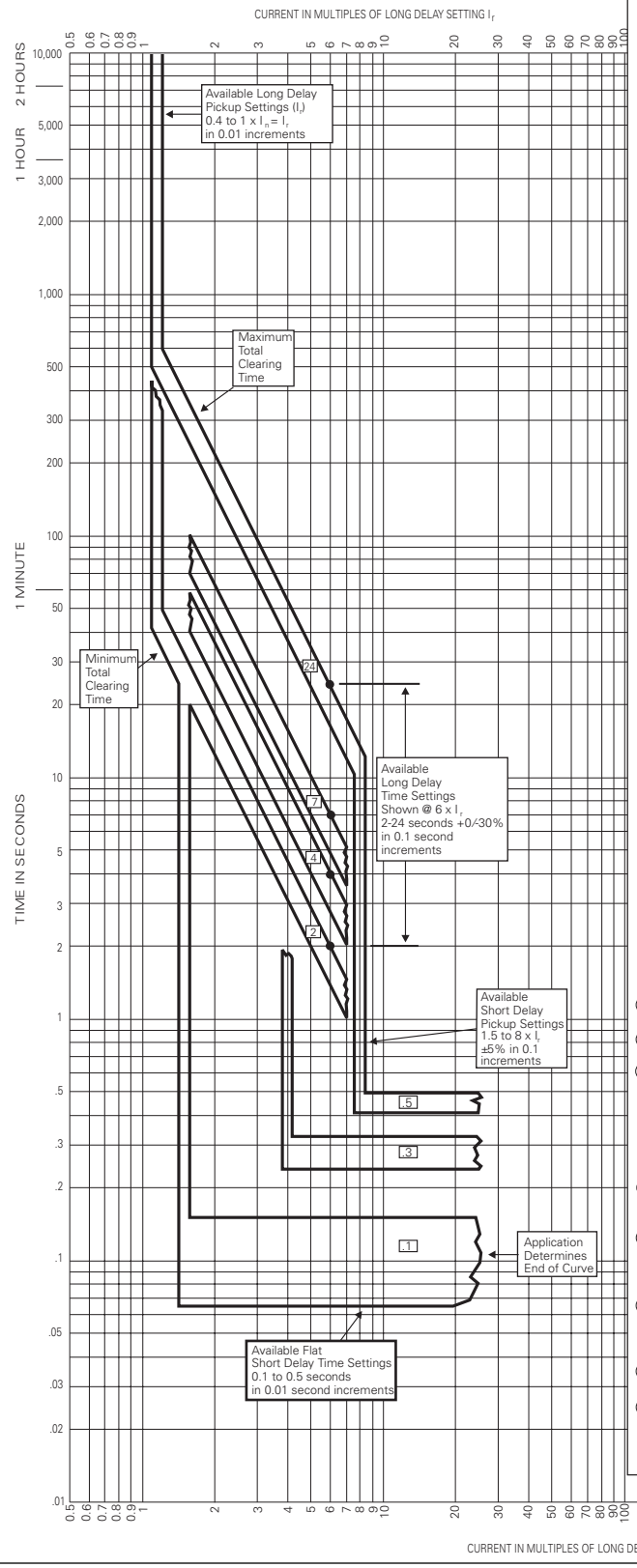
U_{IMP} = 8 kV Utilization Category A

Notes

1. For field testing primary injection methods, follow NEMA AB4 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_r). This I_r setting is programmed in primary value amperes via a Breaker Interface Module, or OPTIMizer, or a Remote PC (IMPACC System).
6. The Long Delay Pick-up Point (indicated by a flashing LED on the product) nominally occurs above 115% of the I_r 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 Optim Trip Units

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

Available Rating Plugs

Maximum Ampere Rating	Ampere Rating (I_n)	Rating Plug Catalog Number	Long Delay Pickup Range 0.4 to 1 x I_n Amperes	Short Delay Pickup Range 1.5 to 8 x I_r Amperes
125	125	ORPL125A125	50 -125	75 -1000
125	110	ORPL125A110	44 -110	66 - 880
125	100	ORPL125A100	40 -100	60 - 800
125	90	ORPL125A090	36 - 90	54 - 720
125	70	ORPL125A070	28 - 70	42 - 560
125	63	ORPL125A063	25 - 63	37.5 - 504
250	250	ORPL250A250	100 - 250	150 - 2000
250	225	ORPL250A225	90 - 225	135 - 1800
250	200	ORPL250A200	80 - 200	120 - 1600
250	175	ORPL250A175	70 - 175	105 - 1400
250	160	ORPL250A160	64 - 160	96 - 1280
250	150	ORPL250A150	60 - 150	90 - 1200
250	125	ORPL250A125	50 - 125	75 - 1000
400	400	ORPL400A400	160 - 140	240 - 3200
400	350	ORPL400A350	140 -350	210 - 2800
400	300	ORPL400A300	120 - 300	180 - 2400
400	250	ORPL400A250	100 - 250	150 - 2000
400	225	ORPL400A225	90 - 225	135 -1800
400	200	ORPL400A200	80 - 200	120 -1600
600	600	ORPL600A600	240 -600	360 - 4800
600	500	ORPL600A500	200 -500	300 - 4000
600	400	ORPL600A400	160 -400	240 - 3200
600	350	ORPL600A350	140 -350	210 - 2800
600	300	ORPL600A300	120 -300	180 - 2400

Interrupting Rating

	UL/CSA rms Sym. kA, 50/60 Hz		
Breaker Type	**240V**	**480V**	**600V**
LD, CLD	65	35	25
HLD, CHDC	100	65	35
LDC, CLDC	200	100	50

	IEC 60947-2 rms Sym. kA, 50/60 Hz					
Breaker Type	**240V**		**415V**		**690V**	
	Icu	Ics	Icu	Ics	Icu	Ics
LD, CLD	85	85	45	45	20	10
HLD, CHDC	100	100	70	70	25	13
LDC, CLDC	200	150	100	75	35	18

U_{IMP} = 8 kV Utilization Category A

Notes

① For field testing primary injection methods, follow NEMA AB4 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_r). This I_r setting is programmed in primary value amperes via a Breaker Interface Module, or OPTIMizer, or a Remote PC (IMPACC System).

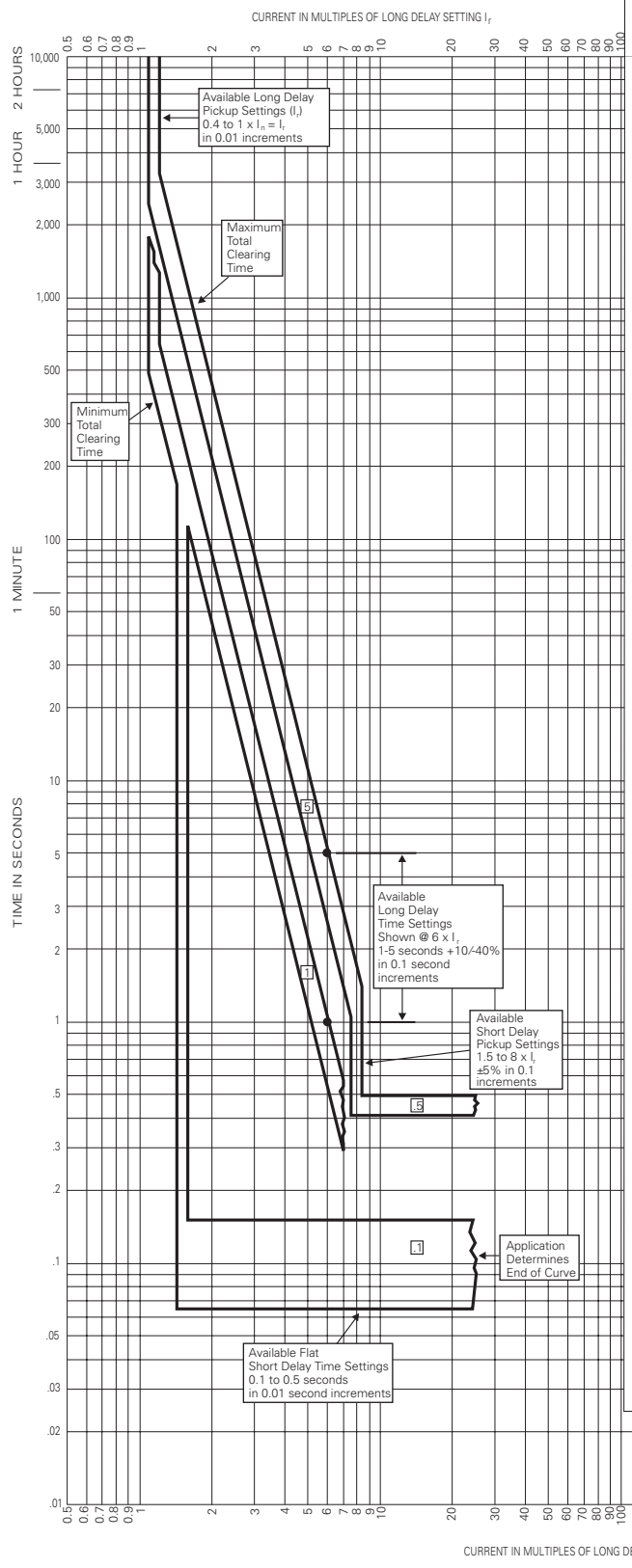
⑥ The Long Delay Pick-up Point (indicated by a flashing LED on the product) nominally occurs above 115% of the I_r current, with a +/- 5% tolerance. The short delay settings have conventional 100%, +/- 5% as the pickup points.

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

L-Frame Circuit Breakers Equipped with Digitrip OPTIM 550/1050 Trip Units; Long Delay I^4t, Short Delay Flat



Circuit Breaker Time/Current Curves (Phase Current)
Series C L-Frame Circuit Breakers
Equipped With Digitrip Optim Trip Units
Response: LONG DELAY I^4t, SHORT DELAY FLAT

Available Rating Plugs

Maximum Ampere Rating	Ampere Rating (I_n)	Rating Plug Catalog Number	Long Delay Pickup Range 0.4 to 1 x I_n Amperes	Short Delay Pickup Range 1.5 to 8 x I_r Amperes
125	125	ORPL125A125	50 -125	75 -1000
125	110	ORPL125A110	44 -110	66 - 880
125	100	ORPL125A100	40 -100	60 - 800
125	90	ORPL125A090	36 - 90	54 - 720
125	70	ORPL125A070	28 - 70	42 - 560
125	63	ORPL125A063	25 - 63	37.5 - 504
250	250	ORPL250A250	100 - 250	150 - 2000
250	225	ORPL250A225	90 - 225	135 - 1800
250	200	ORPL250A200	80 - 200	120 - 1600
250	175	ORPL250A175	70 - 175	105 - 1400
250	160	ORPL250A160	64 - 160	96 - 1280
250	150	ORPL250A150	60 - 150	90 - 1200
250	125	ORPL250A125	50 - 125	75 - 1000
400	400	ORPL400A400	160 - 140	240 - 3200
400	350	ORPL400A350	140 -350	210 - 2800
400	300	ORPL400A300	120 - 300	180 - 2400
400	250	ORPL400A250	100 - 250	150 - 2000
400	225	ORPL400A225	90 - 225	135 -1800
400	200	ORPL400A200	80 - 200	120 -1600
600	600	ORPL600A600	240 -600	360 - 4800
600	500	ORPL600A500	200 -500	300 - 4000
600	400	ORPL600A400	160 -400	240 - 3200
600	350	ORPL600A350	140 -350	210 - 2800
600	300	ORPL600A300	120 -300	180 - 2400

Interrupting Rating

Breaker Type	UL/CSA rms Sym. kA, 50/60 Hz 240V	480V	600V
LD, CLD	65	35	25
HLD, CHDC	100	65	35
LDC, CLDC	200	100	50

Breaker Type	IEC 60947-2 rms Sym. kA, 50/60 Hz 240V		415V		690V	
	Icu	Ics	Icu	Ics	Icu	Ics
LD, CLD	85	85	45	45	20	10
HLD, CHDC	100	100	70	70	25	13
LDC, CLDC	200	150	100	75	35	18

U_{IMP} = 8 kV Utilization Category A

Notes

① For field testing primary injection methods, follow NEMA AB4 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_r). This I_r setting is programmed in primary value amperes via a Breaker Interface Module, or OPTIMizer, or a Remote PC (IMPACC System).

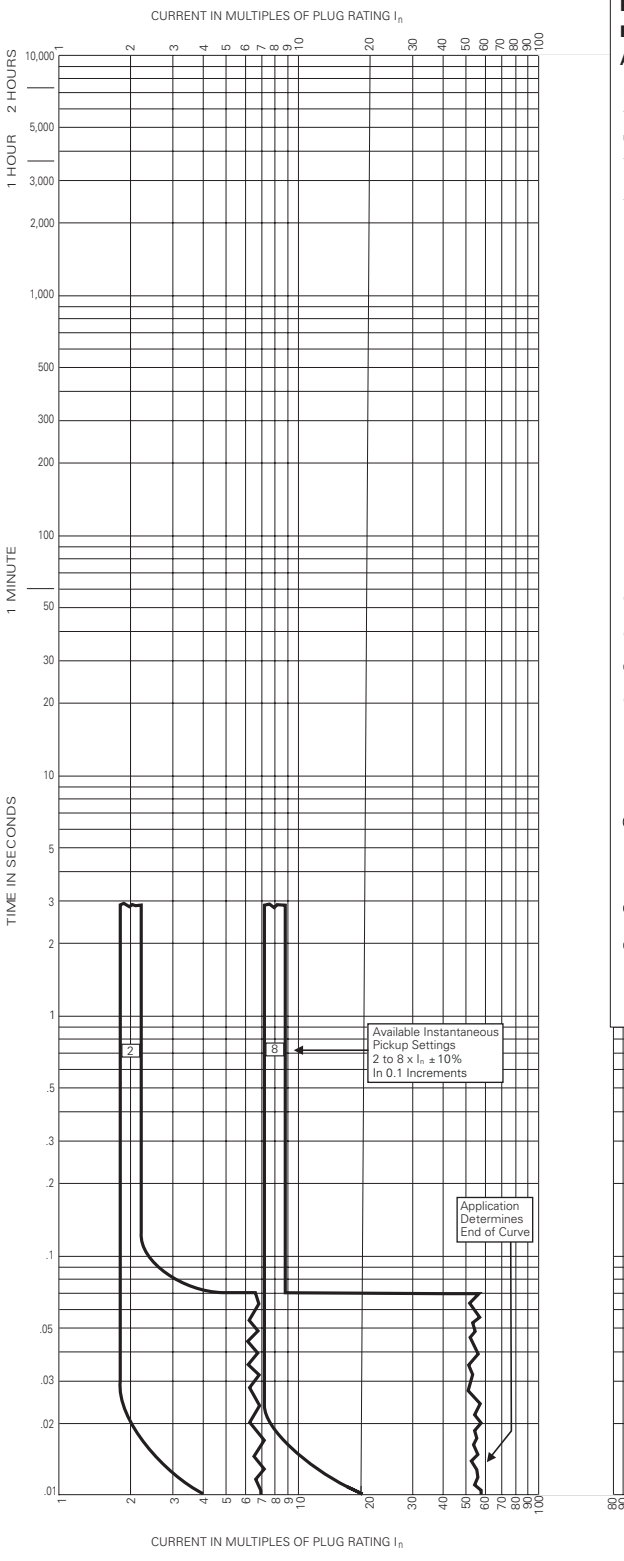
⑥ The Long Delay Pick-up Point (indicated by a flashing LED on the product) nominally occurs above 115% of the I_r current, with a +/- 5% tolerance. The short delay settings have conventional 100%, +/- 5% as the pickup points.

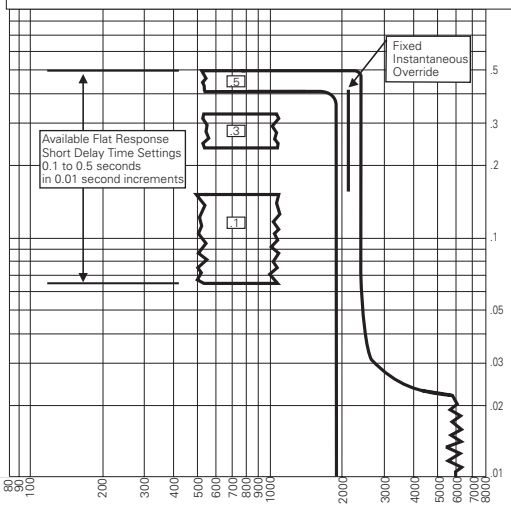
⑦ For additional curve tolerances contact Eaton.

⑧ Total clearing times shown include the response times of the trip unit, the breaker opening, and the quenching of the arcing current.

Figure 15 Long Delay I^4T, 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

Maximum Ampere Rating	Ampere Rating (I_n)	Rating Plug Catalog Number	Long Delay Pickup Range 2 to 8 x I_n Amperes	Override Amperes
125	125	ORPL125A125	250 -1000	2100 +/-15%
125	110	ORPL125A110	220 -880	2100 +/-15%
125	100	ORPL125A100	200 -800	2100 +/-15%
125	90	ORPL125A090	180 - 720	2100 +/-15%
125	70	ORPL125A070	140 - 560	2100 +/-15%

Interrupting Rating

	UL/CSA rms Sym. kA, 50/60 Hz		
Breaker Type	**240V**	**480V**	**600V**
LD, CLD	65	35	25
HLD, CHDC	100	65	35
LDC, CLDC	200	100	50

	IEC 60947-2 rms Sym. kA, 50/60 Hz					
Breaker Type	**240V**		**415V**		**690V**	
	Icu	Ics	Icu	Ics	Icu	Ics
LD, CLD	85	85	45	45	20	10
HLD, CHDC	100	100	70	70	25	13
LDC, CLDC	200	150	100	75	35	18

U_{IMP} = 8 kV Utilization Category A

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.

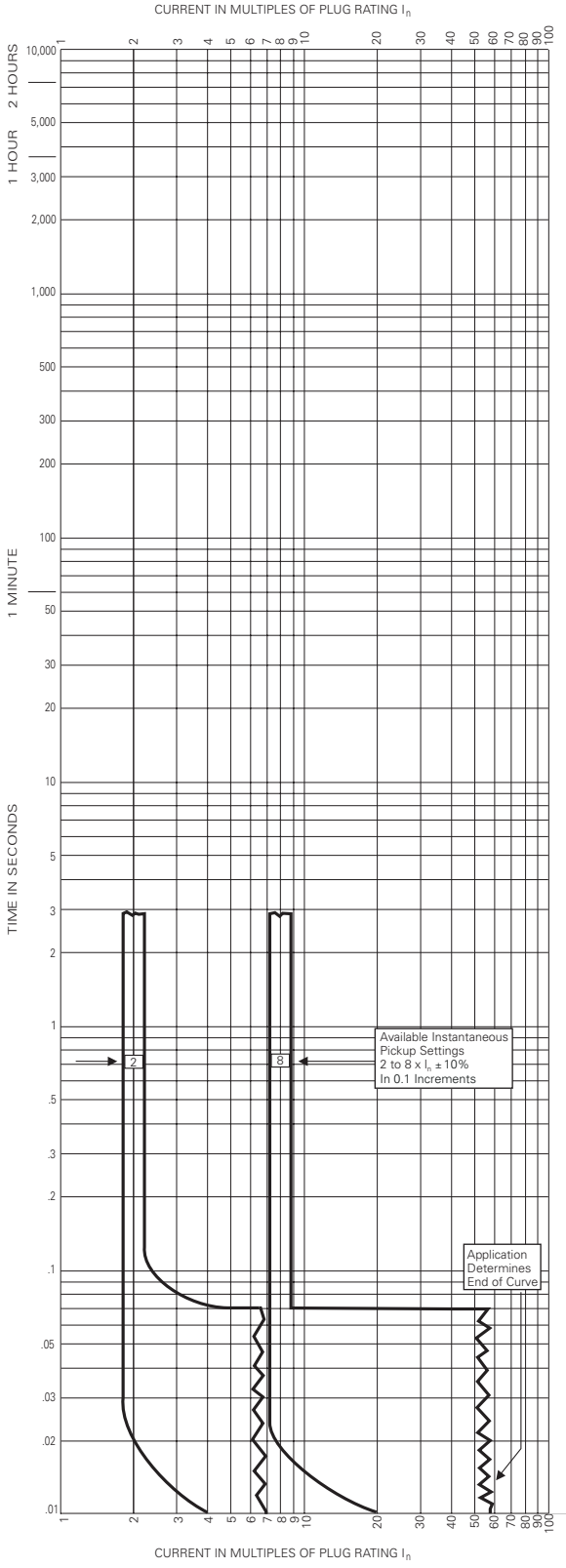
⑥ The instantaneous settings have conventional 100%, +/- 10% of the pickup points.

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. Intantaneous and Override, 125 Amperes - Curve Number SC-6329-96, June 2007

L-Frame Circuit Breakers Equipped with 250A Digitrip OPTIM 550/1050 Trip Units; Instantaneous and Override



Circuit Breaker Time/Current Curves (Phase Current)

Series C L-Frame Circuit Breakers

Equipped With 250A Digitrip Optim Trip Units

Response: INSTANTANEOUS AND OVERRIDE

Available Rating Plugs

Maximum Ampere Rating	Ampere Rating (I_n)	Rating Plug Catalog Number	Long Delay Pickup Range 2 to 8 x I_n Amperes	Override Amperes
250	250	ORPL250A250	250 -1000	4400 +/-15%
250	225	ORPL250A225	220 -880	4400 +/-15%
250	200	ORPL250A200	200 -800	4400 +/-15%
250	175	ORPL250A175	180 - 720	4400 +/-15%
250	160	ORPL250A160	140 - 560	4400 +/-15%
250	150	ORPL250A150	300 -1200	4400 +/-15%
250	120	ORPL250A125	250 -1000	4400 +/-15%

Interrupting Rating

	UL/CSA rms Sym. kA, 50/60 Hz		
Breaker Type	**240V**	**480V**	**600V**
LD, CLD	65	35	25
HLD, CHDC	100	65	35
LDC, CLDC	200	100	50

	IEC 60947-2 rms Sym. kA, 50/60 Hz					
Breaker Type	**240V**		**415V**		**690V**	
	Icu	Ics	Icu	Ics	Icu	Ics
LD, CLD	85	85	45	45	20	10
HLD, CHDC	100	100	70	70	25	13
LDC, CLDC	200	150	100	75	35	18

Notes U_{IMP} = 8 kV Utilization Category A

① For field testing primary injection methods, follow NEMA AB4 guidelines.

② For high fault current levels, a fixed instantaneous override is provided at 4400 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.

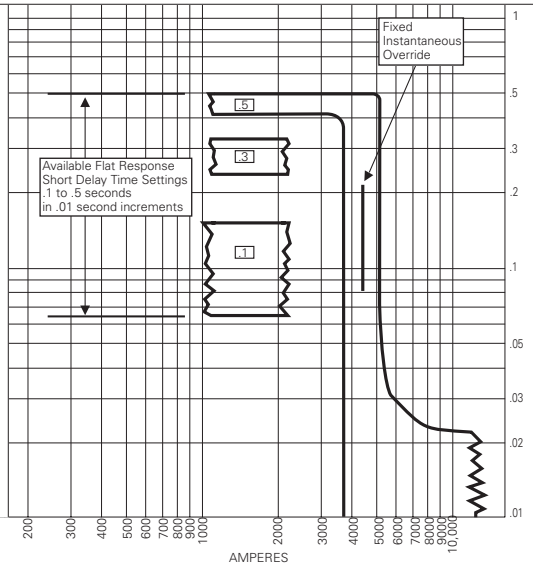
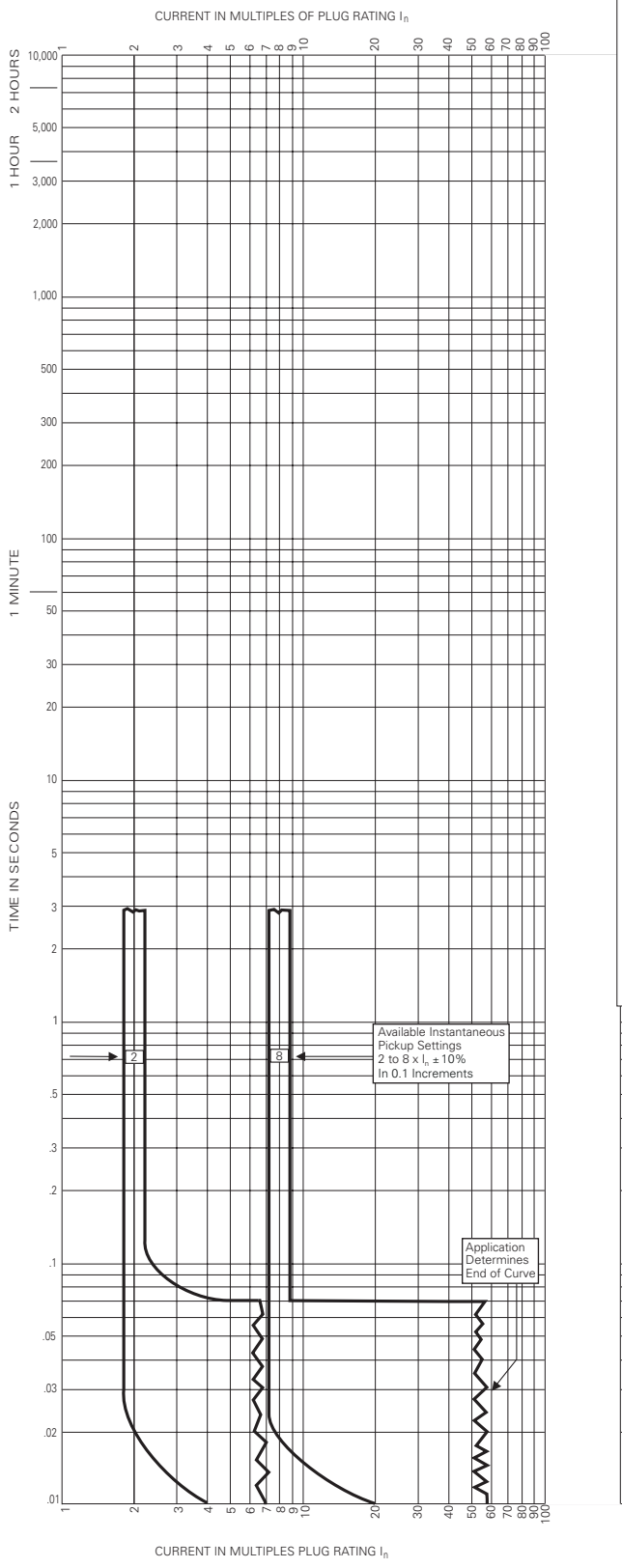


Figure 17. Intantaneous and Override, 250 Amperes - Curve Number SC-6328-96, June 2007

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



Circuit Breaker Time/Current Curves (Phase Current)
Series C L-Frame Circuit Breakers
Equipped With 400A Digitrip Optim Trip Units
Response: INSTANTANEOUS AND OVERRIDE

Available Rating Plugs

Maximum Ampere Rating	Ampere Rating (I_n)	Rating Plug Catalog Number	Long Delay Pickup Range 2 to 8 x I_n Amperes	Override Amperes
400	400	ORPL400A400	800 -3200	6800 +/-15%
400	350	ORPL400A350	700 -2800	6800 +/-15%
400	300	ORPL400A300	600 -2400	6800 +/-15%
400	250	ORPL400A250	500 -2000	6800 +/-15%
400	225	ORPL400A225	450 -1800	6800 +/-15%
400	200	ORPL400A200	400 -1600	6800 +/-15%

Interrupting Rating

	UL/CSA rms Sym. kA, 50/60 Hz		
Breaker Type	**240V**	**480V**	**600V**
LD, CLD	65	35	25
HLD, CHDC	100	65	35
LDC, CLDC	200	100	50

	IEC 60947-2 rms Sym. kA, 50/60 Hz					
Breaker Type	**240V**		**415V**		**690V**	
	Icu	Ics	Icu	Ics	Icu	Ics
LD, CLD	85	85	45	45	20	10
HLD, CHDC	100	100	70	70	25	13
LDC, CLDC	200	150	100	75	35	18

Notes U_{IMP} = 8 kV Utilization Category A

① For field testing primary injection methods, follow NEMA AB4 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.

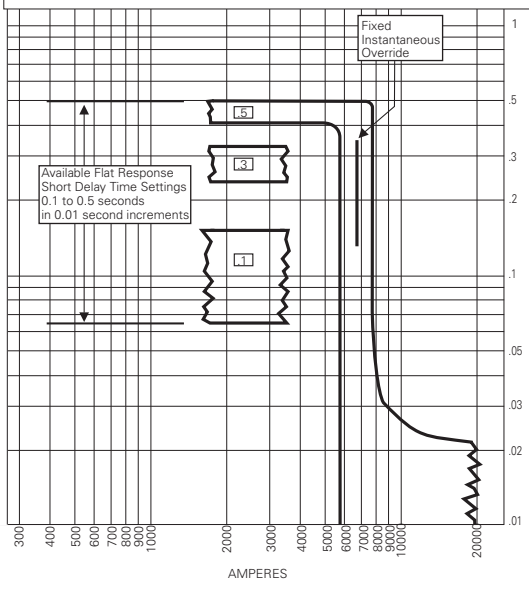
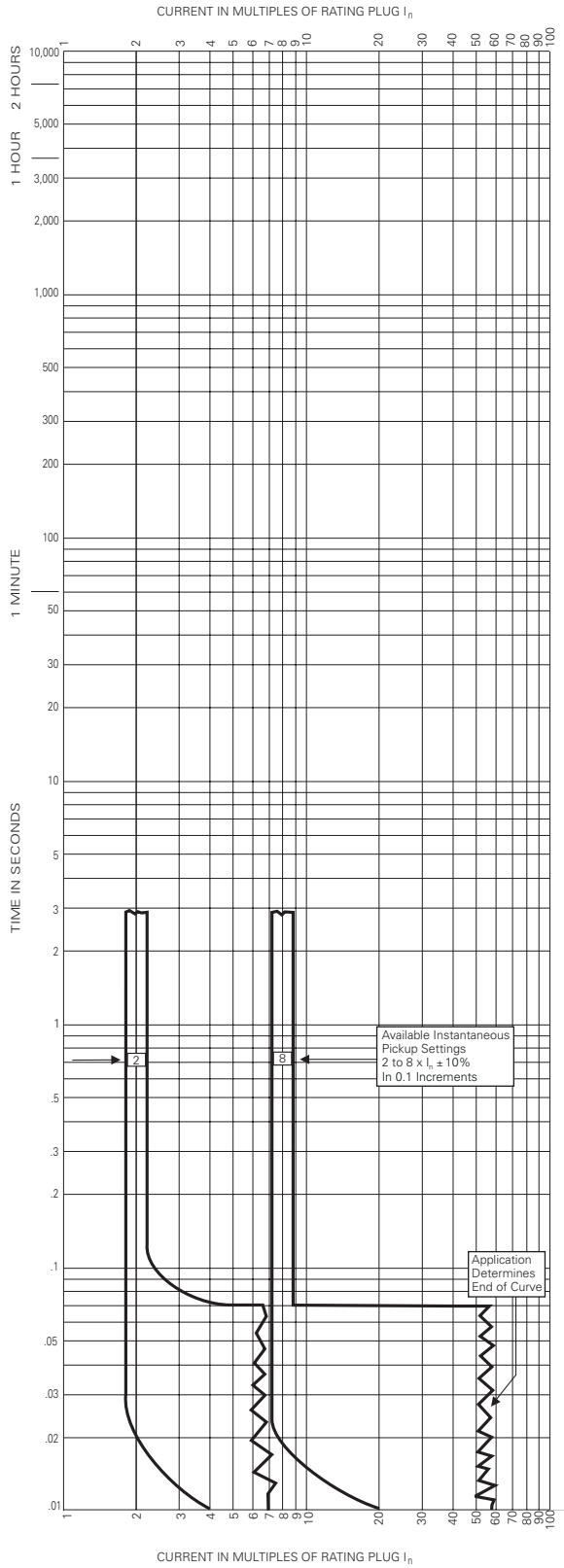


Figure 18. Intantaneous and Override, 400 Amperes - Curve Number SC-6327-96, June 2007

L-Frame Circuit Breakers Equipped with 600A Digitrip OPTIM 550/1050 Trip Units; Instantaneous and Override



Circuit Breaker Time/Current Curves (Phase Current)

Series C L-Frame Circuit Breakers

Equipped With 600A Digitrip Optim Trip Units

Response: INSTANTANEOUS AND OVERRIDE

Available Rating Plugs

Maximum Ampere Rating	Ampere Rating (I_n)	Rating Plug Catalog Number	Long Delay Pickup Range 2 to 8 x I_n Amperes	Override Amperes
600	600	ORPL600A600	1200 -4800	6800 +/-15%
600	500	ORPL400A350	700 -2800	6800 +/-15%
600	400	ORPL400A300	600 -2400	6800 +/-15%
600	350	ORPL400A250	500 -2000	6800 +/-15%
600	300	ORPL400A225	450 -1800	6800 +/-15%

Interrupting Rating

Breaker Type	UL/CSA rms Sym. kA, 50/60 Hz 240V	480V	600V
LD, CLD	65	35	25
HLD, CHDC	100	65	35
LDC, CLDC	200	100	50

Breaker Type	IEC 60947-2 rms Sym. kA, 50/60 Hz 240V		415V		690V	
	Icu	Ics	Icu	Ics	Icu	Ics
LD, CLD	85	85	45	45	20	10
HLD, CHDC	100	100	70	70	25	13
LDC, CLDC	200	150	100	75	35	18

U_{IMP} = 8 kV Utilization Category A

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 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.

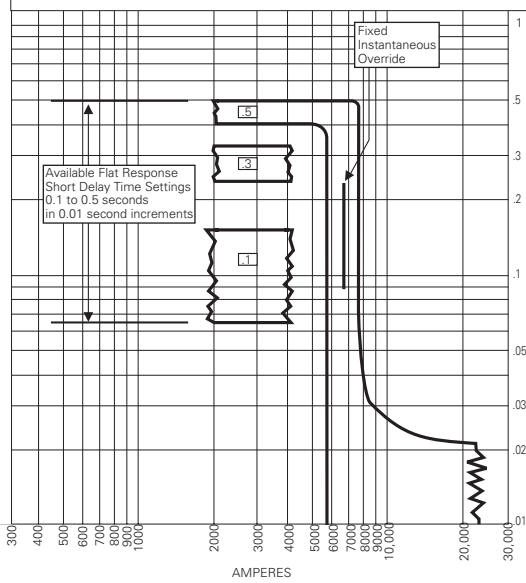


Figure 19. Intantaneous and Override, 600 Amperes - Curve Number SC-6326-96, June 2007

L-Frame Circuit Breakers Equipped with Digitrip OPTIM 550/1050 Trip Units; Ground Fault or Ground Fault Alarm Only

Circuit Breaker Time/Current Curves (Ground Current)

Series C L-Frame Circuit Breakers

Equipped With Digitrip Optim Trip Units

Response: GROUND FAULT TRIP OR GROUND FAULT ALARM ONLY

Available Ground Fault Ranges

Maximum Ampere Rating	Ground Fault Pickup Range 0.2 to 1.0 x I_s Amperes
125	25-125
250	50-250
400	80-400
600	120-600

Interrupting Rating

	UL/CSA rms Sym. kA, 50/60 Hz		
Breaker Type	**240V**	**480V**	**600V**
LD, CLD	65	35	25
HLD, CHDC	100	65	35
LDC, CLDC	200	100	50

	IEC 60947-2 rms Sym. kA, 50/60 Hz					
Breaker Type	**240V**		**415V**		**690V**	
	Icu	Ics	Icu	Ics	Icu	Ics
LD, CLD	85	85	45	45	20	10
HLD, CHDC	100	100	70	70	25	13
LDC, CLDC	200	150	100	75	35	18

U_{IMP} = 8 kV Utilization Category A

Notes

(1) For field testing primary injection methods, follow NEMA AB4 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) 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 quenching of the arcing current.

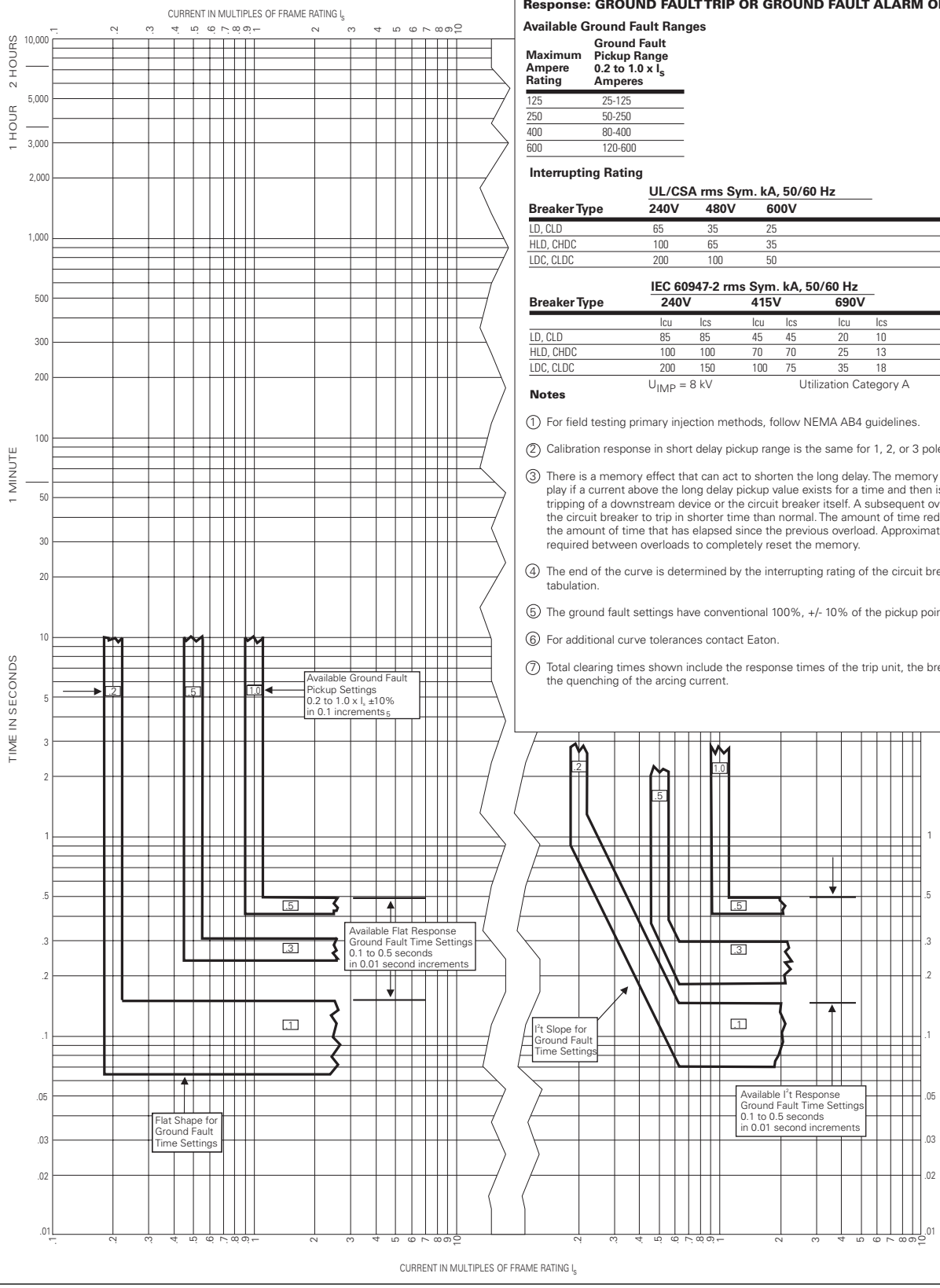
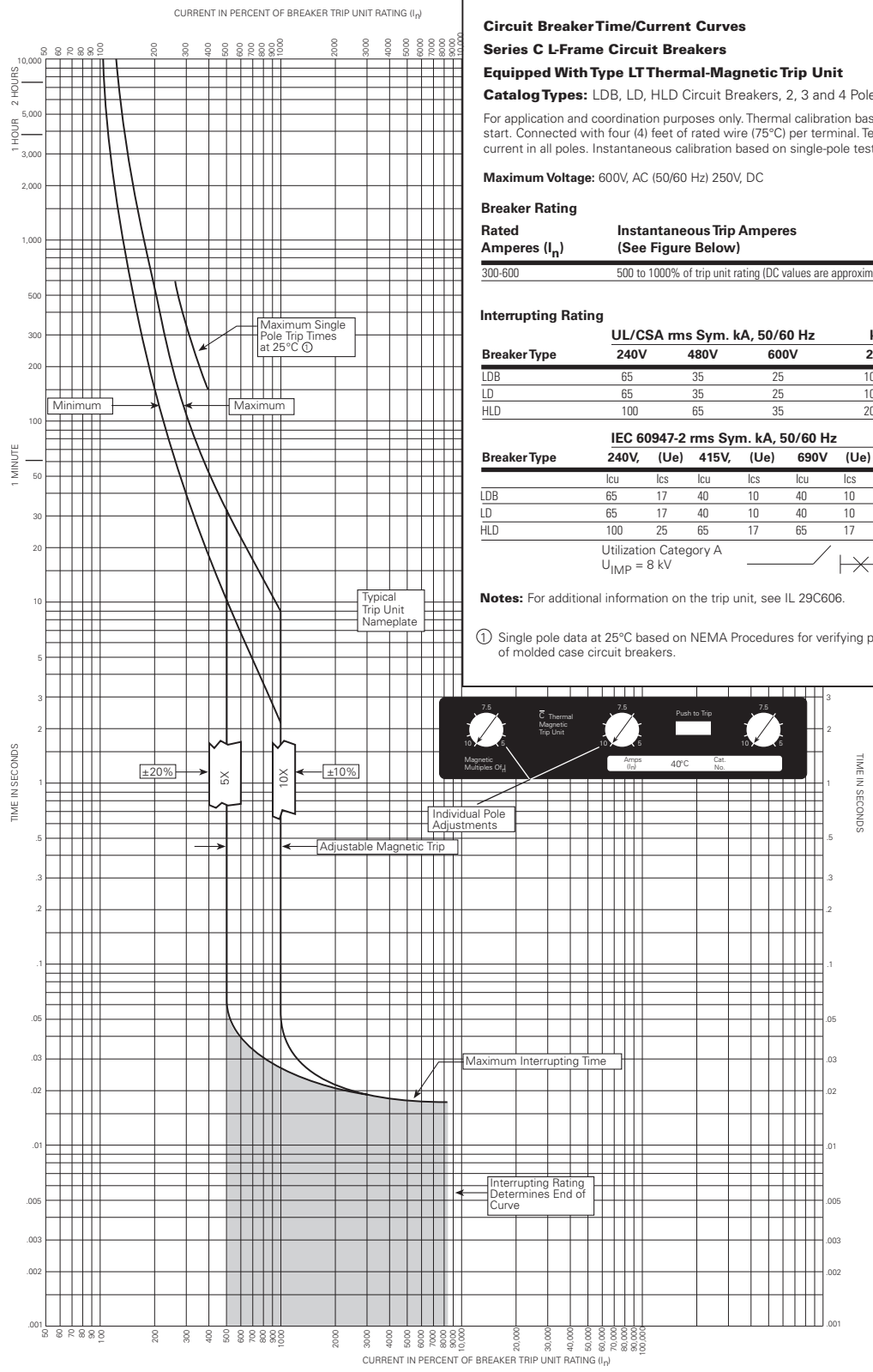


Figure 20. Ground Fault of Ground Fault Alarm Only - Curve Number SC-6330-96, June 2007

Types LDB, LD, HLD 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: 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)	Instantaneous Trip Amperes (See Figure Below)
300-600	500 to 1000% of trip unit rating (DC values are approximately 40% higher)

Interrupting Rating

	UL/CSA rms Sym. kA, 50/60 Hz			kA, DC
Breaker Type	**240V**	**480V**	**600V**	**250V**
LDB	65	35	25	10
LD	65	35	25	10
HLD	100	65	35	20

	IEC 60947-2 rms Sym. kA, 50/60 Hz						kA, DC	
Breaker Type	**240V,**	**(Ue)**	**415V,**	**(Ue)**	**690V**	**(Ue)**	**250V,**	**(Ue)**
	Icu	Ics	Icu	Ics	Icu	Ics	Icu	Ics
LDB	65	17	40	10	40	10	10	3
LD	65	17	40	10	40	10	10	3
HLD	100	25	65	17	65	17	20	5

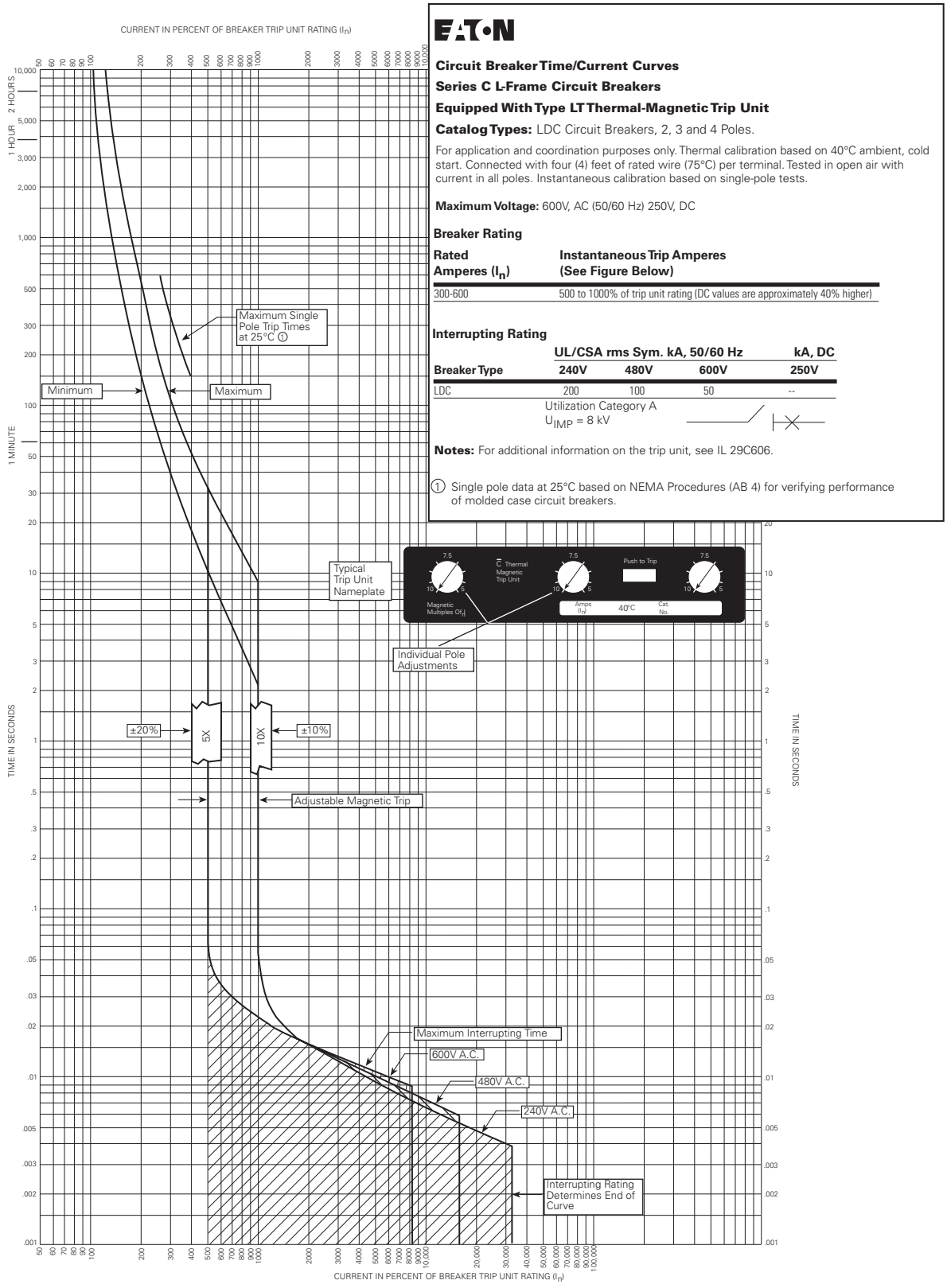
Utilization Category A
U_{IMP} = 8 kV

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

① Single pole data at 25°C based on NEMA Procedures for verifying performance of molded case circuit breakers.

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

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 (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)	Instantaneous Trip Amperes (See Figure Below)
300-600	500 to 1000% of trip unit rating (DC values are approximately 40% higher)

Interrupting Rating

	UL/CSA rms Sym. kA, 50/60 Hz			kA, DC
Breaker Type	**240V**	**480V**	**600V**	**250V**
LDC	200	100	50	--

Utilization Category A
U_{IMP} = 8 kV

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

① Single pole data at 25°C based on NEMA Procedures (AB 4) for verifying performance of molded case circuit breakers.

Figure 22. LDC - Curve Number SC-5760-94, June 2007

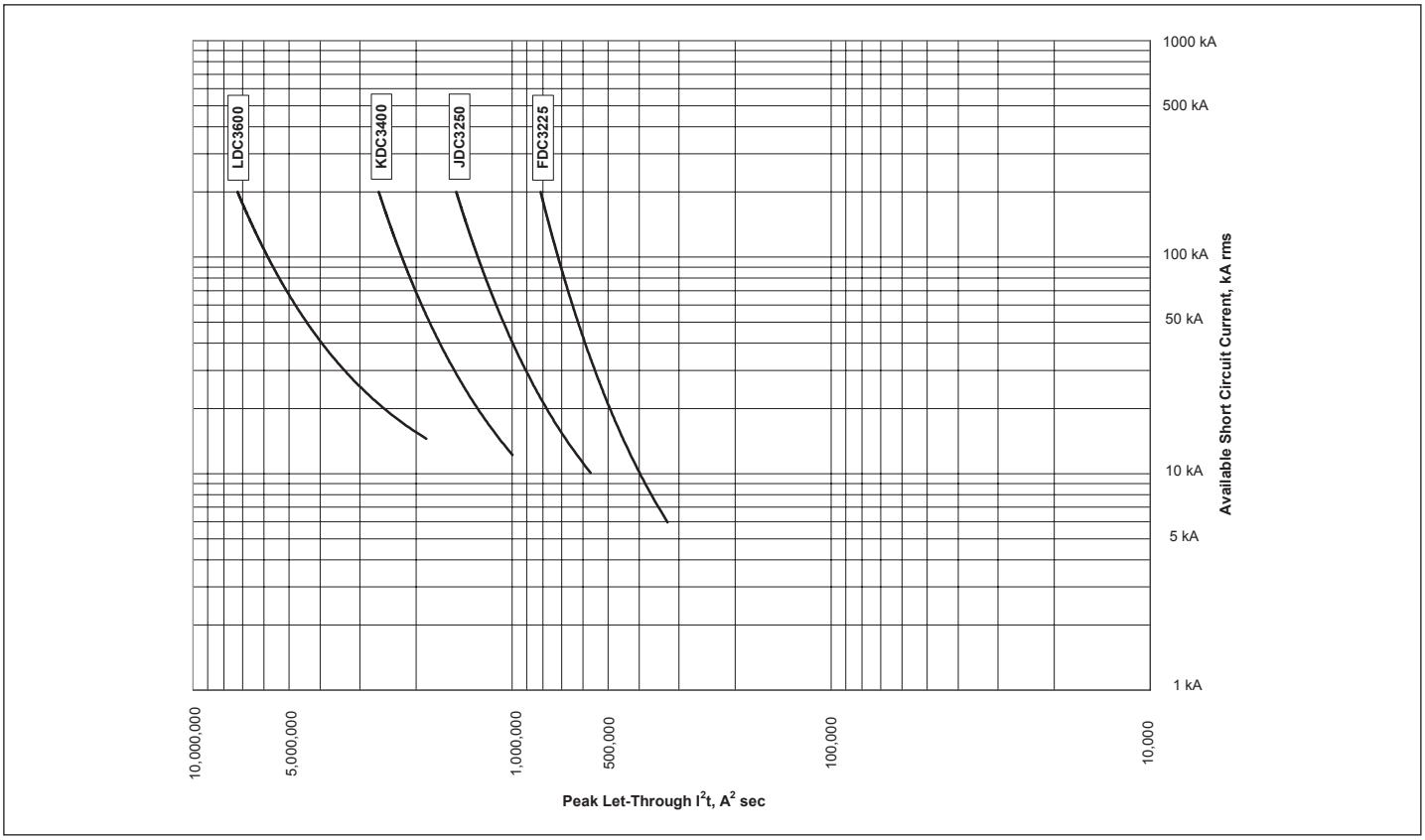


Figure 23. Peak Let-Through I^2t Curve — 240 V - Curve Number AD-29-166A

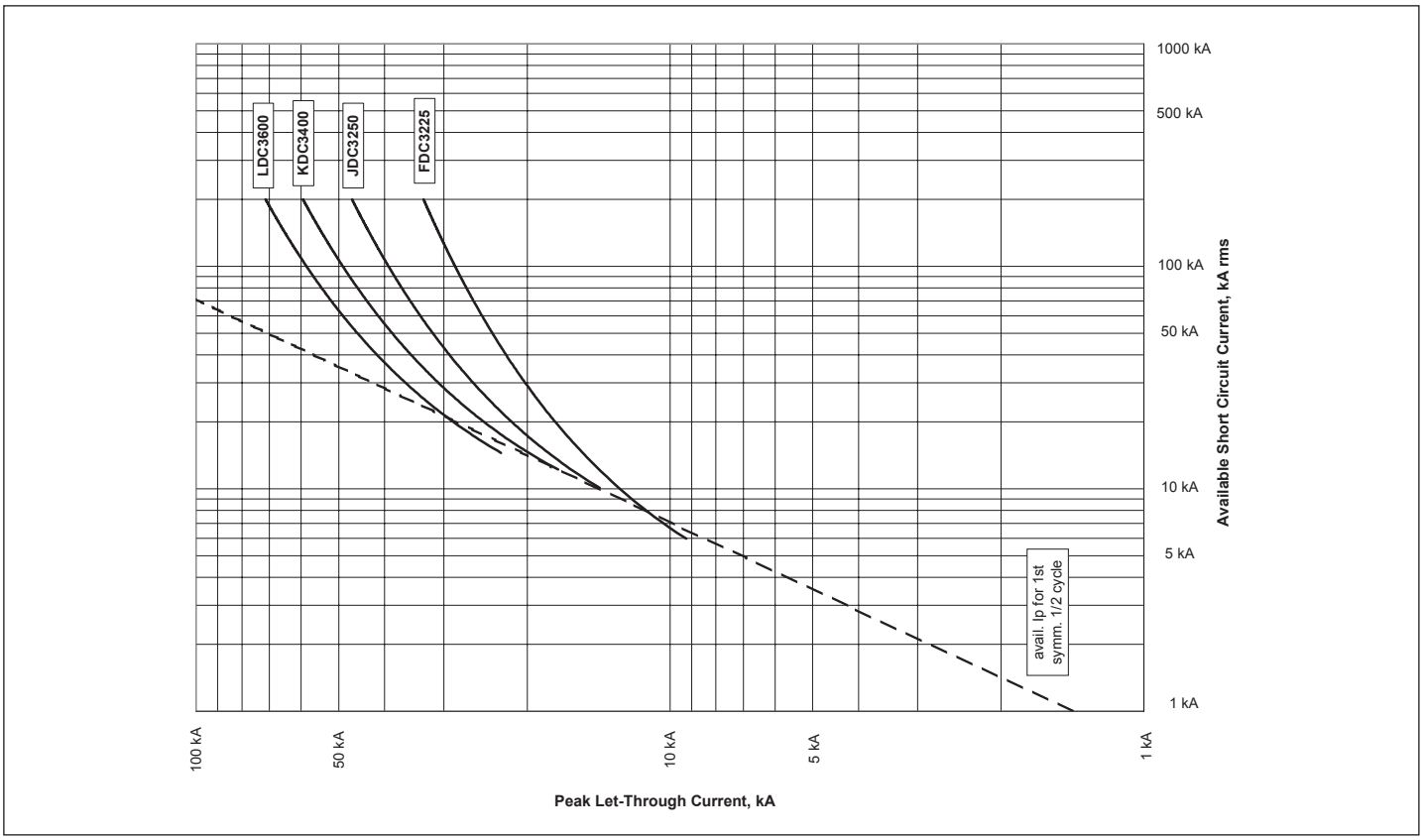


Figure 24. Peak Let-Through Current Curve — 240 V - Curve Number AD-29-166A

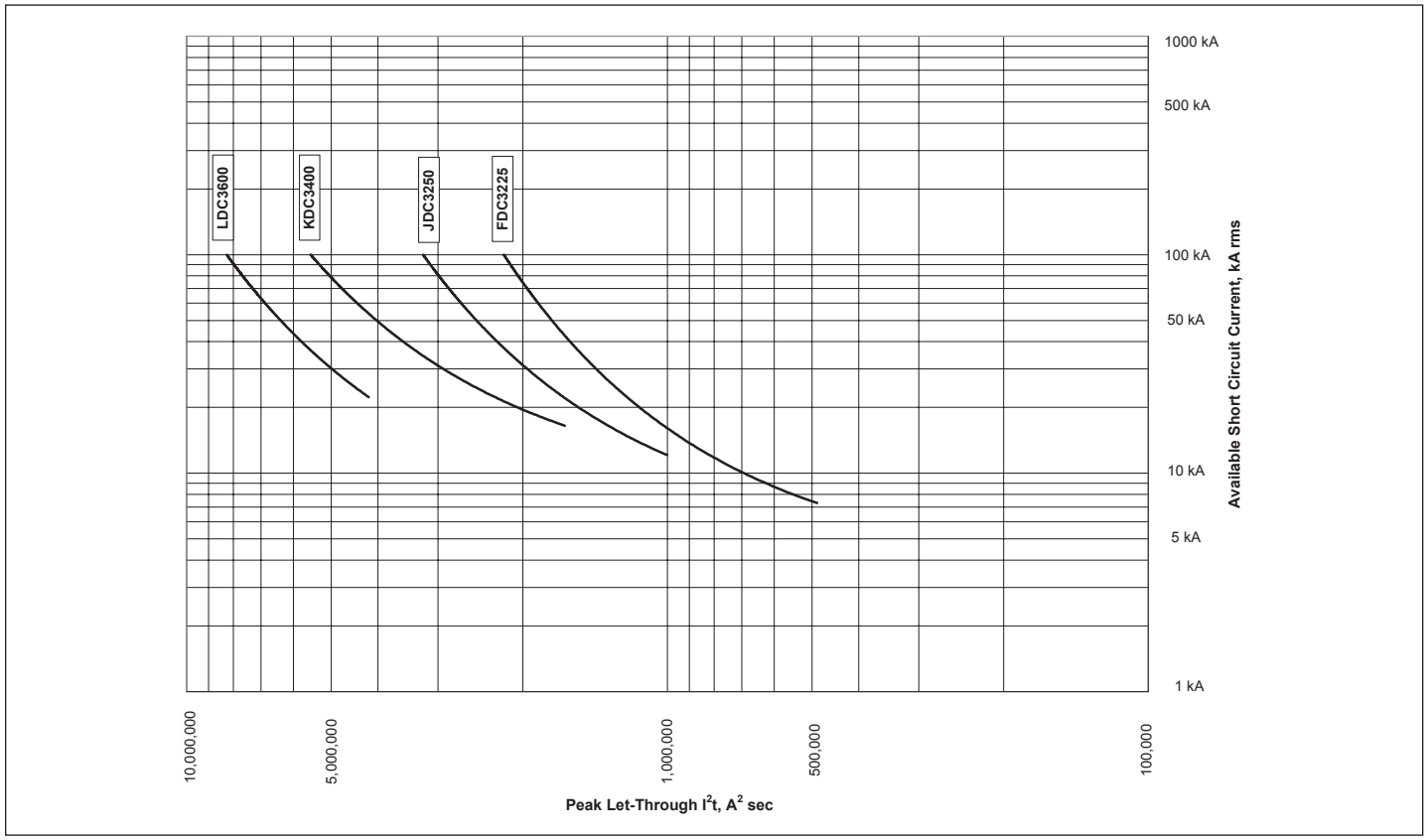


Figure 25. Peak Let-Through I2t Curve — 480 V - Curve Number AD-29-166B

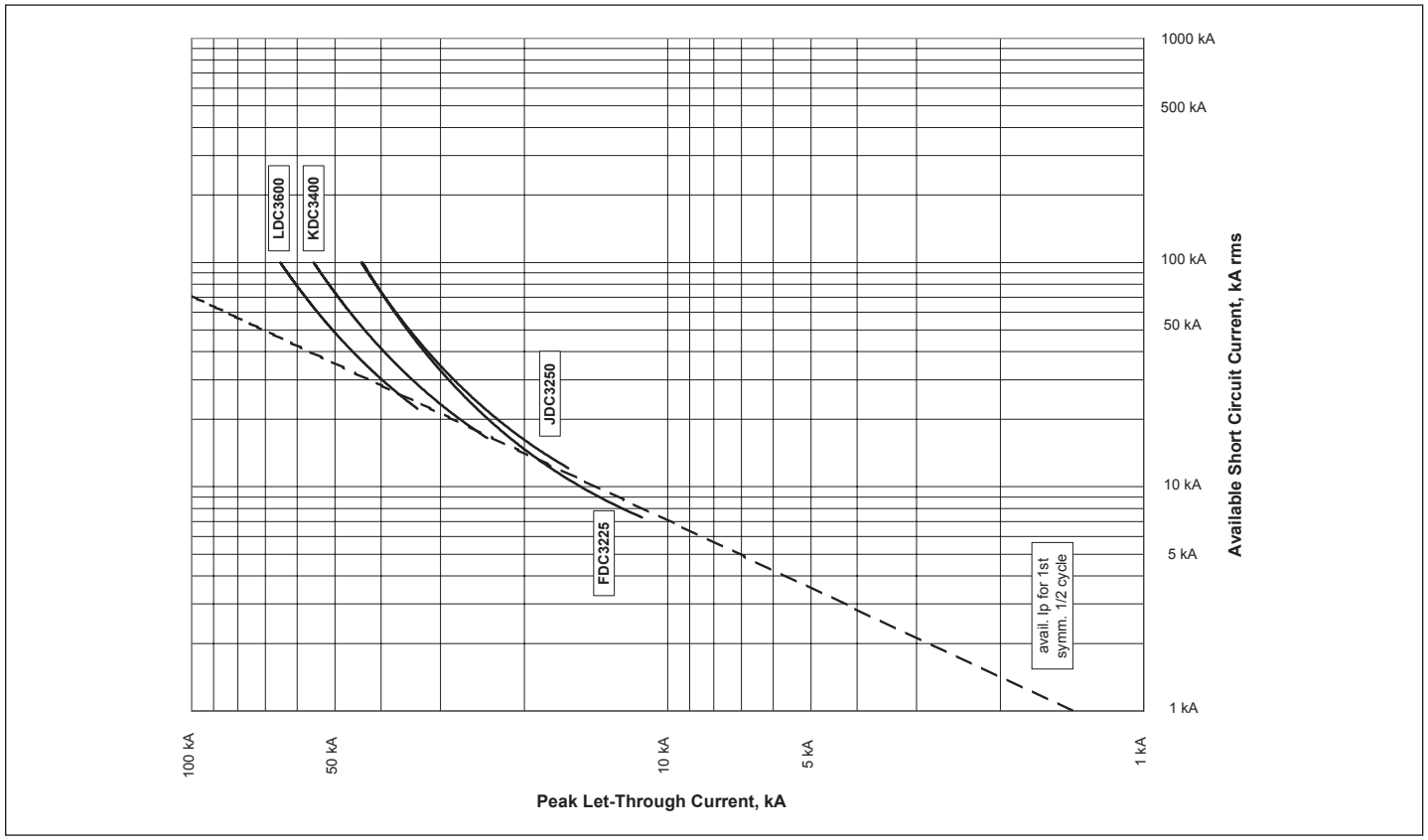


Figure 26. Peak Let-Through Current — 480 V - Curve Number AD-29-166B

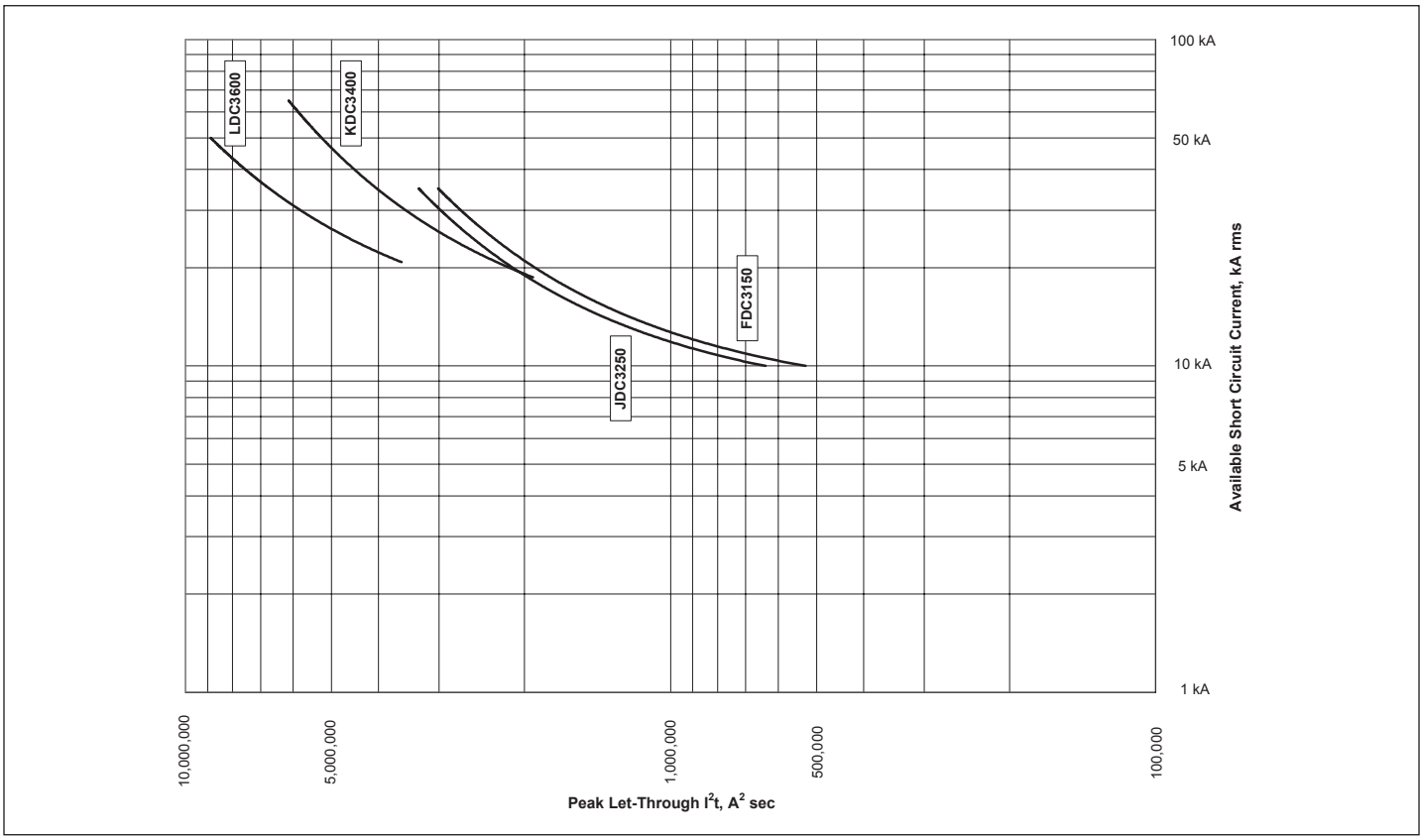


Figure 27. Peak Let-Through I^2t — 600 V - Curve Number AD-29-166C

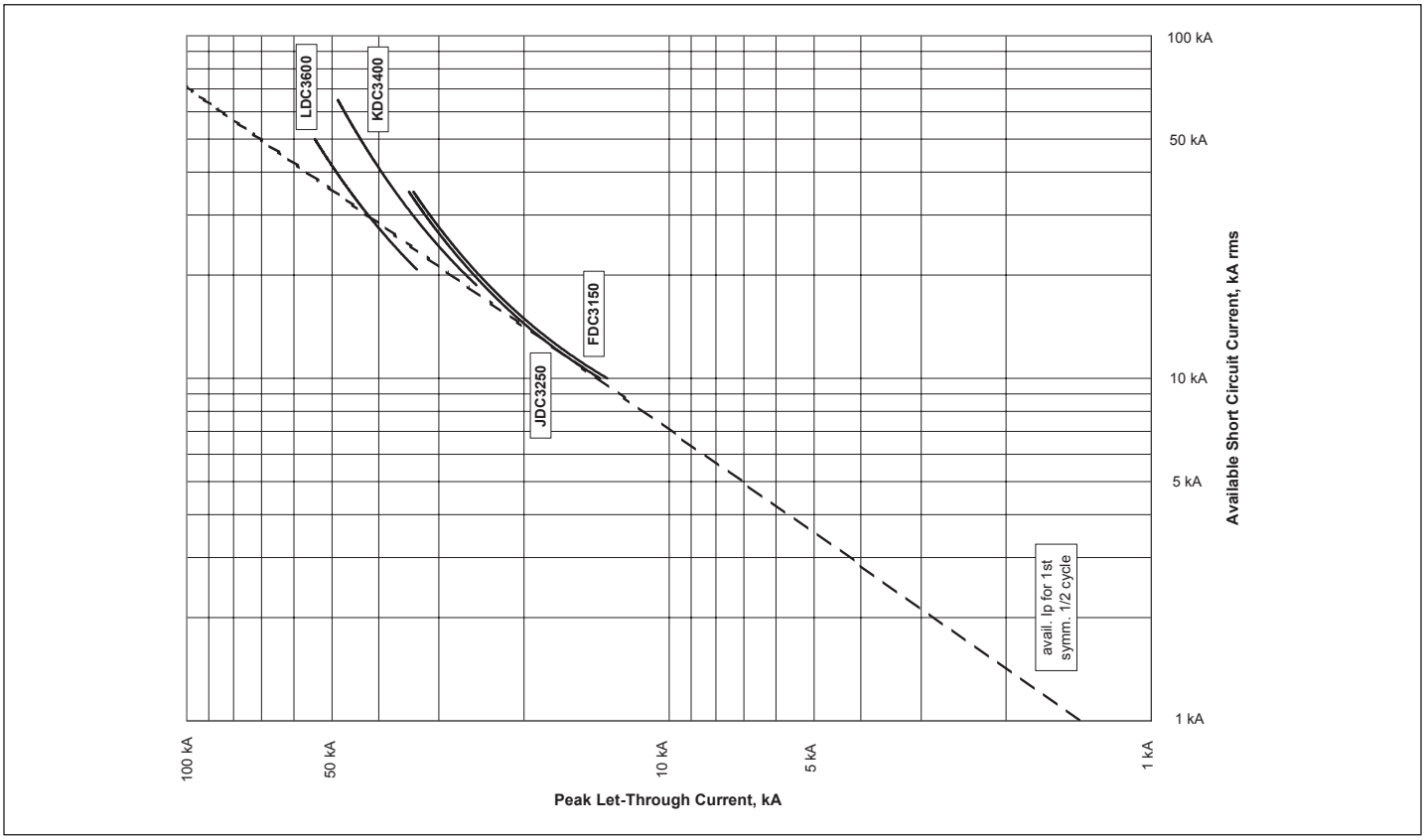


Figure 28. Peak Let-Through Current — 600 V - Curve Number AD-29-166C

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