

May 1998

Time/Current Characteristic Curves for Westinghouse Series C[®] K-Frame Circuit Breakers

Westinghouse AB DE-ION[®] Circuit Breakers

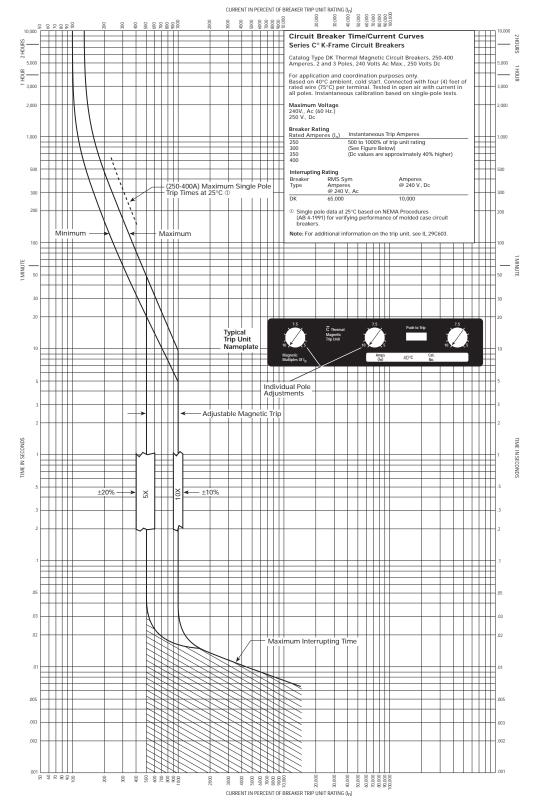
Breaker Description	Curve No.	Page
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Series C Types KDB, KD, HKD Circuit Breakers Equipped with		
Type KT Thermal-Magnetic Trip Unit	SC-4118-87B	3
Series C Type KDC Circuit Breakers Equipped with Type KT		
Thermal-Magnetic Trip Unit	SC-4119-87B	4
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Series C Type KDC Circuit Breakers Equipped with Type KES Digitrip RMS 310 Trip Units		
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Series C K-Frame Circuit Breakers Equipped With Digitrip OPTIM Trip	Units	
Long Delay I ² t, Short Delay I ² t		20
Long Delay I ² t, Short Delay Flat		20
Long Delay I ⁴ t, Short Delay Flat		22
Instantaneous and Override, 125 Amperes		22
		23
Instantaneous and Override, 250 Amperes		
Instantaneous and Override, 400 Amperes Ground Fault or Ground Fault Alarm Only		25 26
 Use in conjunction with SC-5638-93, SC-5639-93, SC-5644-93, or SC-5645-93. Use in conjunction with SC-5640-93, SC-5641-93, SC-5646-93, or SC-5647-93. Use in conjunction with SC-5642-93, SC-5643-93, SC-5648-93, or SC-5649-93. 		
Individual oversize copies of curves listed above printed on onion-skir in limited quantity from: Cutler-Hammer Five Parkway Center Pittsburgh, PA 15220	n paper are av	ailabl
When ordering onion-skin curves, use number at bottom of page whe i.e., SC-4117-87B. Requests for full sets of curves will not be honored.		ars,

Application Data 29-167K

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AB DE-ION Circuit Breakers

Type DK



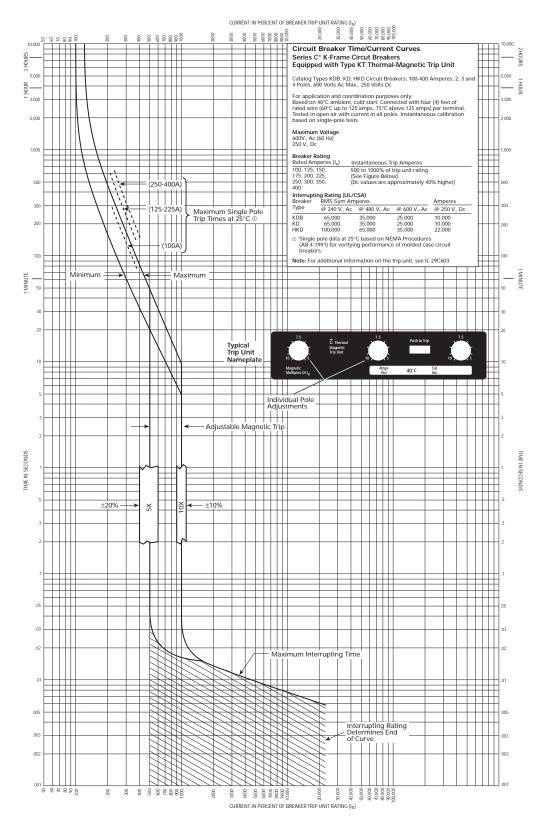
Curve No. SC-4117-87B





AB DE-ION Circuit Breakers



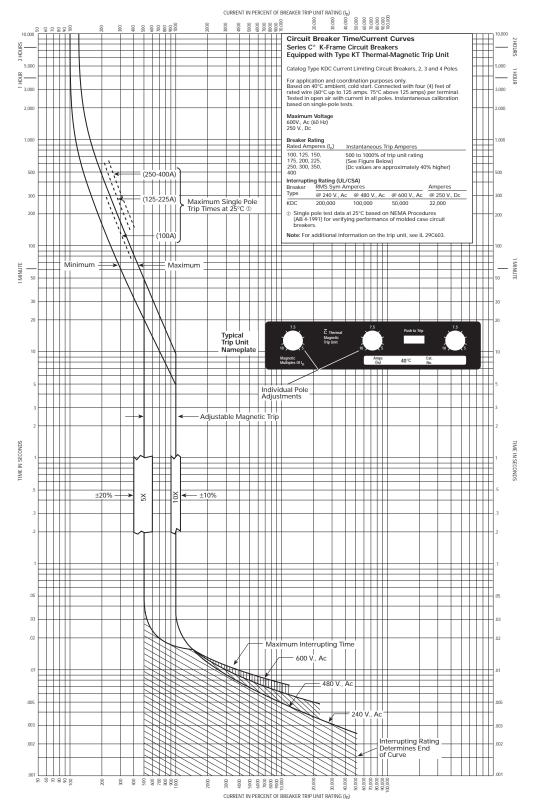


Curve No. SC-4118-87B



AB DE-ION Circuit Breakers

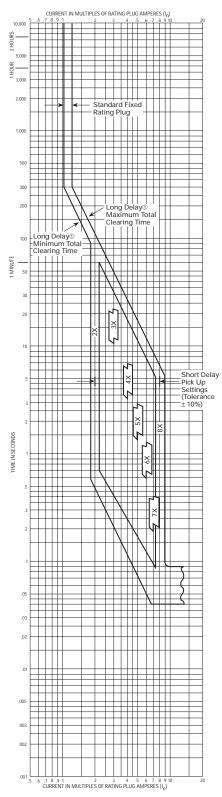
Type KDC Equipped with Type KT Thermal-Magnetic Trip Unit





AB DE-ION Circuit Breakers

Types KD, CKD, HKD, CHKD Equipped with Type KES Digitrip RMS 310 Trip Units, Types KES3400LS, KES3400LSG



Catalog Types KES3400L Breaker Types KD, HKD,	CKD, and CHKD, 40	DA. max.	
Fixed Short Delay Time Digitrip RMS 310 Rating Pluc Cat. In Engaged Remove	Pickup • x Ir		TEST
Available Rating Plugs Ampere Rating (I _n)	Туре	Catalog Number	Short Delay Pickup Range
400 350 350 250 225 200 200, 250, 300, 400 250, 300, 350, 400	Fixed Fixed Fixed Fixed Fixed Fixed Adjustable Adjustable	4KES 400T 4KES 350T 4KES 350T 4KES 250T 4KES 225T 4KES 200T A4KES 400T1 A4KES 400T3	Ampères 800-3200 700-2800 600-2400 500-2000 450-1800 400-1600 400-3200 500-3200
Interrupting Ratings – 50 RMS Sym. Amperes (kA)	/60 Hz UL/CSA		
Breaker Type KD, CKD	240V 65	480V 35	600V 25
HKD, CHKD	100	65	35
Breaker Type	IEC 947-2 240V	380V	415V
KD, CKD HKD, CHKD	65 100	40 65	40 65
Notes Digitrip RMS 310 trip uni STK2. For field testing us 4-1991.	ts are suitable for fu ing primary injection	unctional field testing with on methods, follow NEMA	test kit Cat. No. publication AB-
(Tolerance ±15%).	levels a fixed instar	taneous override is provid	ed at 4000A.
 The end of the curve i See above tabulation. For ground fault time/ 		interrupting rating of the -	circuit breaker.
See above tabulation.			
See above tabulation.			
See above tabulation.			
See above tabulation.		C-5650-93.	
See above tabulation.		C-5650-93.	s Interruptin
See above tabulation.		C-5650-93.	Interruptin Rating Determine End of
See above tabulation.		C-5650-93.	s Interruptin Rating Determine
See above tabulation.		C-5650-93.	Interruptin Rating Determine End of
See above tabulation.		C-5650-93.	Interruptin Rating Determine End of
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See above tabulation.		C-5650-93.	Interruptin Rating Determine End of
See above tabulation.		C-5650-93.	Interruptin Rating Determine End of

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3000 4000 5000

CURRENT IN AMPS

000'01

000'03

30,000 10,000 000,000

Circuit Breaker Time/Current Curves (Phase Current) @

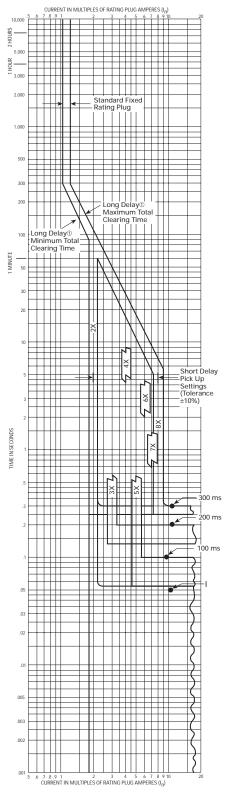
Series C[®] K-Frame Circuit Breakers Equipped With Type KES Digitrip RMS 310 Trip Units

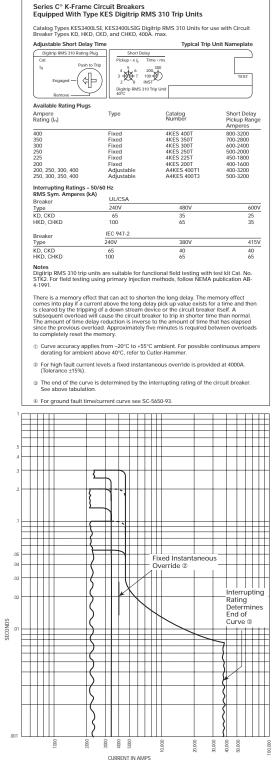




AB DE-ION Circuit Breakers

Types KD, CKD, HKD, CHKD Equipped with Type KES Digitrip RMS 310 Trip Units, Types KES3400LSI, KES3400LSIG





Circuit Breaker Time/Current Curves (Phase Current) ④

Curve No. SC-5639-93



AB DE-ION Circuit Breakers

Types KD, CKD, HKD, CHKD Equipped with Type KES Digitrip RMS 310 Trip Units, Types KES3250LS, KES3250LSG

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.04

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.02

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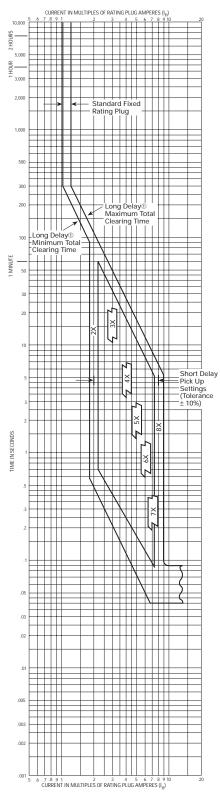
3000 4000 5000

CURRENT IN AMPS

10,000

20,000 30,000 40,000 50,000 000'00

SECONDS



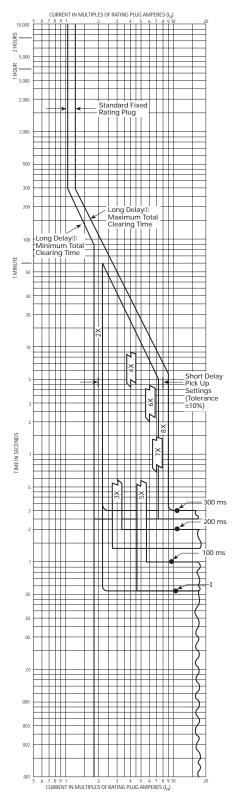
	Circuit Breakers e KES Digitrip RM	IS 310 Trip Unite	
Catalog Types KES3250	LS, KES3250LSG Digiti	rip RMS 310 Units for us	e with Circuit
Breaker Types KD, HKD, Fixed Short Delay Time	CKD, and CHKD, 2504		Unit Nameplate
Digitrip RMS 310 Rating Pl	ug Short Delay	Typical Trip	
Cat.	Pickup + x /		
**	14x4x		TEST
Engaged —	□) ⁻ 2×× ⁸		TEST
Remove	Digitrip RMS 310 40°C	Trip Unit	J
Available Rating Plugs			
Ampere Rating (In)	Туре	Catalog Number	Short Delay Pickup Range
250	Fixed	2KES 250T	Amperes 500-2000
225	Fixed Fixed	2KES 250T 2KES 225T 2KES 200T	450-1800 400-1600
175	Fixed	2KES 200T 2KES 175T	350-1400
150 125	Fixed Fixed	2KES 150T 2KES 125T	300-1200 250-1000
125, 150, 200, 250	Adjustable	A2KES 250T1	250-2000
Interrupting Ratings – 5 RMS Sym. Amperes (kA	0/60 Hz		
Breaker	UL/CSA		
Гуре	240V	480V	600V
KD, CKD HKD, CHKD	65 100	35 65	25 35
	IEC 947-2		
Breaker Type	240V	380V	415V
KD, CKD HKD, CHKD	65 100	40 65	40
since the previous over	load Approximately fit	to the amount of time the ve minutes is required be	etween overloads
o completely reset the	memory.		
o completely reset the	memory.	C ambient. For possible o utler-Hammer.	continuous ampere
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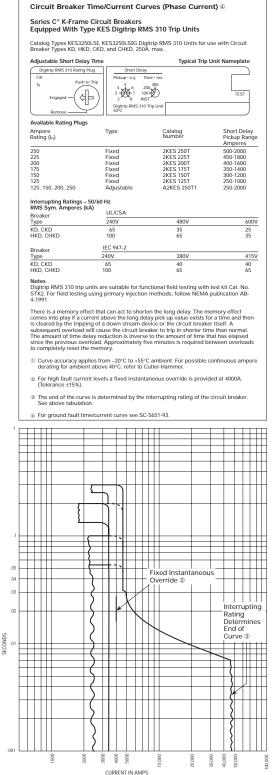
Curve No. SC-5640-93



AB DE-ION Circuit Breakers

Types KD, CKD, HKD, CHKD Equipped with Type KES Digitrip RMS 310 Trip Units, Types KES3250LSI, KES3250LSIG







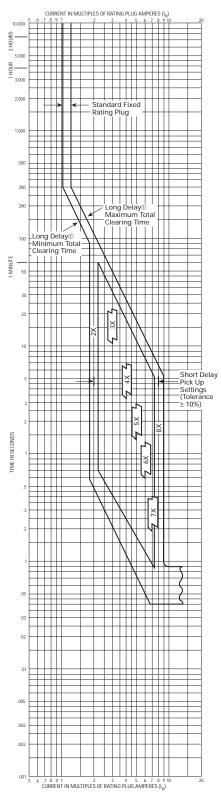
AB DE-ION Circuit Breakers

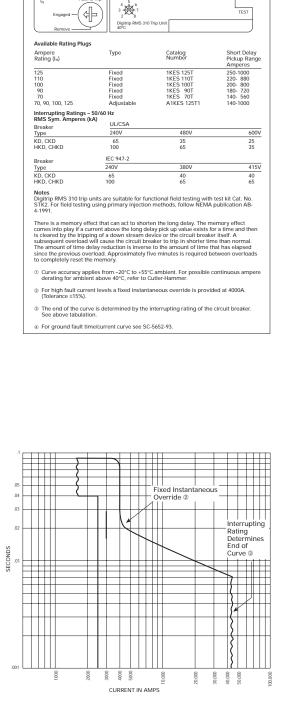
Types KD, CKD, HKD, CHKD Equipped with Type KES Digitrip RMS 310 Trip Units, Types KES3125LS, KES3125LSG

Fixed Short Delay Time

Digitrip RMS 310 Rating Plug Cat.

Push to Trip





Circuit Breaker Time/Current Curves (Phase Current) ® Series C[®] K-Frame Circuit Breakers Equipped With Type KES Digitrip RMS 310 Trip Units

Short Delay Pickup • x I_r

32 2 2 4 8 7

Catalog Types KES3125LS, KES3125LSG Digitrip RMS 310 Trip Units for use with Circuit Breaker Types KD, HKD, CKD, and CHKD, 125A. max.

Typical Trip Unit Nameplate

Л

TEST

Curve No. SC-5642-93 F-T-N



AB DE-ION Circuit Breakers

Types KD, CKD, HKD, CHKD Equipped with Type KES Digitrip RMS 310 Trip Units, Types KES3125LSI, KES3125LSIG

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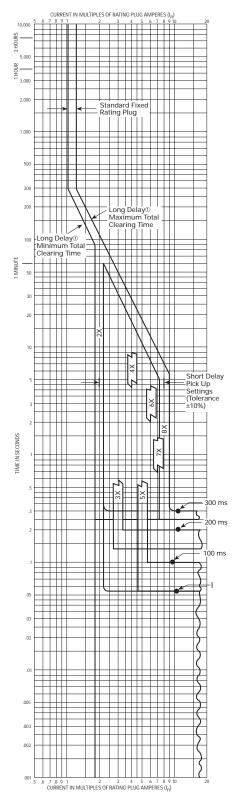
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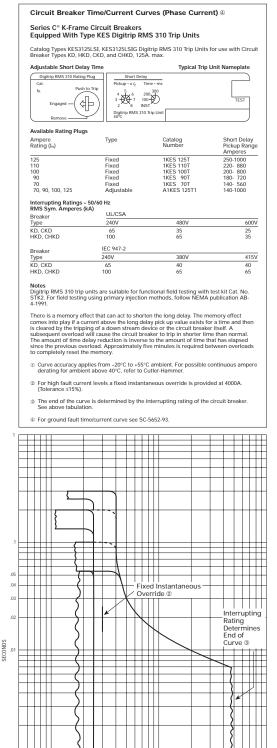
2000 3000 4000 5000 30,000 40,000 50,000

000001

CURRENT IN AMPS

100,000

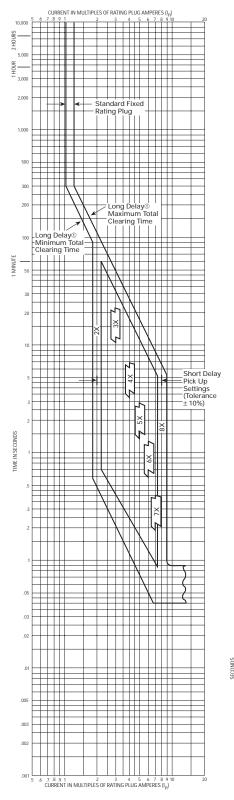






AB DE-ION Circuit Breakers

Type KDC Equipped with Type KES Digitrip RMS 310 Trip Units, Types KES3400LS, KES3400LSG



In Push to Trip	Pickup • x Ir		
			TEST
Engaged -	2 2 8 Digitrip PMS 210.7	Trin Linit	
Remove	Digitrip RMS 310 T 40 ⁹ C		
Available Rating Plugs			
Ampere Rating (In)	Туре	Catalog Number	Short Delay Pickup Range
		11/20 1007	Amperes 800-3200
400 350	Fixed	4KES 400T 4KES 350T	700-2800
300 250	Fixed Fixed	4KES 300T 4KES 250T	600-2400 500-2000
225 200	Fixed	4KES 225T 4KES 200T	450-1800 400-1600
200, 250, 300, 400 250, 300, 350, 400	Adjustable	A4KES 400T1 A4KES 400T3	400-3200 500-3200
	Adjustable	A4KE3 40013	500-3200
Interrupting Ratings – 50/6 RMS Sym. Amperes (kA)			
Breaker Type	UL/CSA 240V	480V	600V
KDC	200	100	50
Breaker	IEC 947-2 240V	380V	415V
Type KDC	200	100	100
Notes Digitrip RMS 310 trip units STK2. For field testing usin 4-1991. There is a memory effect th comes into play if a current is cleared by the triping of	g primary injection hat can act to shorte above the long dela	methods, follow NEMA in the long delay. The me ay pick up value exists fo	publication AB- emory effect r a time and then
is cleared by the tripping o subsequent overload will c The amount of time delay is since the previous overload to completely reset the me	ause the circuit brea reduction is inverse d. Approximately fiv mory.	aker to trip in shorter tim to the amount of time th re minutes is required be	e than normal. at has elapsed etween overloads
 Curve accuracy applies derating for ambient ab 	ove 40°C, refer to Cu	utler-Hammer.	onanuous ampere
② For high fault current lev (Tolorance +15%)	vels a fixed instanta	neous override is provid	ed at 4000A.
(Tolerance ±15%).			
		nterrupting rating of the	
③ The end of the curve is on See above tabulation.	determined by the ir		circuit breaker.
 The end of the curve is a See above tabulation. For ground fault time/cu 			circuit breaker.
See above tabulation.			
See above tabulation.			
See above tabulation.			
See above tabulation. (a) For ground fault time/cu	Irrent curve see SC-1	5650-93.	
See above tabulation. (a) For ground fault time/cu	arrent curve see SC-1	5650-93.	
See above tabulation. (a) For ground fault time/cu	ed Instantaneous erride @ Maxin	5650-93.	
See above tabulation. (a) For ground fault time/cu	arrent curve see SC-1	5650-93.	
See above tabulation. (a) For ground fault time/cu	ed Instantaneous rride © I Marine	5650-93.	
See above tabulation. (a) For ground fault time/cu	ed Instantaneous rride @ Instantaneous Interru Time	5650-93.	
See above tabulation. (a) For ground fault time/cu	ed Instantaneous rride @ Instantaneous Interru Time	5650-93.	
See above tabulation. (a) For ground fault time/cu	ed Instantaneous rride @ Instantaneous Interru Time	5650-93.	
See above tabulation. (a) For ground fault time/cu	ed Instantaneous rride @ Instantaneous Interru Time	5650-93.	
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See above tabulation. (a) For ground fault time/cu	ed Instantaneous rride @ Instantaneous Interru Time	5650-93.	
See above tabulation. (a) For ground fault time/cu	ed Instantaneous rride @ Instantaneous Interru Time	5650-93.	
See above tabulation. (a) For ground fault time/cu	ed Instantaneous rride @ Instantaneous Interru Time	5650-93.	
See above tabulation. (a) For ground fault time/cu	ed Instantaneous rride @ Instantaneous Interru Time	5650-93.	AC Interru
See above tabulation. (a) For ground fault time/cu	ed Instantaneous rride @ Instantaneous Interru Time	5650-93.	
See above tabulation. (a) For ground fault time/cu	errind curve see SC-1	5650-93.	AC

Circuit Breaker Time/Current Curves (Phase Current) ④ Series C[®] K-Frame Circuit Breakers Equipped With Type KES Digitrip RMS 310 Trip Units

Fixed Short Delay Time

Catalog Types KES3400LS, KES3400LSG Digitrip RMS 310 Trip Units for use with Circuit Breaker Type KDC, 400A, max.

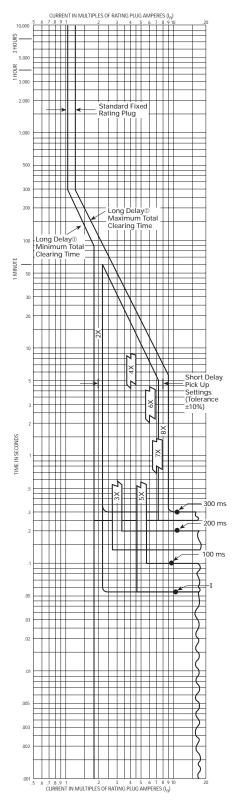
Typical Trip Unit Nameplate

Curve No. SC-5644-93 FAT-N



AB DE-ION Circuit Breakers

Type KDC Equipped with Type KES Digitrip RMS 310 Trip Units, Types KES3400LSI, KES3400LSIG



Catalog Types KES3400 Breaker Type KDC, 400		itrip RMS 310 Trip Units	for use with Circu
Adjustable Short Delay	Time	Typical Trip	Unit Nameplate
Digitrip RMS 310 Rating F Cat. In Push to Engaged Remove	Pickup • x Ir Tir	Ð	TEST
Available Rating Plugs			
Ampere Rating (I _n)	Туре	Catalog Number	Short Delay Pickup Range Amperes
400	Fixed	4KES 400T	800-3200
350	Fixed	4KES 350T	700-2800
300	Fixed	4KES 300T	600-2400
250	Fixed	4KES 250T	500-2000
225	Fixed	4KES 225T	450-1800
200 200, 250, 300, 400	Fixed	4KES 200T A4KES 400T1	400-1600 400-3200
250, 250, 300, 400	Adjustable Adjustable	A4KES 40011 A4KES 400T3	400-3200
Interrupting Ratings –		A4KE3 40013	500-3200
RMS Sym. Amperes (k			
Breaker Type	240V	480V	600\
KDC	2400	100	50
KDC		100	50
Breaker	IEC 947-2	2001/	415
Туре КDC	240V 200	380V 100	415

Circuit Breaker Time/Current Curves (Phase Current) ④

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 publication AB-4-1991.

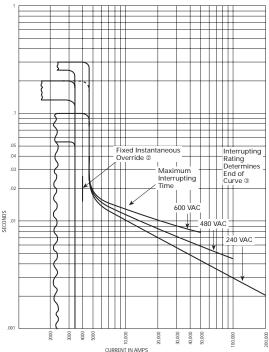
There is a memory effect that can act to shorten the long delay. The memory effect comes into play if a current above the long delay pick up value exists for a time and then is cleared by the tripping of a down stream device or the circuit breaker itself. A subsequent overload will cause the circuit 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 Cutler-Hammer.

② For high fault current levels a fixed instantaneous override is provided at 4000A. (Tolerance ±15%).

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

For ground fault time/current curve see SC-5650-93.





AB DE-ION Circuit Breakers

Type KDC Equipped with Type KES Digitrip RMS 310 Trip Units, Types KES3250LS, KES3250LSG

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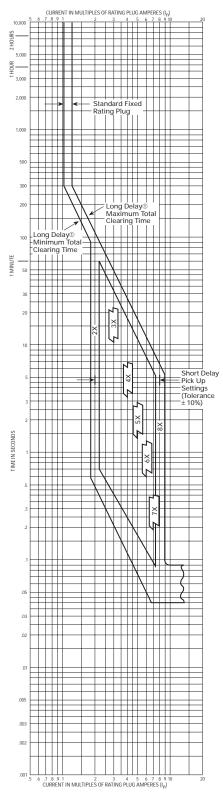
2000

3000 4000 5000 10,000

CURRENT IN AMPS

20,000

30,000 40,000 50,000



Catalog Types KES3250L Breaker Type KDC, 250A.	S, KES3250LSG Digit	rip RMS 310 Units for us	se with Circuit
Fixed Short Delay Time	max.		Unit Namepla
Digitrip RMS 310 Rating Plug	3 Short Delay	турісат тір	Unit Namepia
Cat.	Pickup • x /z		
In Push to Tr			
Engaged -() ⁴ 2 ⁴		TES
	2 8 Digitrip RMS 310 40°C	Trip Unit	
Remove	40 ⁶ C		
Available Rating Plugs			
Ampere	Туре	Catalog	Short D
Rating (In)		Number	Pickup F Ampere
250	Fixed	2KES 250T	500-200
225	Fixed	2KES 225T	450-180
200	Fixed	2KES 200T 2KES 175T	400-160
150	Fixed	2KES 150T 2KES 125T	300-120
125	Fixed	2KES 125T	250-100
125, 150, 200, 250	Adjustable	A2KES 250T1	250-200
Interrupting Ratings – 50. RMS Sym. Amperes (kA)	/60 Hz		
Breaker	UL/CSA		
Туре	240V	480V	
KDC	200	100	
Breaker	IEC 947-2		
Туре	240V	380V	
KDC	200	100	
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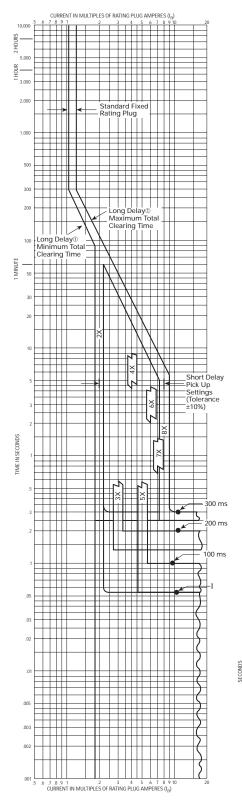
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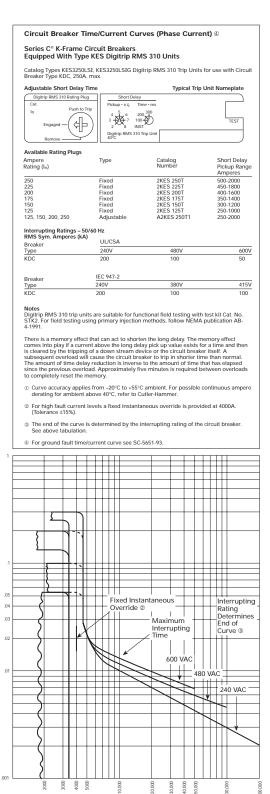
Curve No. SC-5646-93



AB DE-ION Circuit Breakers

Type KDC Equipped with Type KES Digitrip RMS 310 Trip Units, Types KES3250LSI, KES3250LSIG



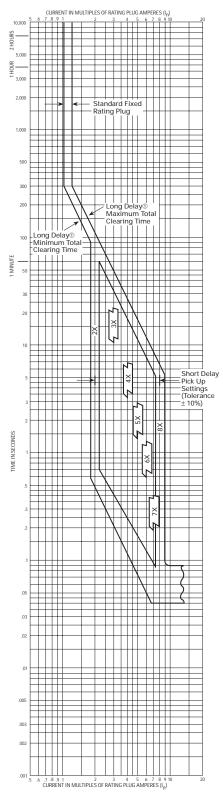


CURRENT IN AMPS



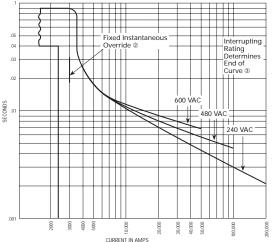
AB DE-ION Circuit Breakers

Type KDC Equipped with Type KES Digitrip RMS 310 Trip Units, Types KES3125LS, KES3125LSG



Digitup RMS 310 Rating Plug Short Delive Ch Push to Trip Image: Ch Push to Trip Image: Ch Push to Trip Image: Ch Type Available Rating Plug Image: Ch Arrange Ch Type Analing (Jn) Type Ch Type Ch Pickup FAR 125 Fixed 125 Fixed 126 Fixed 127 Fixed 128 Top Fixed 129 Fixed 120 Fixed 121 Fixed 122 Fixed 123 Fixed 124 Fixed 125 Fixed 126 Fixed 127 Fixed 128 Top Fixed 129 Poil State 120 Fixed 121 Hole State 122 Fixed 123 Fixed 124	Fixed Short Delay Time	,	Typical Trip	Unit Nameplate
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Circuit Breaker Time/Current Curves (Phase Current) @



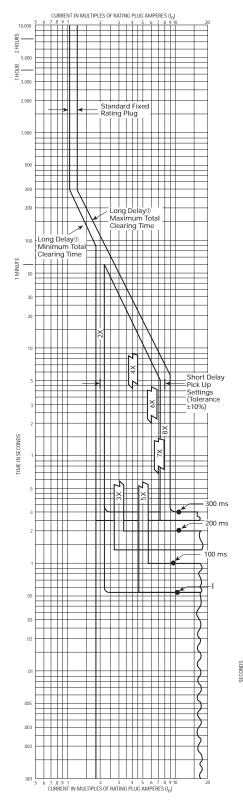
Curve No. SC-5648-93



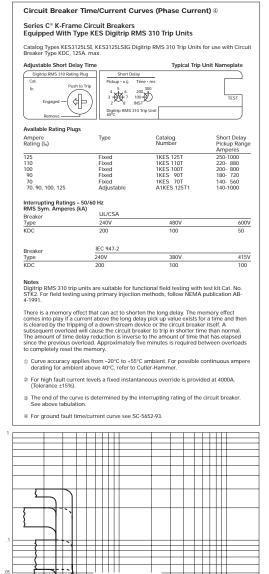


AB DE-ION Circuit Breakers

Type KDC Equipped with Type KES Digitrip RMS 310 Trip Units, Types KES3125LSI, KES3125LSIG



F-T-N



Fixed Instantaneous Override @

> Maximum Interrupting Time

.04

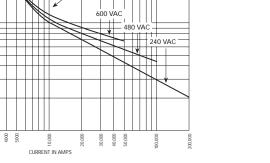
.03

.02

.01

.001

2000



Interrupting Rating

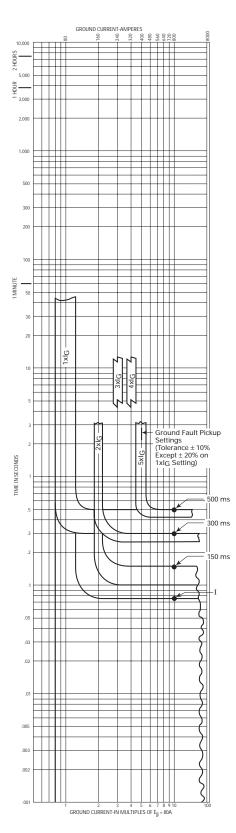
Determines End of Curve 3

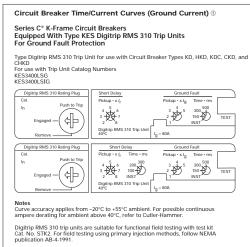
Curve No. SC-5649-93



AB DE-ION Circuit Breakers

Ground Fault Protection (KES3400LSG, KES3400LSIG)





 For phase time/current curves see SC-5638-93, SC-5639-93, SC-5644-93, or SC-5645-93.

October 1997

Curve No. SC-5650-93



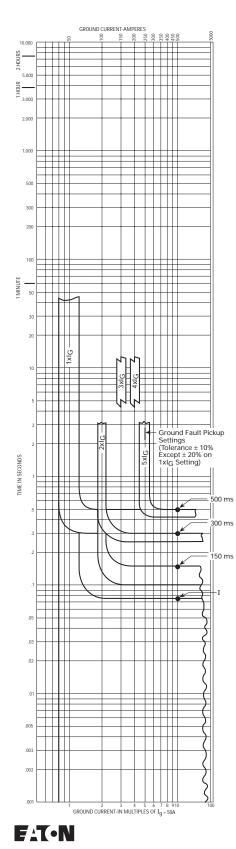
Application Data 29-167K

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AB DE-ION Circuit Breakers

Ground Fault Protection (KES3250LSG, KES3250LSIG)



Series C* K-Frame Circuit Breakers Equipped With Type KES Digitrip RMS 310 Trip Units For Ground Fault Protection Type Digitrip RMS 310 Trip Unit for use with Circuit Breaker Types KD, HKD, KDC, CKD, and CHKD For use with Trip Unit Catalog Numbers KES3250LSG KES3250LSIG Digitrip RMS 310 Rating Plug Cat. Push to Trip $\frac{\text{Short Delay}}{\text{Pickup} \cdot x I_{f}}$ Ground Fault Pickup • x Ig Time • ms Push to Trip 300 150 INST 32 2 2 3 4 7 (+) TEST Enga Digitrip RMS 310 Trip Un 40°C Ig = 50A Ground Fault Pickup • x Ig Time • ms Digitrip RMS 310 Rating Plug Cat. Short Del Pickup • x Ir • ms Push to Trip 300 500 150 D In ² ² ¹ (+) Engaged Ig = 50A Notes Curve accuracy applies from -20° C to $+55^\circ$ C ambient. For possible continuous ampere derating for ambient above 40° C, refer to Cutler-Hammer. 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 publication AB-4-1991. ③ For phase time/current curves see SC-5640-93, SC-5641-93, SC-5646-93, or SC-5647-93.

Circuit Breaker Time/Current Curves (Ground Current) ①

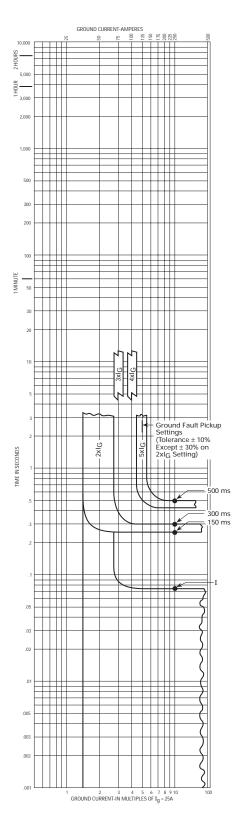
Curve No. SC-5651-93

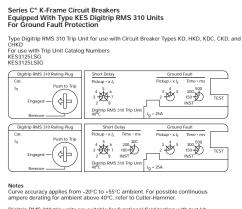
October 1997



AB DE-ION Circuit Breakers

Ground Fault Protection (KES3125LSG, KES3125LSIG)





Circuit Breaker Time/Current Curves (Ground Current) ①

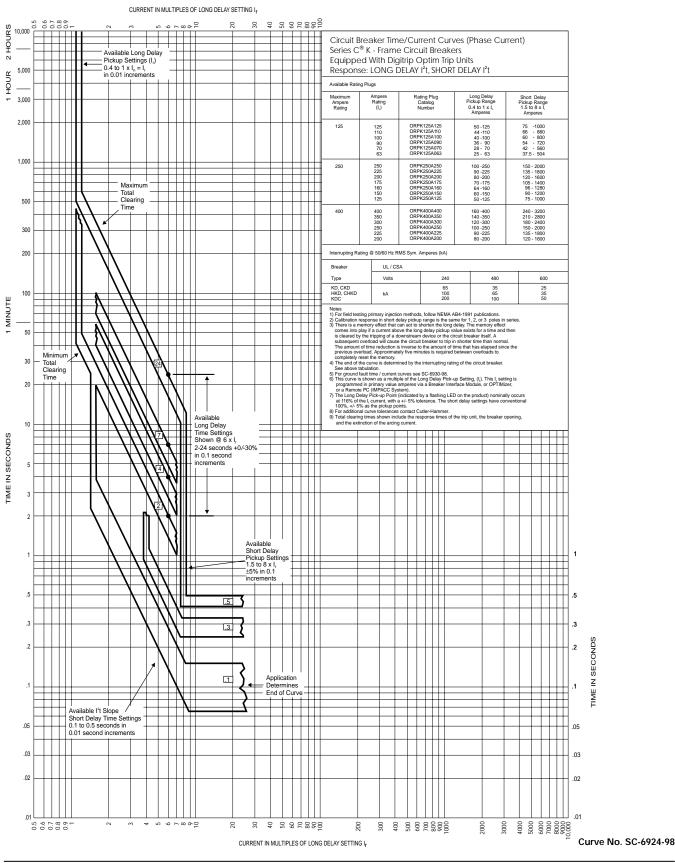
Curve accuracy applies from -2010 to 455 °C ambient. For possible continuous ampere deraiting for ambient above 40°C, refer to Culler Hammwith test kit Cat. No. STK2. For field testing using primary injection methods, follow NEMA publication AB-4-1991. (9) For phase time/current curves see SC-5642-93, SC-5643-93, or SC-5649-93, or SC-5649-93.

Curve No. SC-5652-93

Effective: May 1998

AB DE-ION® Circuit Breakers

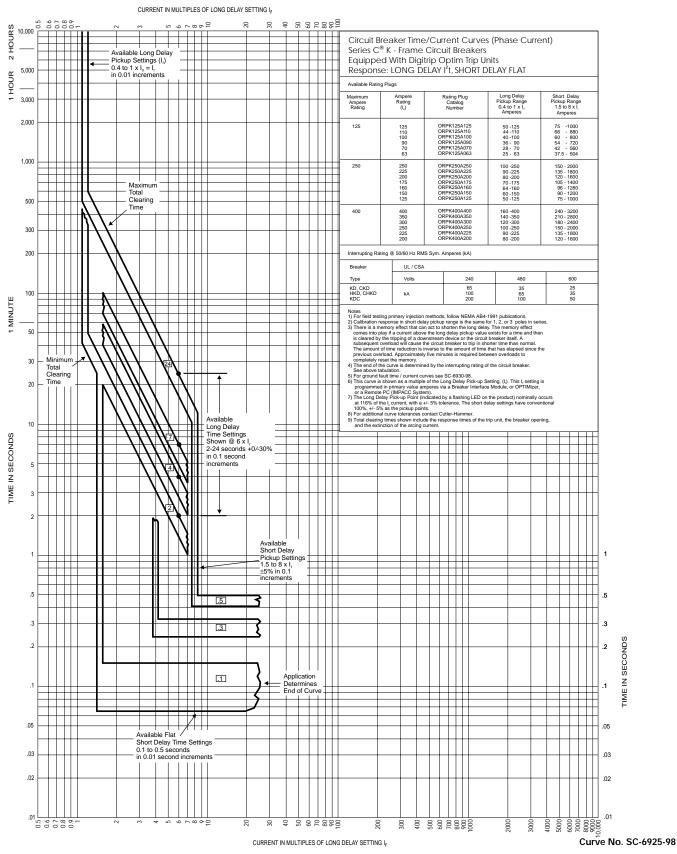
K-Frame Circuit Breakers Equipped with Digitrip OPTIM Trip Units; Long Delay I²t, Short Delay I²t



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AB DE-ION[®] Circuit Breakers

K-Frame Circuit Breakers Equipped with Digitrip OPTIM Trip Units; Long Delay I²t, Short Delay Flat

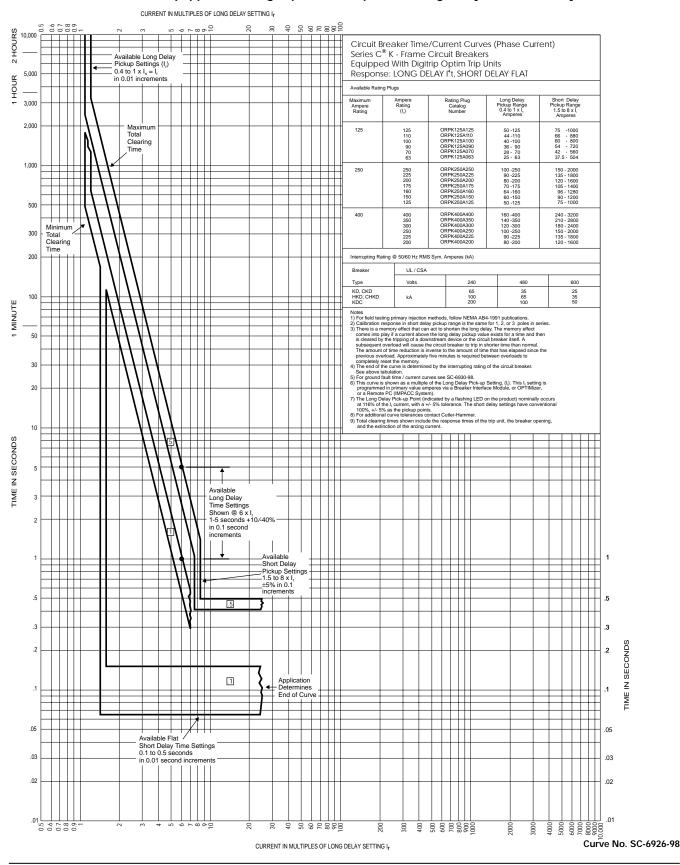


Effective: May 1998

AB DE-ION[®] Circuit Breakers

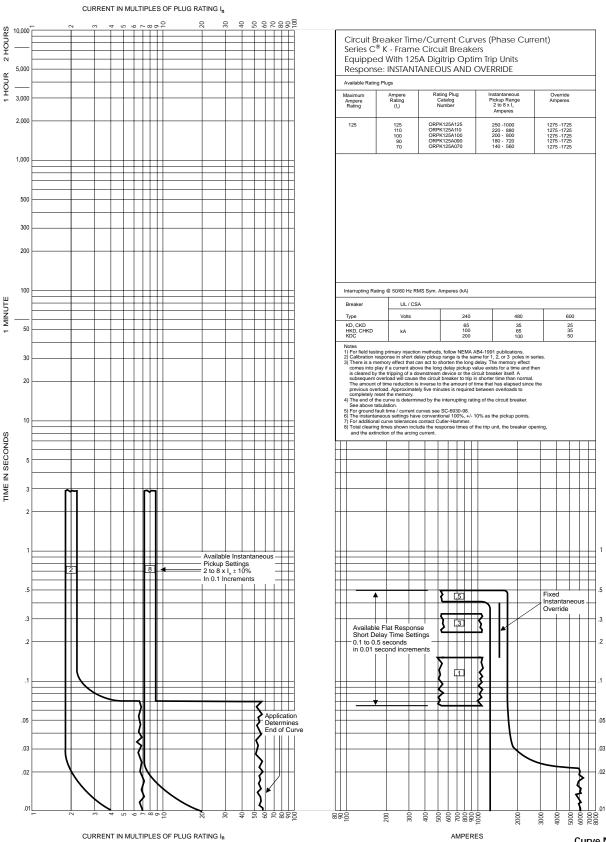
Page 22

K-Frame Circuit Breakers Equipped with Digitrip OPTIM Trip Units; Long Delay I⁴t, Short Delay Flat



AB DE-ION® Circuit Breakers

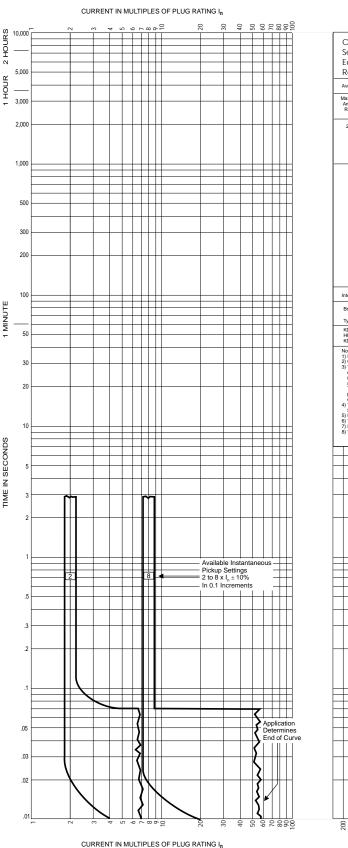
K-Frame Circuit Breakers Equipped with 400A Digitrip OPTIM Trip Units; Instantaneous and Override



Effective: May 1998

AB DE-ION® Circuit Breakers

K-Frame Circuit Breakers Equipped with 250A Digitrip OPTIM Trip Units; Instantaneous and Override



Circuit Breaker Time/Current Curves (Phase Current) Series C[®] K - Frame Circuit Breakers Equipped With 250A Digitrip Optim Trip Units Response: INSTANTANEOUS AND OVERRIDE Available Rating Plugs Ampere Rating (I,) Rating Plug Catalog Number Maximurr Ampere Rating Override Amperes Pickup Rang 2 to 8 x I, Amperes 500 -2000 450 -1800 400 -1600 350 -1400 320 -1280 300 -1200 250 -1000 ORPK250A250 ORPK250A225 ORPK250A200 ORPK250A175 ORPK250A160 ORPK250A160 ORPK250A150 ORPK250A125 2550 -3450 2550 -3450 2550 -3450 2550 -3450 2550 -3450 2550 -3450 2550 -3450 250 225 200 175 160 150 125 250 Interrupting Rating @ 50/60 Hz RMS Sym. Amperes (kA) UL/CSA Breaker Туре Volts 240 480 600 35 65 100 KD, CKD HKD, CHKD KDC 65 100 200 25 35 50 kA
 NDC

 Netset
 1) For field testing primary hjection methods, follow NEMA AB4-1991 publications.

 2) Calabriation response in short deling pickup range site same for 1, 2 of 3 poles in series.

 3) There is a memory effect that can act to shorten the long delay. The memory effect comes into pill 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 tself. A

 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 for the curve is determined by the interrupting rating of the circuit breaker.

 ear dot the curve is determined by the interrupting rating of the circuit breaker.

 ear dot dual curve is bearness contact Cuffer-Hammer.

 6) The instantaneous estings have conventional 100%, +/ 10% as the pickup points.

 7) For addition curve to farances contact Cuffer-Hammer.

 8) Total clearing times arring urgen curvet.
 1 .5 Σ * .5 Instantaneous Override Available Flat Response Short Delay Time Settings -.1 to .5 seconds in .01 second incremente I .3 .3 .2 .1 .05 .03 .02 S

300

400 500 600 900 900 2000 3000 4000

AMPERES

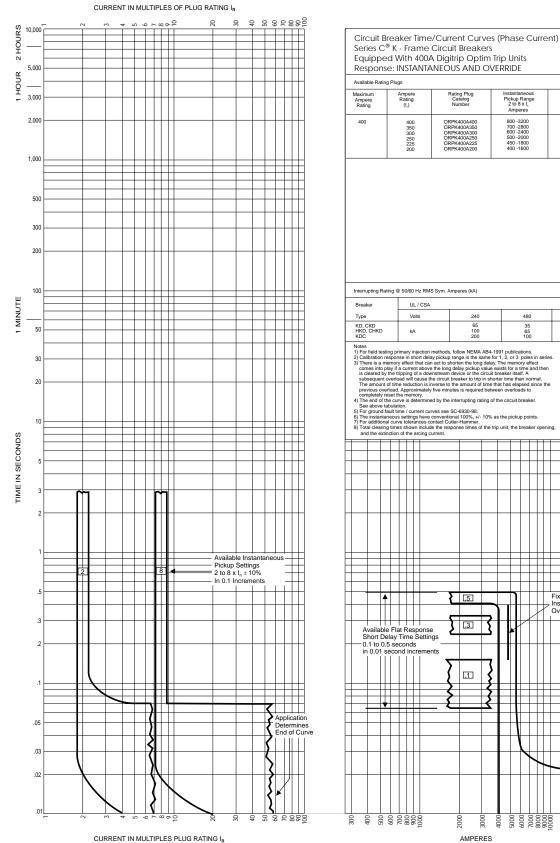
Curve No. SC-6928-98

01

5000 5000 5000 5000 5000 5000 5000

AB DE-ION® Circuit Breakers

K-Frame Circuit Breakers Equipped with 125A Digitrip OPTIM Trip Units; Instantaneous and Override



Response: INSTANTANEOUS AND OVERRIDE Override Amperes Pickup Range 2 to 8 x I_n Amperes 800 -3200 700 -2800 600 -2400 500 -2000 450 -1800 400 -1600 4080 -5520 4080 -5520 4080 -5520 4080 -5520 4080 -5520 4080 -5520 240 480 600 65 100 200 35 65 100 25 35 50
 KDC

 Notes
 1) For field testing primary injection methods, follow NEMA AB4-1991 publications.

 2) Calibration reports 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 corners into pill a current above the long delay value axists for a time and then is cleared by the tripping of a downstream device or the circuit breaker them in contract the shorten the long delay. The memory effect corners into pill a current above the long delay value axists for a time and then is cleared by the tripping of a downstream device or the circuit breaker them in contract 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.
 6) For ground fault time / current curves see 35C 630.98.

 7) Por additional curve toterances contact Collers. Hommer.
 7) For additional curve toterances contact Collers. Hommer.

 8) Total clearing times shown include the response times of the trip unit, the breaker copring and the extinction of the arting current.

</tabular 5 .5 Fixed Instantaneous Override .3 .2 .05

Curve No. SC-6929-98

.03

.02

5000 8000 9000 9000

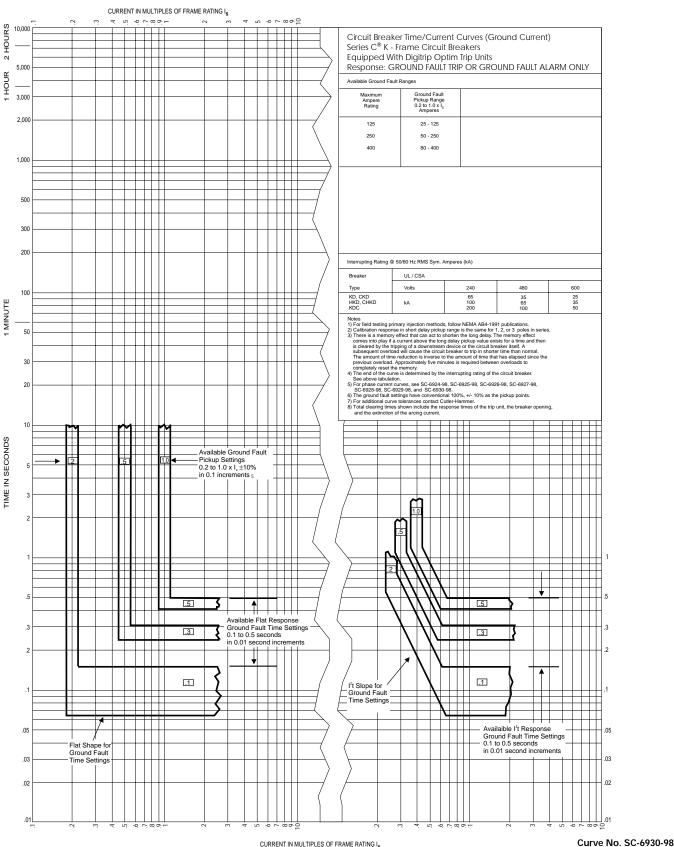
4000

Effective: May 1998

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AB DE-ION[®] Circuit Breakers

K-Frame Circuit Breakers Equipped with Digitrip OPTIM Trip Units; Ground Fault or Ground Fault Alarm Only



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