

# CLASS CC KLDR SERIES FUSES

600 Vac • 300 Vdc • Time-Delay • 1/10-30 A



## Description

KLDR fuses are time-delay fuses designed to protect control transformers, solenoids and similar inductive components with high magnetizing currents during the first half-cycle. They provide excellent protection of motor branch circuits containing IEC or NEMA rated motor controllers or contactors.

## Features/Benefits

- Meets UL and CSA standards
- Class CC fuses are the smallest 600 V, 200,000 A.I.R. fuses approved for branch circuit protection
- Rejection feature prevents use of fuses with lower interrupting ratings or voltage ratings when used with corresponding fuse holders
- Extremely current limiting reduces damage caused by heating and magnetic effects of short-circuit currents

## Applications

- Transformer Protection

## Web Resources

For additional informations, visit:  
[littelfuse.com/klDR](http://littelfuse.com/klDR)

## Recommended Fuse Holders

L60030C Series  
LPSC Touch-Safe Series

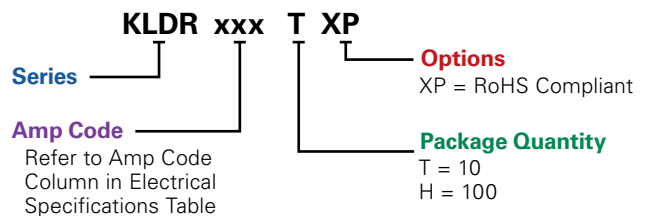
## Specifications

<b>Voltage Rating</b>	AC: 600 V DC: 300 V
<b>Amperage Rating</b>	1/10 – 30 A
<b>Interrupting Rating</b>	AC: 200 kA rms symmetrical DC: 20 kA
<b>Material</b>	Body: Melamine Caps: Nickel-plated Bronze
<b>Fuse Weight</b>	.019 lb (8.62g)
<b>Approvals</b>	AC: Standard 248-4, Class CC UL Listed 1/10-30 A (File: E81895) CSA Certified 1/10-30 A (File: LR29862) DC: Littelfuse self-certified
<b>Environmental</b>	RoHS Compliant
<b>Country of Origin</b>	Mexico

## Ordering Information

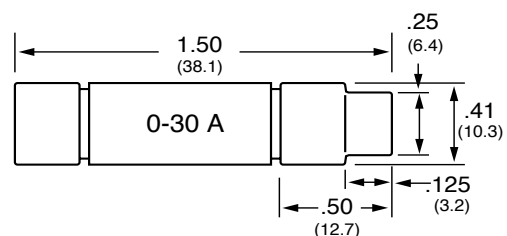
AMPERAGE RATINGS				
1/10	6/10	1 8/10	4 1/2	10
1/8	3/4	2	5	12
15/100	8/10	2 1/4	5 6/10	15
3/16	1	2 1/2	6	17 1/2
2/10	1 1/8	2 8/10	6 1/4	20
1/4	1 1/4	3	7	25
3/10	1 4/10	3 2/10	7 1/2	30
4/10	1 1/2	3 1/2	8	—
1/2	1 6/10	4	9	—

## Part Numbering System



SERIES	AMPERAGE	PACKAGE QUANTITY	CATALOG NUMBER	ORDERING NUMBER
KLDR	10	10	KLDR 10	KLDR010.TXP

## Dimensions Inches (mm)



# CLASS CC KLDR SERIES FUSES

## Electrical Specifications

ORDERING NUMBER	AMPERAGE RATING	VOLTAGE RATING		INTERRUPTING RATING		UPC	MELT (PRE-ARC) I <sup>2</sup> T (A <sup>2</sup> SEC)	TOTAL CLEARING I <sup>2</sup> T (A <sup>2</sup> SEC)	AGENCY APPROVALS		
		AC	DC	AC	DC				UL	CSA	RoHS
KLDR.100TXP	1/10	600	300	200 kA	20 kA	079458 96877	0.0004	0.0059	•	•	•
KLDR.125TXP	1/8	600	300	200 kA	20 kA	079458 96878	0.0007	0.0055	•	•	•
KLDR.150TXP	15/100	600	300	200 kA	20 kA	079458 96879	0.0016	0.0059	•	•	•
KLDR.187TXP	3/16	600	300	200 kA	20 kA	079458 96880	0.0040	0.0267	•	•	•
KLDR.200TXP	2/10	600	300	200 kA	20 kA	079458 79239	0.0018	0.0230	•	•	•
KLDR.250TXP	¼	600	300	200 kA	20 kA	079458 79240	0.0138	0.0967	•	•	•
KLDR.300TXP	3/10	600	300	200 kA	20 kA	079458 79241	0.0111	0.1005	•	•	•
KLDR.400TXP	4/10	600	300	200 kA	20 kA	079458 79242	0.0579	0.1420	•	•	•
KLDR.500TXP	½	600	300	200 kA	20 kA	079458 79243	0.0877	0.3121	•	•	•
KLDR.600TXP	6/10	600	300	200 kA	20 kA	079458 79244	0.1404	0.3742	•	•	•
KLDR.750TXP	¾	600	300	200 kA	20 kA	079458 79245	0.2911	1.972	•	•	•
KLDR.800TXP	8/10	600	300	200 kA	20 kA	079458 79246	0.2416	2.064	•	•	•
KLDR001.TXP	1	600	300	200 kA	20 kA	079458 79247	0.4494	5.883	•	•	•
KLDR1.12TXP	1-1/8	600	300	200 kA	20 kA	079458 79248	0.5049	5.149	•	•	•
KLDR1.25TXP	1-¼	600	300	200 kA	20 kA	079458 79249	0.4367	7.354	•	•	•
KLDR01.4TXP	1-4/10	600	300	200 kA	20 kA	079458 79250	0.8135	7.639	•	•	•
KLDR01.5TXP	1-½	600	300	200 kA	20 kA	079458 79251	0.9302	5.885	•	•	•
KLDR01.6TXP	1-6/10	600	300	200 kA	20 kA	079458 79252	0.7495	6.682	•	•	•
KLDR01.8TXP	1-8/10	600	300	200 kA	20 kA	079458 79253	0.9964	6.594	•	•	•
KLDR002.TXP	2	600	300	200 kA	20 kA	079458 79254	0.8615	14.01	•	•	•
KLDR2.25TXP	2-¼	600	300	200 kA	20 kA	079458 79255	1.126	26.41	•	•	•
KLDR02.5TXP	2-½	600	300	200 kA	20 kA	079458 79256	2.087	35.35	•	•	•
KLDR02.8TXP	2-8/10	600	300	200 kA	20 kA	079458 79257	21.28	45.47	•	•	•
KLDR003.TXP	3	600	300	200 kA	20 kA	079458 79258	23.21	55.99	•	•	•
KLDR03.2TXP	3-2/10	600	300	200 kA	20 kA	079458 79259	37.92	57.27	•	•	•
KLDR03.5TXP	3-½	600	300	200 kA	20 kA	079458 79260	21.42	109.4	•	•	•
KLDR004.TXP	4	600	300	200 kA	20 kA	079458 79261	83.81	258.6	•	•	•
KLDR04.5TXP	4-½	600	300	200 kA	20 kA	079458 79262	83.89	110.6	•	•	•
KLDR005.TXP	5	600	300	200 kA	20 kA	079458 79263	63.33	84.04	•	•	•
KLDR05.6TXP	5-6/10	600	300	200 kA	20 kA	079458 79264	87.66	114.0	•	•	•
KLDR006.TXP	6	600	300	200 kA	20 kA	079458 79265	129.5	161.9	•	•	•
KLDR6.25TXP	6-¼	600	300	200 kA	20 kA	079458 79266	147.6	261.7	•	•	•
KLDR007.TXP	7	600	300	200 kA	20 kA	079458 79267	202.4	513.4	•	•	•
KLDR07.5TXP	7-½	600	300	200 kA	20 kA	079458 79268	321.8	813.0	•	•	•
KLDR008.TXP	8	600	300	200 kA	20 kA	079458 79269	111.2	1,145	•	•	•
KLDR009.TXP	9	600	300	200 kA	20 kA	079458 79270	73.40	1,334	•	•	•
KLDR010.TXP	10	600	300	200 kA	20 kA	079458 79271	132.0	934.8	•	•	•
KLDR012.TXP	12	600	300	200 kA	20 kA	079458 79272	154.7	1,723	•	•	•
KLDR015.TXP	15	600	300	200 kA	20 kA	079458 79273	200.5	2,248	•	•	•
KLDR17.5TXP	17-½	600	300	200 kA	20 kA	079458 79274	87.50	722.8	•	•	•
KLDR020.TXP	20	600	300	200 kA	20 kA	079458 79275	123.8	1,363	•	•	•
KLDR025.TXP	25	600	300	200 kA	20 kA	079458 79276	226.0	1,710	•	•	•
KLDR030.TXP	30	600	300	200 kA	20 kA	079458 79277	299.6	1,990	•	•	•

### Electrical Specifications

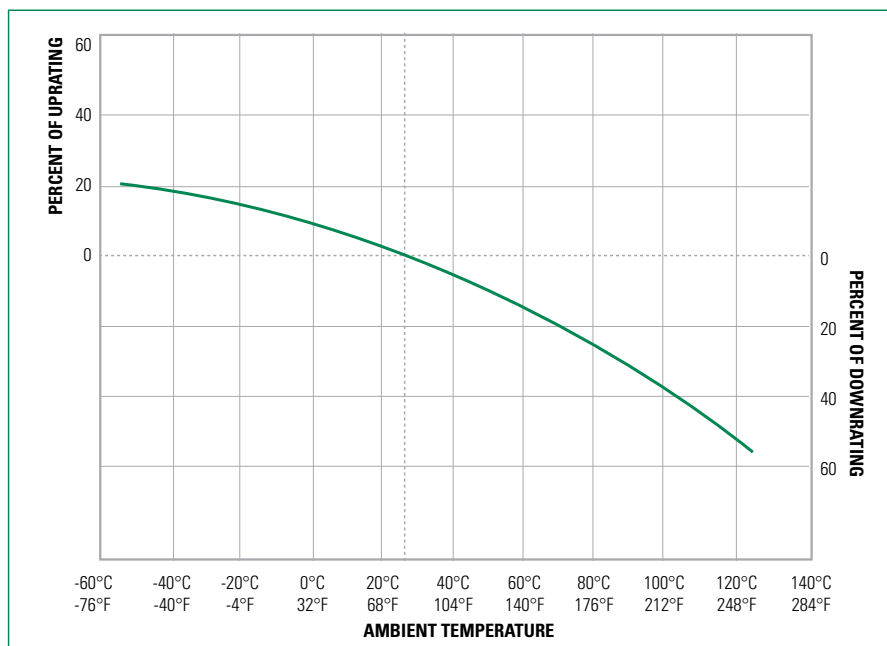
ORDERING NUMBER	AMPERAGE RATING	WATTS LOSS AT 100% RATED CURRENT(W)	WATTS LOSS AT 80% RATED CURRENT(W)
KLDR001.TXP	1	1.67	1.34
KLDR005.TXP	5	1.31	0.75
KLDR010.TXP	10	1.41	.86
KLDR015.TXP	15	1.72	1.03
KLDR020.TXP	20	2.3	1.39
KLDR030.TXP	30	2.75	1.62

### Current-Limiting Effects

SHORT CIRCUIT CURRENT*	APPARENT RMS SYMMETRICAL CURRENT FOR VARIOUS FUSE RATINGS								
	4 A	6 A	7.5 A	8 A	10 A	12 A	15 A	20 A	30 A
5,000	349	420	521	437	359	369	435	456	621
10,000	440	529	656	551	452	465	548	575	783
15,000	504	605	751	631	517	532	627	658	896
20,000	554	666	827	694	569	585	690	724	986
25,000	597	718	890	748	613	630	743	780	1063
30,000	634	763	946	795	651	670	790	829	1129
35,000	668	803	996	837	686	705	832	872	1189
40,000	698	840	1041	875	717	737	870	912	1243
50,000	752	904	1122	942	772	794	937	983	1339
60,000	799	961	1192	1001	821	844	995	1044	1423
80,000	880	1058	1312	1102	903	929	1096	1149	1566
100,000	948	1139	1413	1187	973	1001	1180	1238	1687
150,000	1085	1304	1618	1359	1114	1146	1351	1417	1931
200,000	1194	1436	1781	1496	1226	1261	1487	1560	2125

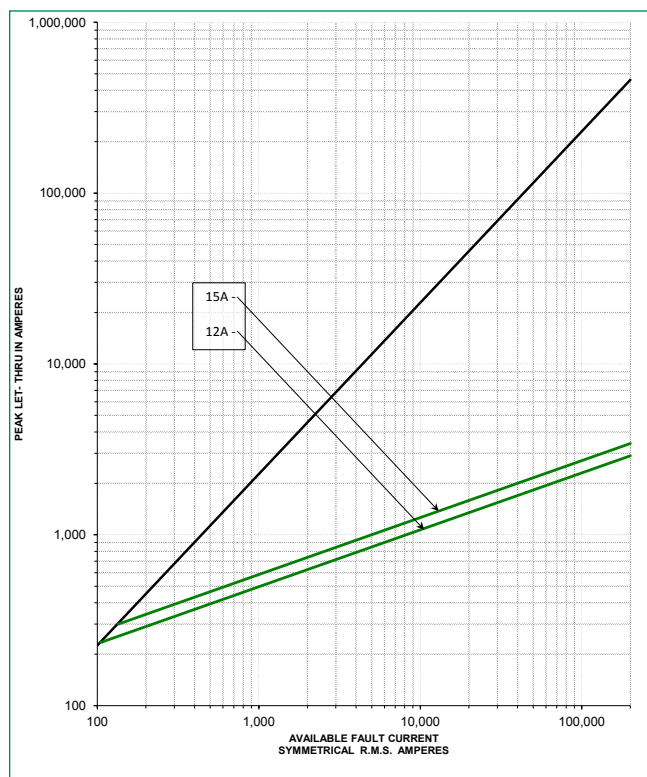
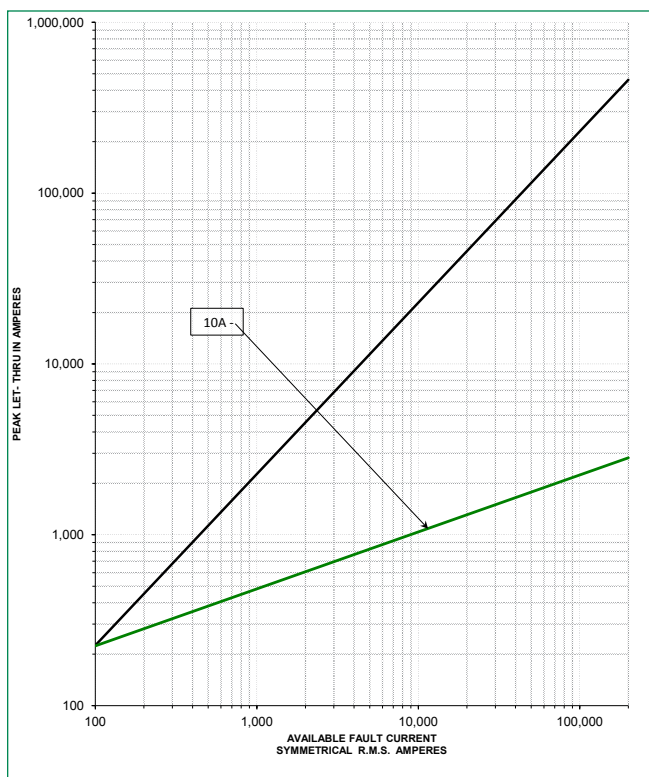
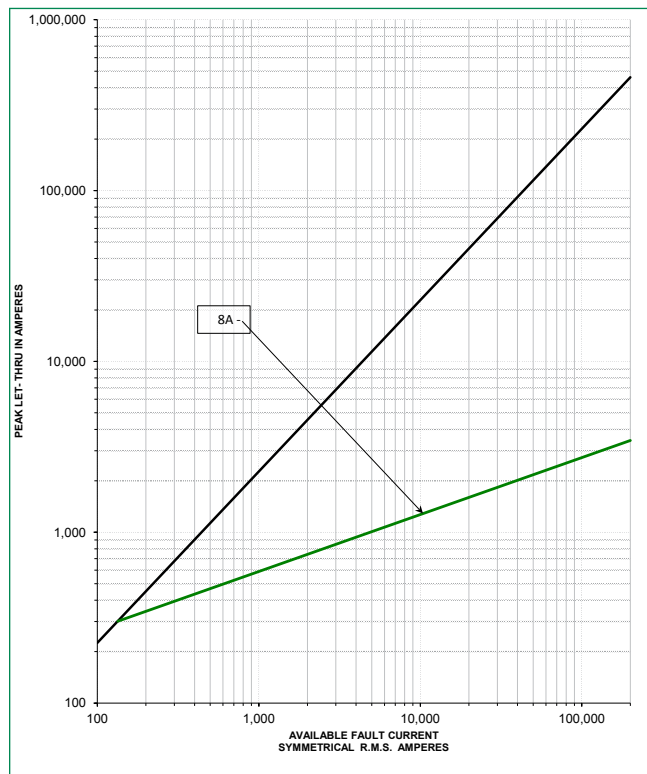
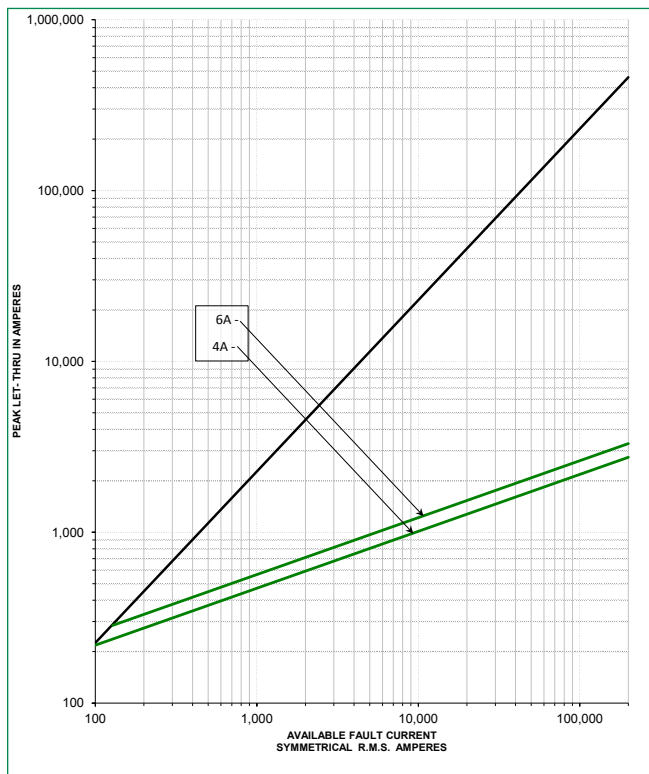
\*Prospective RMS Symmetrical Amperes Short-Circuit Current  
Note: Data Derived from Peak Let-Thru Curves

### Temperature Derating Curve (Temperature of Air Immediately Surrounding Fuse)



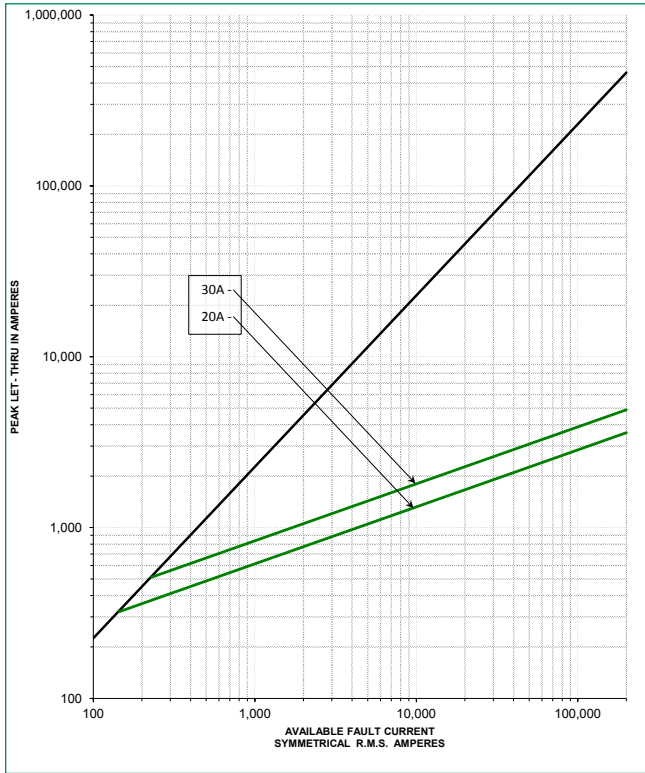
# CLASS CC KLDR SERIES FUSES

## Peak Let-Thru Curves

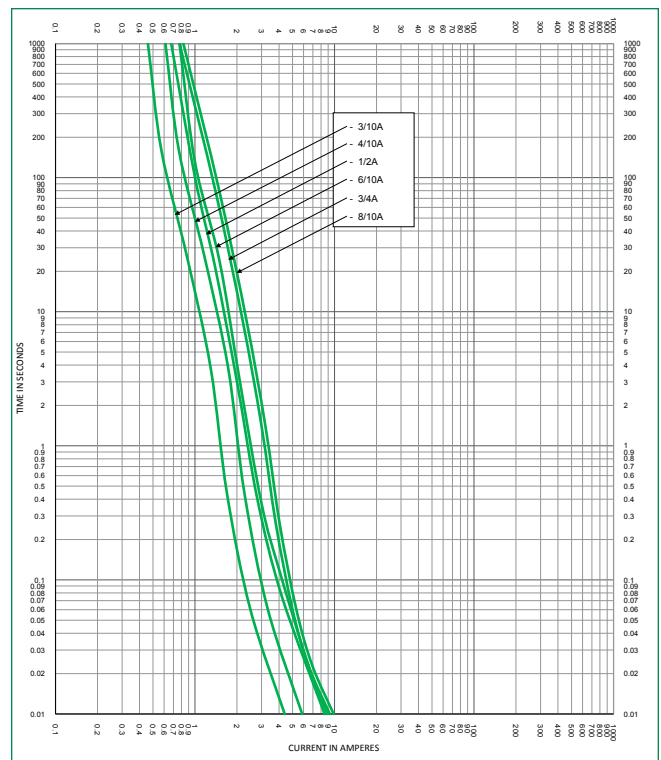
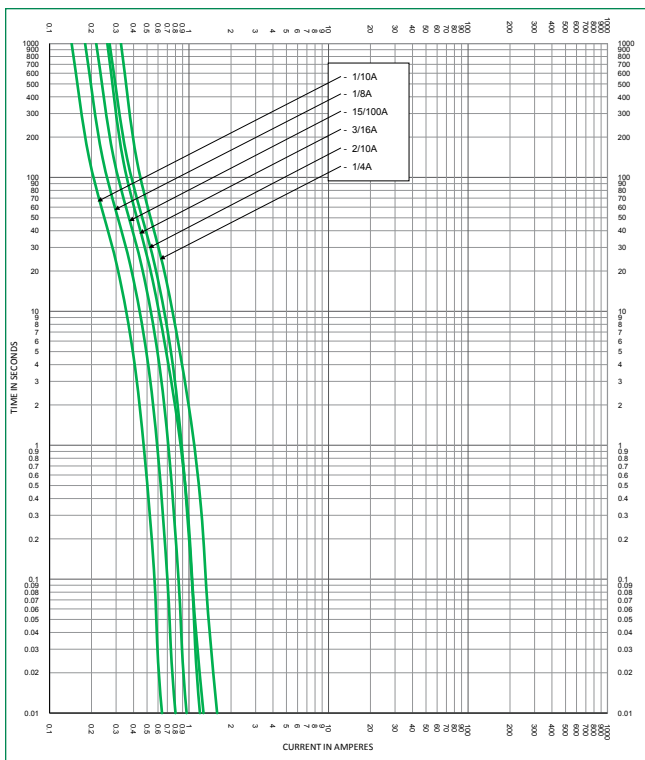


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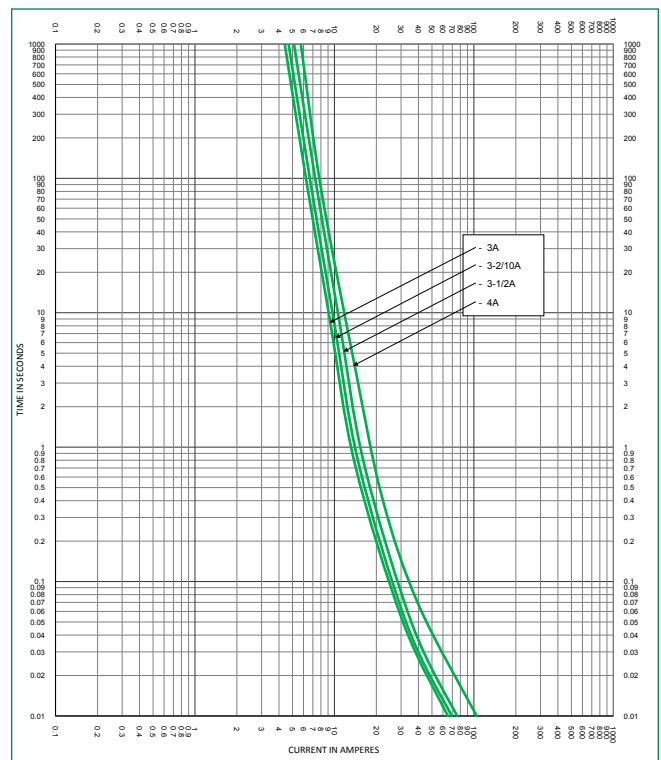
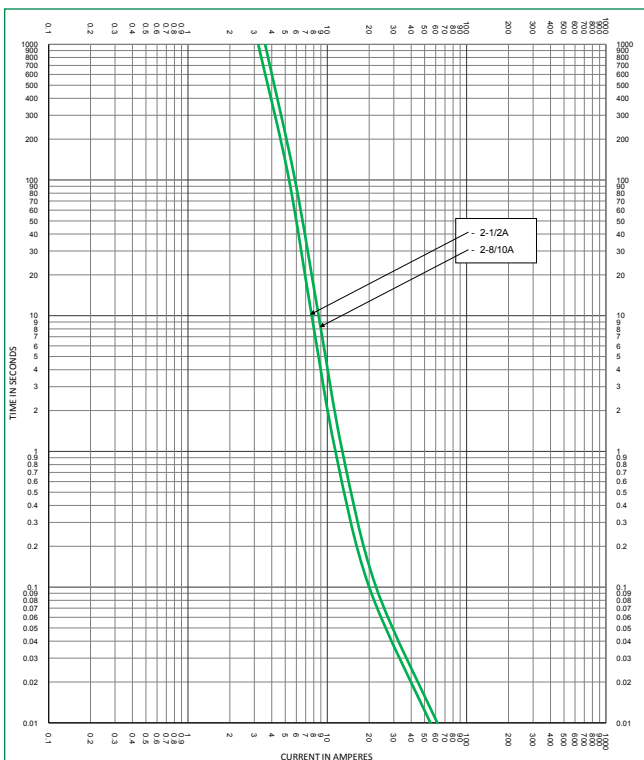
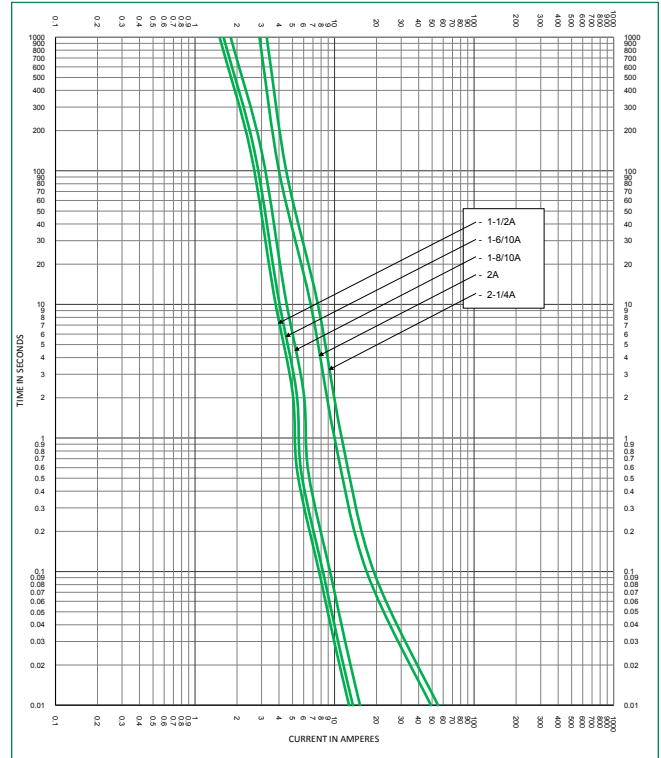
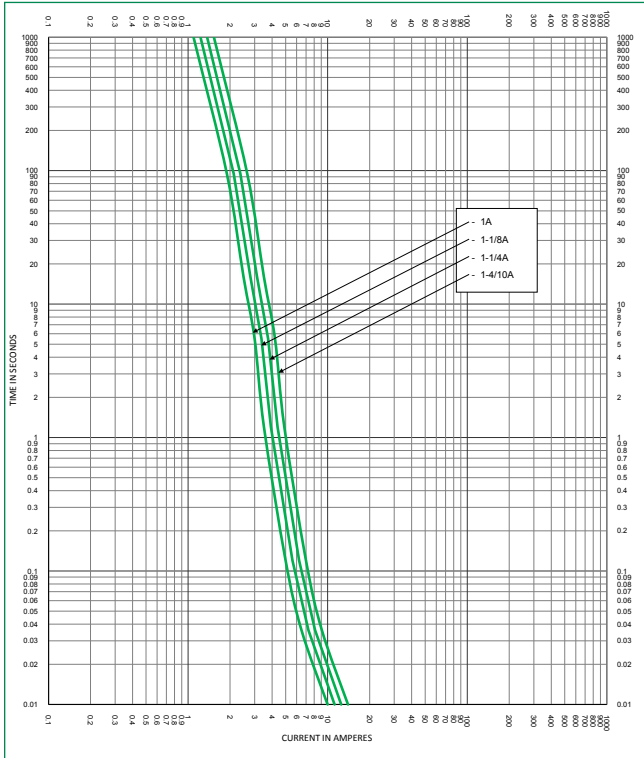


## Time Current Curves



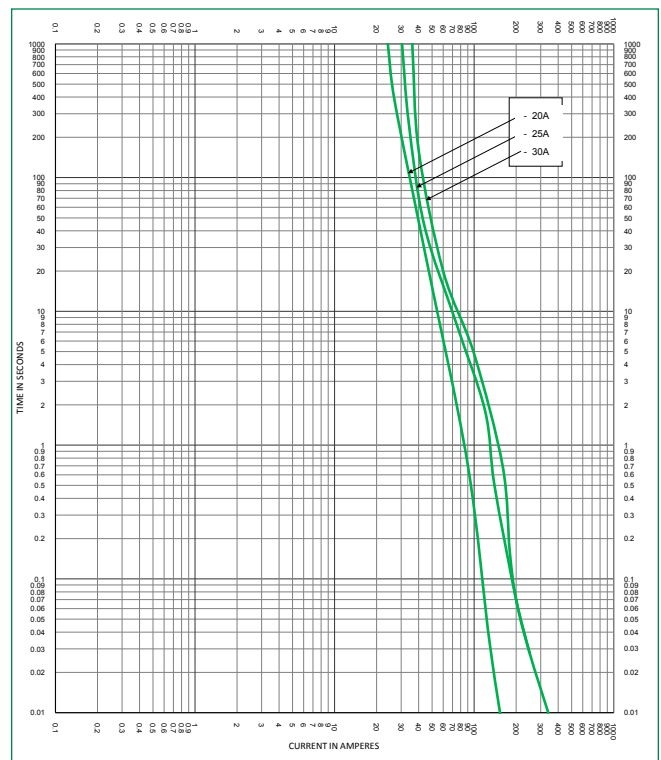
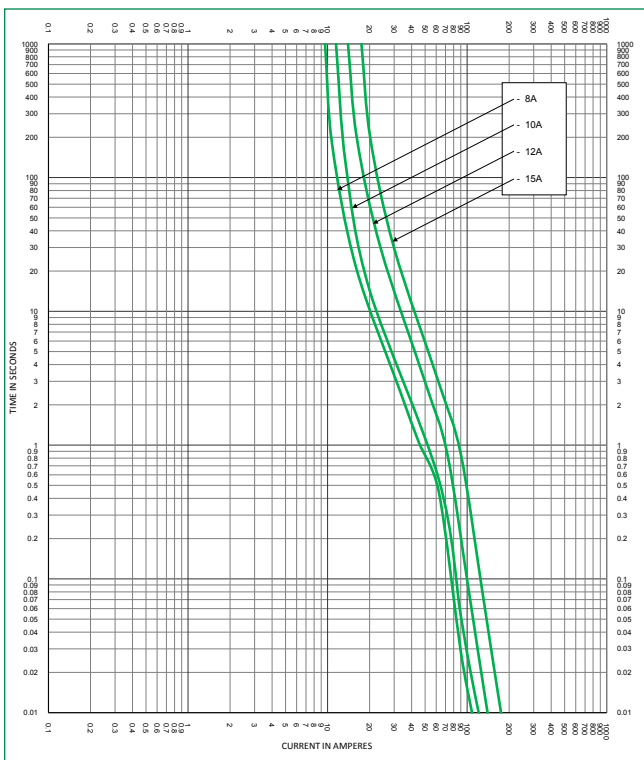
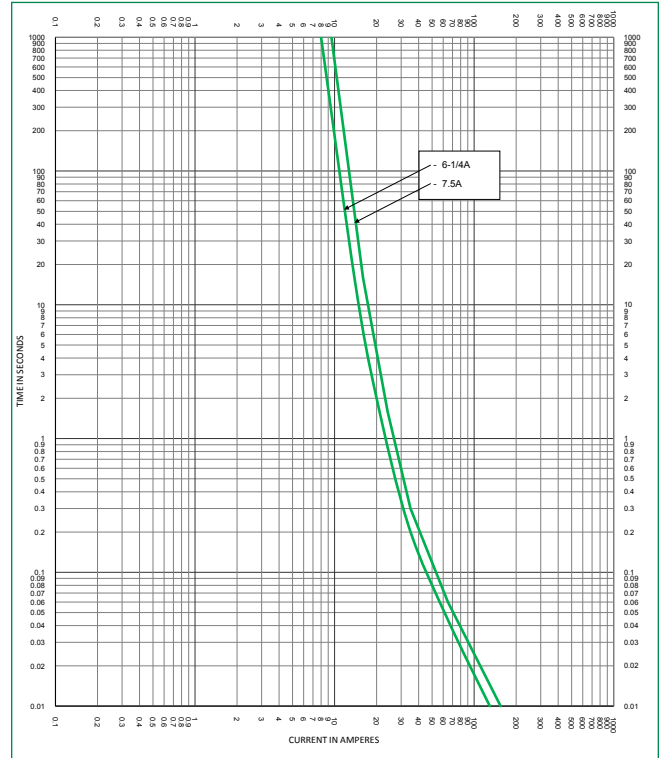
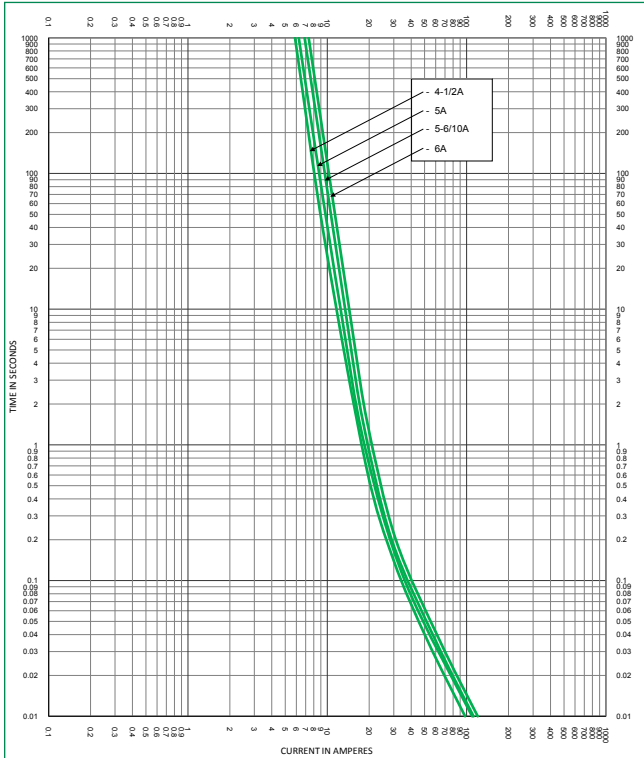
# CLASS CC KLDR SERIES FUSES

## Time Current Curves



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## Description

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## Features/Benefits

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- Class CC fuses are the smallest 600 V, 200,000 A.I.R. fuses approved for branch circuit protection
- Rejection feature prevents use of fuses with lower interrupting ratings or voltage ratings when used with corresponding fuse holders
- Extremely current limiting reduces damage caused by heating and magnetic effects of short-circuit currents

## Applications

- Transformer Protection

## Web Resources

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## Recommended Fuse Holders

L60030C Series  
LPSC Touch-Safe Series

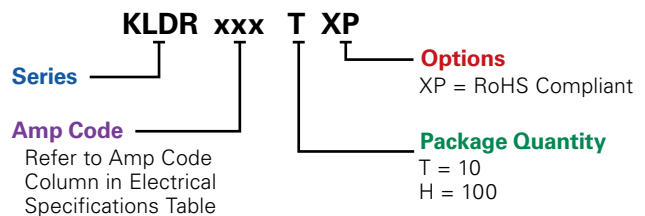
## Specifications

<b>Voltage Rating</b>	AC: 600 V DC: 300 V
<b>Amperage Rating</b>	1/10 – 30 A
<b>Interrupting Rating</b>	AC: 200 kA rms symmetrical DC: 20 kA
<b>Material</b>	Body: Melamine Caps: Nickel-plated Bronze
<b>Fuse Weight</b>	.019 lb (8.62g)
<b>Approvals</b>	AC: Standard 248-4, Class CC UL Listed 1/10-30 A (File: E81895) CSA Certified 1/10-30 A (File: LR29862) DC: Littelfuse self-certified
<b>Environmental</b>	RoHS Compliant
<b>Country of Origin</b>	Mexico

## Ordering Information

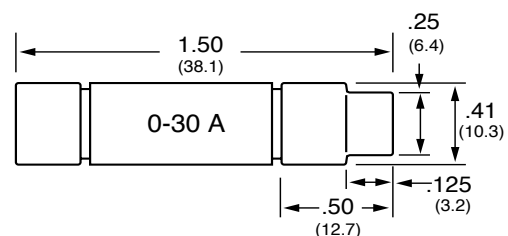
AMPERAGE RATINGS				
1/10	6/10	1 8/10	4 1/2	10
1/8	3/4	2	5	12
15/100	8/10	2 1/4	5 6/10	15
3/16	1	2 1/2	6	17 1/2
2/10	1 1/8	2 8/10	6 1/4	20
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3/10	1 4/10	3 2/10	7 1/2	30
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## Part Numbering System



SERIES	AMPERAGE	PACKAGE QUANTITY	CATALOG NUMBER	ORDERING NUMBER
KLDR	10	10	KLDR 10	KLDR010.TXP

## Dimensions Inches (mm)





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## Electrical Specifications

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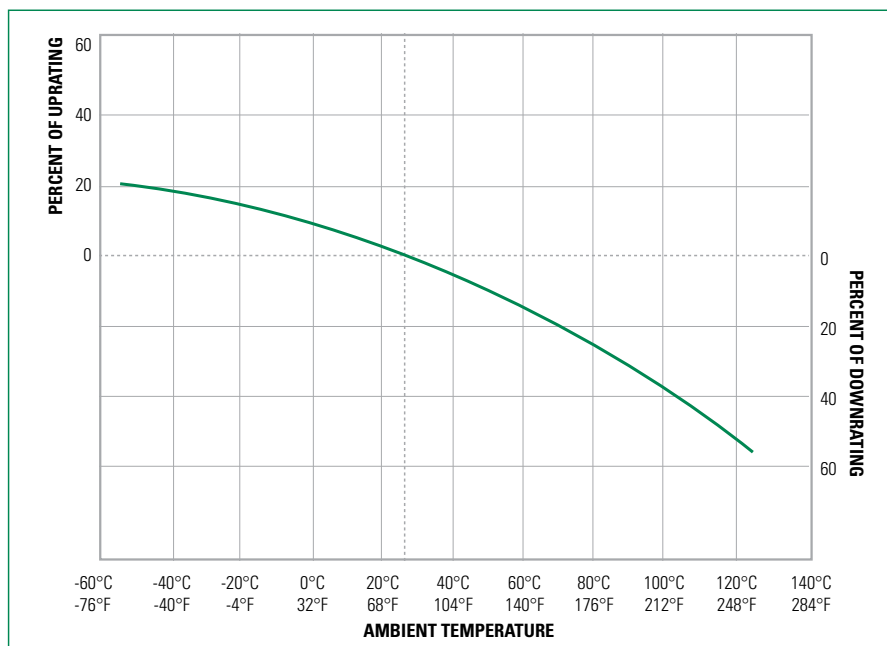
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SHORT CIRCUIT CURRENT*	APPARENT RMS SYMMETRICAL CURRENT FOR VARIOUS FUSE RATINGS								
	4 A	6 A	7.5 A	8 A	10 A	12 A	15 A	20 A	30 A
5,000	349	420	521	437	359	369	435	456	621
10,000	440	529	656	551	452	465	548	575	783
15,000	504	605	751	631	517	532	627	658	896
20,000	554	666	827	694	569	585	690	724	986
25,000	597	718	890	748	613	630	743	780	1063
30,000	634	763	946	795	651	670	790	829	1129
35,000	668	803	996	837	686	705	832	872	1189
40,000	698	840	1041	875	717	737	870	912	1243
50,000	752	904	1122	942	772	794	937	983	1339
60,000	799	961	1192	1001	821	844	995	1044	1423
80,000	880	1058	1312	1102	903	929	1096	1149	1566
100,000	948	1139	1413	1187	973	1001	1180	1238	1687
150,000	1085	1304	1618	1359	1114	1146	1351	1417	1931
200,000	1194	1436	1781	1496	1226	1261	1487	1560	2125

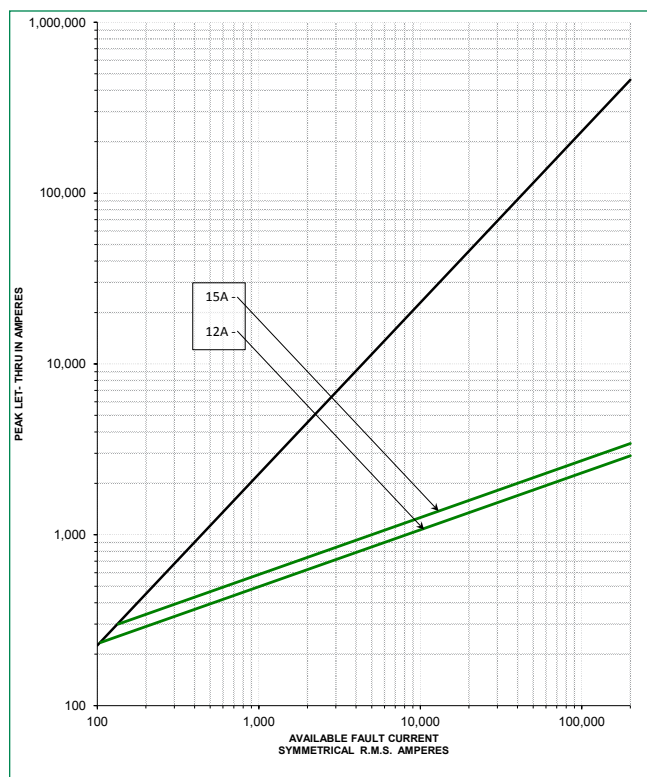
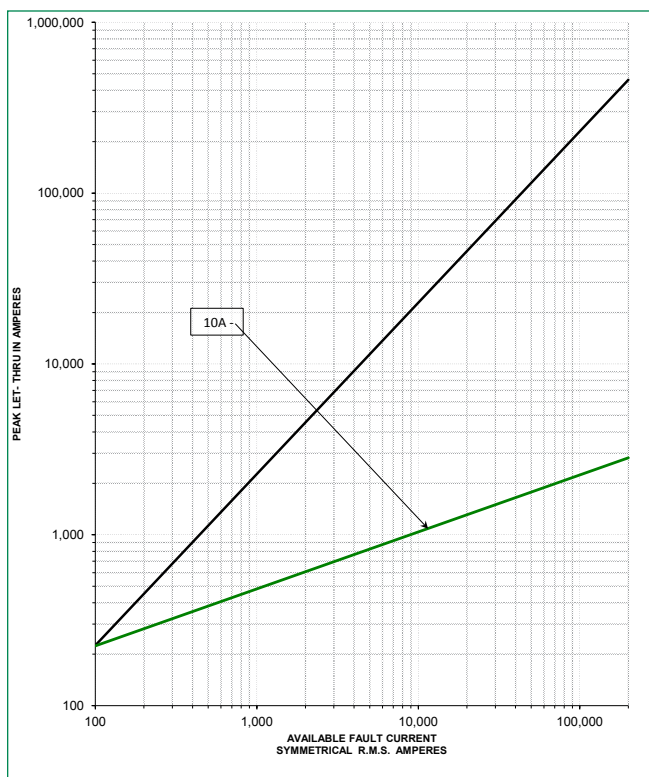
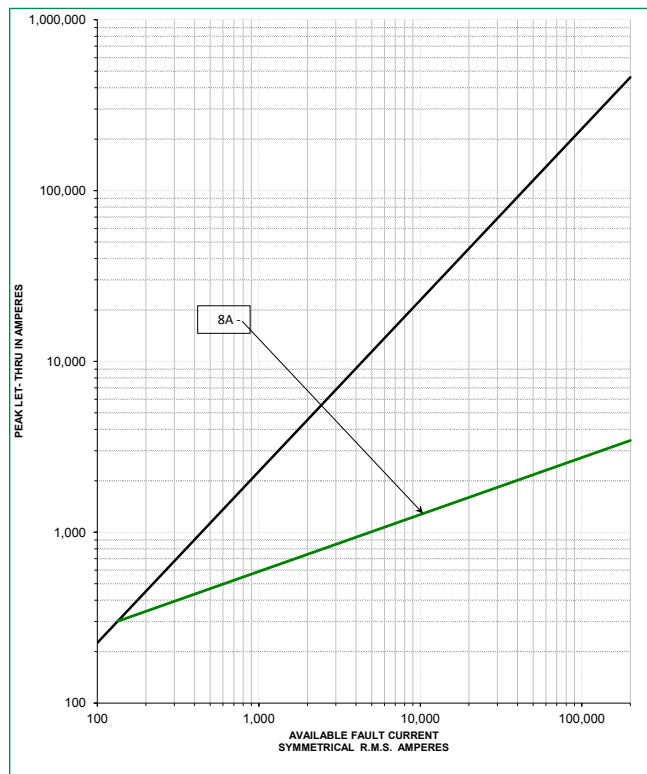
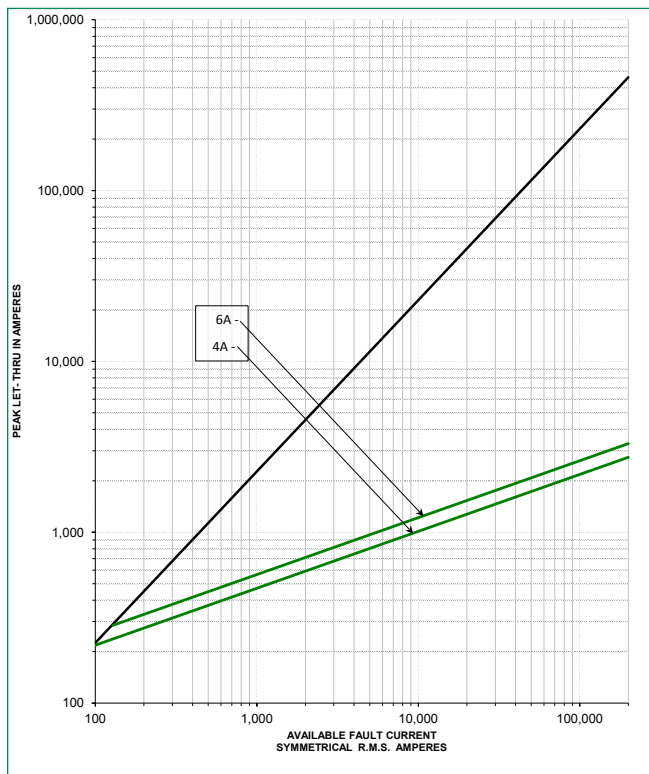
\*Prospective RMS Symmetrical Amperes Short-Circuit Current  
Note: Data Derived from Peak Let-Thru Curves

### Temperature Derating Curve (Temperature of Air Immediately Surrounding Fuse)



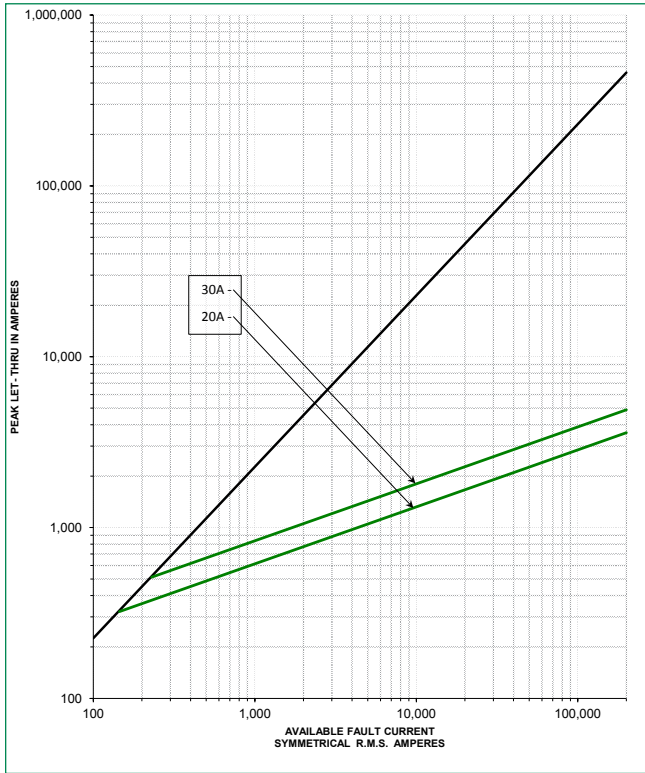
# CLASS CC KLDR SERIES FUSES

## Peak Let-Thru Curves

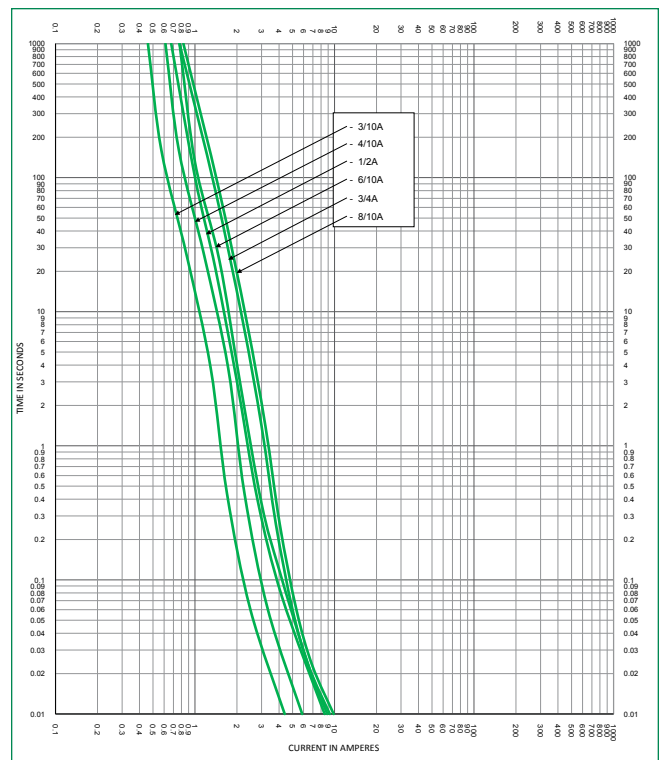
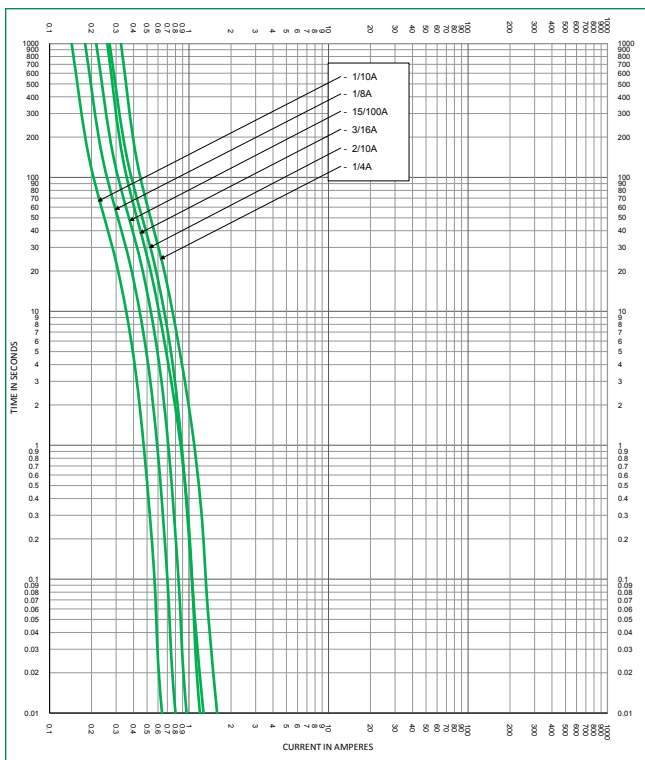


# CLASS CC KLDR SERIES FUSES

## Peak Let-Thru Curves

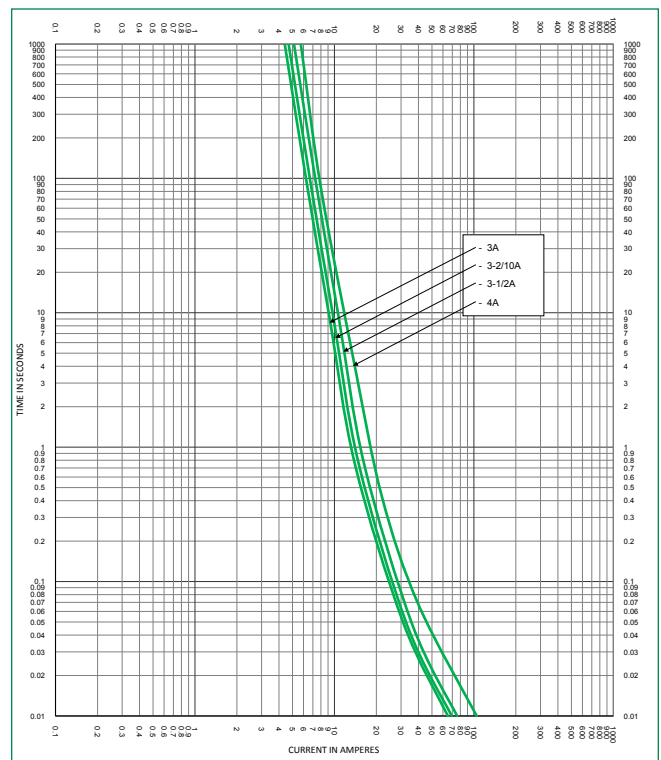
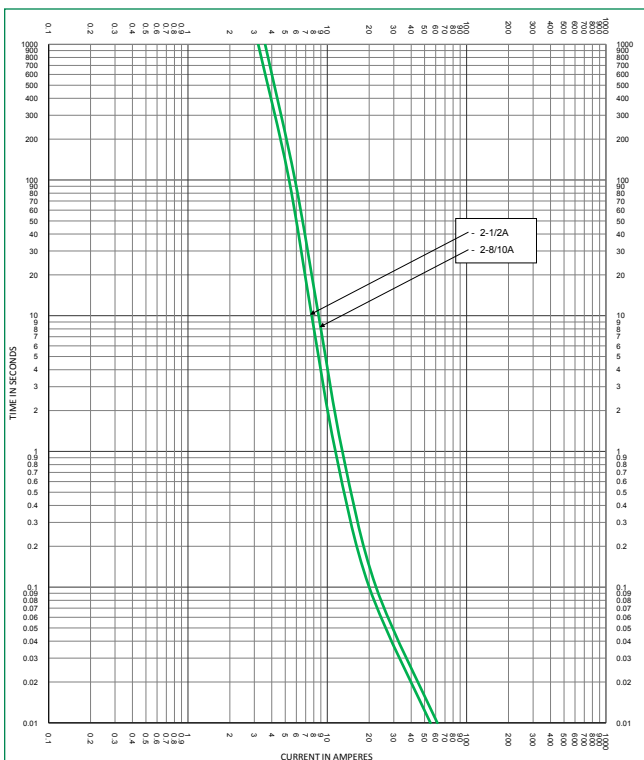
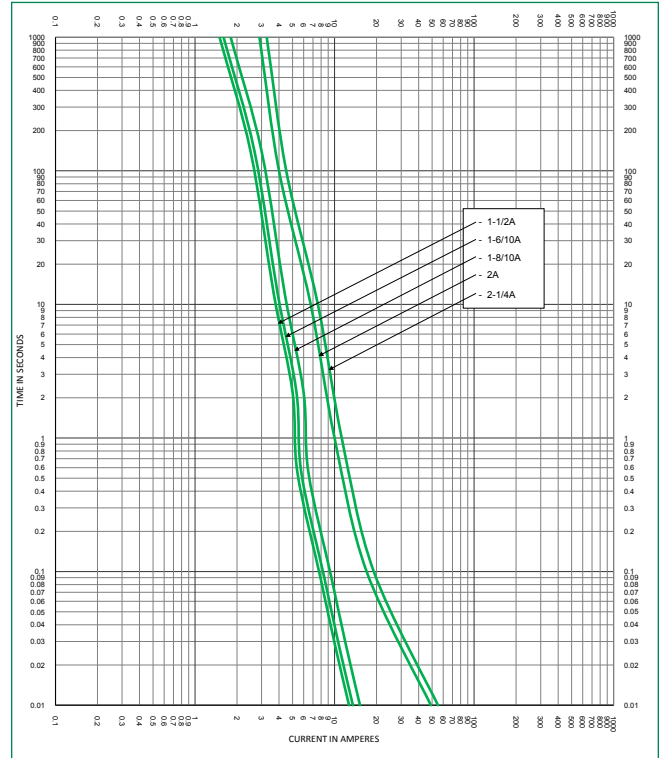
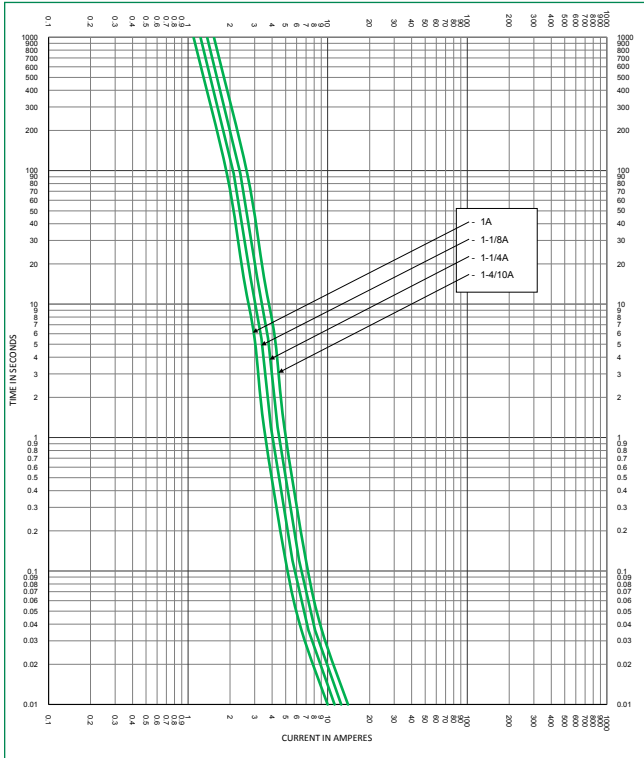


## Time Current Curves



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## Time Current Curves



# CLASS CC KLDR SERIES FUSES

## Time Current Curves

