

Class CC Fuses

KLDR Series

600 V ac • 300 V dc • Time-Delay • 1/10–30 A



Description

Use FLM 250 volt time-delay fuses to protect control circuit transformers, solenoids, and other circuits with high in-rush currents. Excellent for supplemental protection of small motors. For motor branch circuit protection, refer to Class CC fuses.

Features & Benefits

| FEATURES | BENEFITS |
|---|--|
| Excellent short-circuit protection | Improve safety through faster response to fault currents |
| Current limiting | Restricts fault currents to provide high degree of circuit protection |
| Rejection feature | Prevents use of fuses with lower interrupting ratings or voltage when used with corresponding fuse holders |

Applications

- Transformer Protection

Specifications

| | |
|----------------------------|---|
| Voltage Rating | Ac: 600 V Dc: 300 V |
| Amperage Rating | 1/10–30 A |
| Interrupting Rating | Ac: 200,000 A rms symmetrical Dc: 20,000 A |
| Material | Body: Melamine Caps: Nickel-plated Bronze |
| Fuse Weight | .019 lb (8.62g) |
| Approvals | Ac: Standard 248-4, Class CC Dc: Littelfuse self-certified |
| Environmental | RoHS Compliant |
| Country of Origin | Mexico |

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Certification & Compliance

| | |
|------------|-------------------------------|
| UL | UL Listed (File: E81895) |
| CSA | CSA Certified (File: LR29862) |
| CE | EU_DOC-KLDR_P_210128 |

Accessories

L60030C series fuse holder

LPSC Touch-Safe series fuse holder

LEC series inline fuse holder

571/572 series panel mount fuse holder

Ordering Information

| AMPERE RATING | CATALOG NUMBER | PRODUCT MARKING | PACKING QUANTITY | ORDERING NUMBER | UPC CODE |
|---------------|----------------|-----------------|------------------|-----------------|-------------|
| 1/10 | KLDR.100 | KLDR 1/10A | 10 | KLDR.100TXP | 07945896877 |
| | | | 100 | KLDR.100HXP | 07945879278 |
| 1/8 | KLDR.125 | KLDR 1/8A | 10 | KLDR.125TXP | 07945896878 |
| | | | 100 | KLDR.125HXP | 07945879279 |
| 15/100 | KLDR.150 | KLDR 15/100A | 10 | KLDR.150TXP | 07945896879 |
| | | | 100 | KLDR.150HXP | 07945879280 |
| 3/16 | KLDR.187 | KLDR 3/16A | 10 | KLDR.187TXP | 07945896880 |
| | | | 100 | KLDR.187HXP | 07945879281 |
| 3/10 | KLDR.200 | KLDR 3/10A | 10 | KLDR.200TXP | 07945879239 |
| | | | 100 | KLDR.200HXP | 07945879282 |
| 1/4 | KLDR.250 | KLDR 1/4A | 10 | KLDR.250TXP | 07945879240 |
| | | | 100 | KLDR.250HXP | 07945879283 |
| 3/10 | KLDR.300 | KLDR 3/10A | 10 | KLDR.300TXP | 07945879241 |
| | | | 100 | KLDR.300HXP | 07945879284 |
| 3/10 | KLDR.400 | KLDR 3/10A | 10 | KLDR.400TXP | 07945879242 |
| | | | 100 | KLDR.400HXP | 07945879285 |
| 1/2 | KLDR.500 | KLDR 1/2A | 10 | KLDR.500TXP | 07945879243 |
| | | | 100 | KLDR.500HXP | 07945879286 |
| 3/10 | KLDR.600 | KLDR 3/10A | 10 | KLDR.600TXP | 07945879244 |
| | | | 100 | KLDR.600HXP | 07945879287 |
| 3/4 | KLDR.750 | KLDR 3/4A | 10 | KLDR.750TXP | 07945879245 |
| | | | 100 | KLDR.750HXP | 07945879288 |
| 3/10 | KLDR.800 | KLDR 3/10A | 10 | KLDR.800TXP | 07945879246 |
| | | | 100 | KLDR.800HXP | 07945879289 |
| 1 | KLDR001 | KLDR 1A | 10 | KLDR001.TXP | 07945879247 |
| | | | 100 | KLDR001.HXP | 07945879290 |
| 1 1/8 | KLDR1.12 | KLDR 1-1/8A | 10 | KLDR1.12TXP | 07945879248 |
| | | | 100 | KLDR1.12HXP | 07945879291 |
| 1 1/4 | KLDR1.25 | KLDR 1-1/4A | 10 | KLDR1.25TXP | 07945879249 |
| | | | 100 | KLDR1.25HXP | 07945879292 |
| 1 3/10 | KLDR01.4 | KLDR 1-3/10A | 10 | KLDR01.4TXP | 07945879250 |
| | | | 100 | KLDR01.4HXP | 07945879293 |
| 1 1/2 | KLDR01.5 | KLDR 1-1/2A | 10 | KLDR01.5TXP | 07945879251 |
| | | | 100 | KLDR01.5HXP | 07945879294 |
| 1 5/10 | KLDR01.6 | KLDR 1-5/10A | 10 | KLDR01.6TXP | 07945879252 |
| | | | 100 | KLDR01.6HXP | 07945879295 |

Class CC Fuses

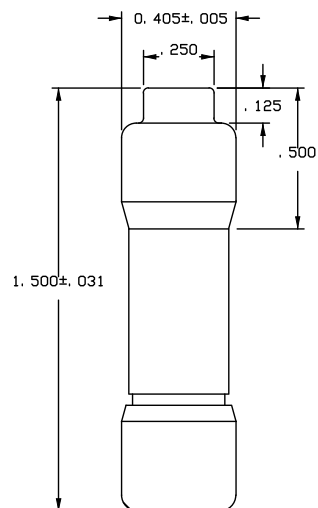
KLDR Series

Ordering Information (cont.)

| AMPERE RATING | CATALOG NUMBER | PRODUCT MARKING | PACKING QUANTITY | ORDERING NUMBER | UPC CODE |
|------------------|----------------|--------------------------|------------------|----------------------------|----------------------------|
| 1 $\frac{1}{10}$ | KLDR01.8 | KLDR 1- $\frac{1}{10}$ A | 10 100 | KLDR01.8TXP KLDR01.8HXP | 07945879253 07945879296 |
| 2 | KLDR002 | KLDR 2A | 10 100 | KLDR002.TXP KLDR002.HXP | 07945879254 07945879297 |
| 2 $\frac{1}{4}$ | KLDR2.25 | KLDR 2- $\frac{1}{4}$ A | 10 100 | KLDR2.25TXP KLDR2.25HXP | 07945879255 07945879298 |
| 2 $\frac{1}{2}$ | KLDR02.5 | KLDR 2- $\frac{1}{2}$ A | 10 100 | KLDR02.5TXP KLDR02.5HXP | 07945879256 07945879299 |
| 2 $\frac{3}{10}$ | KLDR02.8 | KLDR 2- $\frac{3}{10}$ A | 10 100 | KLDR02.8TXP KLDR02.8HXP | 07945879257 07945879300 |
| 3 | KLDR003 | KLDR 3A | 10 100 | KLDR003.TXP KLDR003.HXP | 07945879258 07945879301 |
| 3 $\frac{1}{10}$ | KLDR03.2 | KLDR 3- $\frac{1}{10}$ A | 10 100 | KLDR03.2TXP KLDR03.2HXP | 07945879259 07945879302 |
| 3 $\frac{1}{2}$ | KLDR03.5 | KLDR 3- $\frac{1}{2}$ A | 10 100 | KLDR03.5TXP KLDR03.5HXP | 07945879260 07945879303 |
| 4 | KLDR004 | KLDR 4A | 10 100 | KLDR004.TXP KLDR004.HXP | 07945879261 07945879304 |
| 4 $\frac{1}{2}$ | KLDR04.5 | KLDR 4- $\frac{1}{2}$ A | 10 100 | KLDR04.5TXP KLDR04.5HXP | 07945879262 07945879305 |
| 5 | KLDR005 | KLDR 5A | 10 100 | KLDR005.TXP KLDR005.HXP | 07945879263 07945879306 |
| 5 $\frac{1}{10}$ | KLDR05.6 | KLDR 5- $\frac{1}{10}$ A | 10 100 | KLDR05.6TXP KLDR05.6HXP | 07945879264 07945879307 |
| 6 | KLDR006 | KLDR 6A | 10 100 | KLDR006.TXP KLDR006.HXP | 07945879265 07945879308 |
| 6 $\frac{1}{4}$ | KLDR6.25 | KLDR 6- $\frac{1}{4}$ A | 10 100 | KLDR6.25TXP KLDR6.25HXP | 07945879266 07945879309 |
| 7 | KLDR007 | KLDR 7A | 10 100 | KLDR007.TXP KLDR007.HXP | 07945879267 07945879310 |
| 7 $\frac{1}{2}$ | KLDR07.5 | KLDR 7- $\frac{1}{2}$ A | 10 100 | KLDR07.5TXP KLDR07.5HXP | 07945879268 07945879311 |
| 8 | KLDR008 | KLDR 8A | 10 100 | KLDR008.TXP KLDR008.HXP | 07945879269 07945879312 |
| 9 | KLDR009 | KLDR 9A | 10 100 | KLDR009.TXP KLDR009.HXP | 07945879270 07945879313 |
| 10 | KLDR010 | KLDR 10A | 10 100 | KLDR010.TXP KLDR010.HXP | 07945879271 07945879314 |
| 12 | KLDR012 | KLDR 12A | 10 100 | KLDR012.TXP KLDR012.HXP | 07945879272 07945879315 |
| 15 | KLDR015 | KLDR 15A | 10 100 | KLDR015.TXP KLDR015.HXP | 07945879273 07945879316 |
| 17 $\frac{1}{2}$ | KLDR17.5 | KLDR 17- $\frac{1}{2}$ A | 10 100 | KLDR17.5TXP KLDR17.5HXP | 07945879274 07945879317 |
| 20 | KLDR020 | KLDR 20A | 10 100 | KLDR020.TXP KLDR020.HXP | 07945879275 07945879318 |
| 25 | KLDR025 | KLDR 25A | 10 100 | KLDR025.TXP KLDR025.HXP | 07945879276 07945879319 |
| 30 | KLDR030 | KLDR 30A | 10 100 | KLDR030.TXP KLDR030.HXP | 07945879277 07945879320 |

Class CC Fuses KLDL Series

Dimensions



Electrical Specification - Agency Requirements

| AMPERAGE RATING | OPENING TIME | | |
|--------------------|----------------------------|----------------------------|----------------------------|
| | 100 % OF AMP RATING PER UL | 135 % OF AMP RATING PER UL | 200 % OF AMP RATING PER UL |
| $\frac{1}{10}$ -30 | Temperature Stabilization | 60 Minutes Max | 12 Seconds Minimum |

Electrical Specifications

| CATALOG NUMBER | VOLTAGE RATING (V) | | INTERRUPTING RATING (A) | | MELT (PRE-ARC) I ² T (A ² S) | TOTAL CLEARING I ² T (A ² S) | AGENCY APPROVALS | |
|----------------|--------------------|-----|-------------------------|--------|--|--|------------------|-----|
| | AC | DC | AC | DC | | | UL | CSA |
| KLDR.100 | 600 | 300 | 200,000 | 20,000 | .0004 | .0059 | • | • |
| KLDR.125 | 600 | 300 | 200,000 | 20,000 | .0007 | .0055 | • | • |
| KLDR.150 | 600 | 300 | 200,000 | 20,000 | .0016 | .0059 | • | • |
| KLDR.187 | 600 | 300 | 200,000 | 20,000 | .0040 | .0267 | • | • |
| KLDR.200 | 600 | 300 | 200,000 | 20,000 | .0018 | .0230 | • | • |
| KLDR.250 | 600 | 300 | 200,000 | 20,000 | .0138 | .0967 | • | • |
| KLDR.300 | 600 | 300 | 200,000 | 20,000 | .0111 | .1005 | • | • |
| KLDR.400 | 600 | 300 | 200,000 | 20,000 | .0579 | .1420 | • | • |
| KLDR.500 | 600 | 300 | 200,000 | 20,000 | .0877 | .3121 | • | • |
| KLDR.600 | 600 | 300 | 200,000 | 20,000 | .1404 | .3742 | • | • |
| KLDR.750 | 600 | 300 | 200,000 | 20,000 | .2911 | 1.972 | • | • |
| KLDR.800 | 600 | 300 | 200,000 | 20,000 | .2416 | 2.064 | • | • |
| KLDR001 | 600 | 300 | 200,000 | 20,000 | .4494 | 5.883 | • | • |
| KLDR1.12 | 600 | 300 | 200,000 | 20,000 | .5049 | 5.149 | • | • |
| KLDR1.25 | 600 | 300 | 200,000 | 20,000 | .4367 | 7.354 | • | • |
| KLDR01.4 | 600 | 300 | 200,000 | 20,000 | .8135 | 7.639 | • | • |
| KLDR01.5 | 600 | 300 | 200,000 | 20,000 | .9302 | 5.885 | • | • |
| KLDR01.6 | 600 | 300 | 200,000 | 20,000 | .7495 | 6.682 | • | • |

Class CC Fuses

KLDR Series

Electrical Specifications (cont.)

| CATALOG NUMBER | VOLTAGE RATING (V) | | INTERRUPTING RATING (A) | | MELT (PRE-ARC) I ² T (A ² S) | TOTAL CLEARING I ² T (A ² S) | AGENCY APPROVALS | |
|----------------|--------------------|-----|-------------------------|--------|--|--|------------------|-----|
| | AC | DC | AC | DC | | | UL | CSA |
| KLDR01.8 | 600 | 300 | 200,000 | 20,000 | .9964 | 6.594 | • | • |
| KLDR002 | 600 | 300 | 200,000 | 20,000 | .8615 | 14.01 | • | • |
| KLDR2.25 | 600 | 300 | 200,000 | 20,000 | 1.126 | 26.41 | • | • |
| KLDR02.5 | 600 | 300 | 200,000 | 20,000 | 2.087 | 35.35 | • | • |
| KLDR02.8 | 600 | 300 | 200,000 | 20,000 | 21.28 | 45.47 | • | • |
| KLDR003 | 600 | 300 | 200,000 | 20,000 | 23.21 | 55.99 | • | • |
| KLDR03.2 | 600 | 300 | 200,000 | 20,000 | 37.92 | 57.27 | • | • |
| KLDR03.5 | 600 | 300 | 200,000 | 20,000 | 21.42 | 109.4 | • | • |
| KLDR004 | 600 | 300 | 200,000 | 20,000 | 83.81 | 258.6 | • | • |
| KLDR04.5 | 600 | 300 | 200,000 | 20,000 | 83.89 | 110.6 | • | • |
| KLDR005 | 600 | 300 | 200,000 | 20,000 | 63.33 | 84.04 | • | • |
| KLDR05.6 | 600 | 300 | 200,000 | 20,000 | 87.66 | 114.0 | • | • |
| KLDR006 | 600 | 300 | 200,000 | 20,000 | 129.5 | 161.9 | • | • |
| KLDR6.25 | 600 | 300 | 200,000 | 20,000 | 147.6 | 261.7 | • | • |
| KLDR007. | 600 | 300 | 200,000 | 20,000 | 202.4 | 513.4 | • | • |
| KLDR07.5 | 600 | 300 | 200,000 | 20,000 | 321.8 | 813.0 | • | • |
| KLDR008 | 600 | 300 | 200,000 | 20,000 | 111.2 | 1,145 | • | • |
| KLDR009 | 600 | 300 | 200,000 | 20,000 | 73.40 | 1,334 | • | • |
| KLDR010 | 600 | 300 | 200,000 | 20,000 | 132.0 | 934.8 | • | • |
| KLDR012 | 600 | 300 | 200,000 | 20,000 | 154.7 | 1,723 | • | • |
| KLDR015 | 600 | 300 | 200,000 | 20,000 | 200.5 | 2,248 | • | • |
| KLDR17.5 | 600 | 300 | 200,000 | 20,000 | 87.50 | 722.8 | • | • |
| KLDR020 | 600 | 300 | 200,000 | 20,000 | 123.8 | 1,363 | • | • |
| KLDR025 | 600 | 300 | 200,000 | 20,000 | 226.0 | 1,710 | • | • |
| KLDR030 | 600 | 300 | 200,000 | 20,000 | 299.6 | 1,990 | • | • |

Class CC Fuses

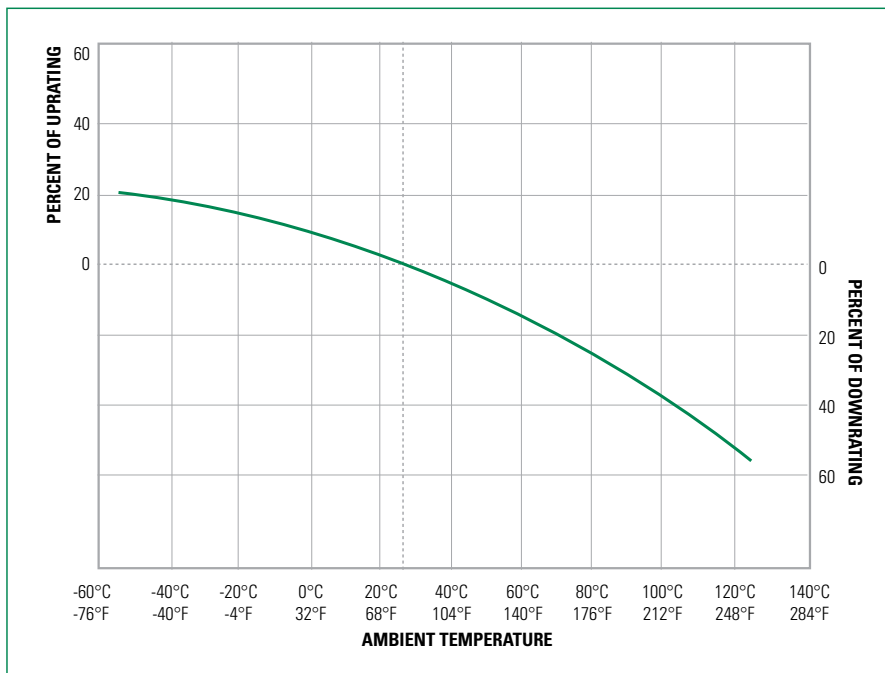
KLDR Series

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 |

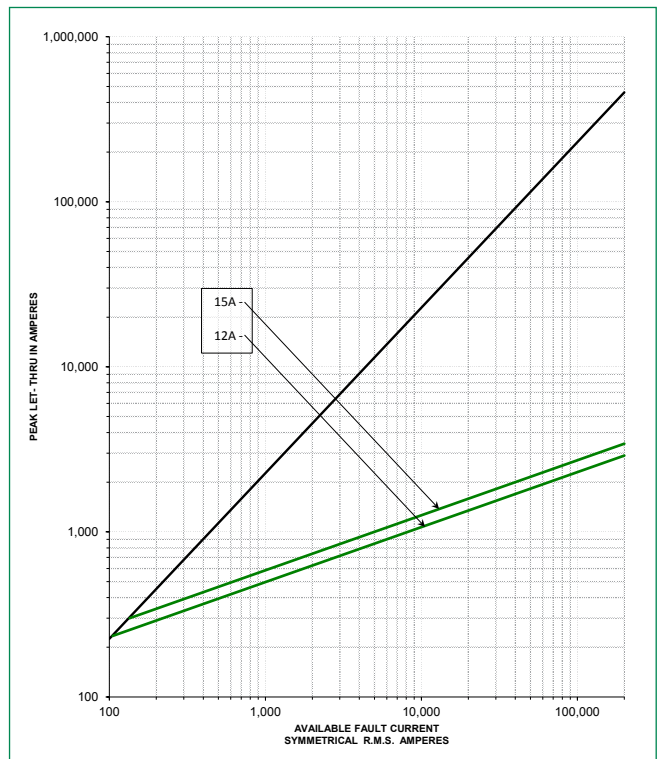
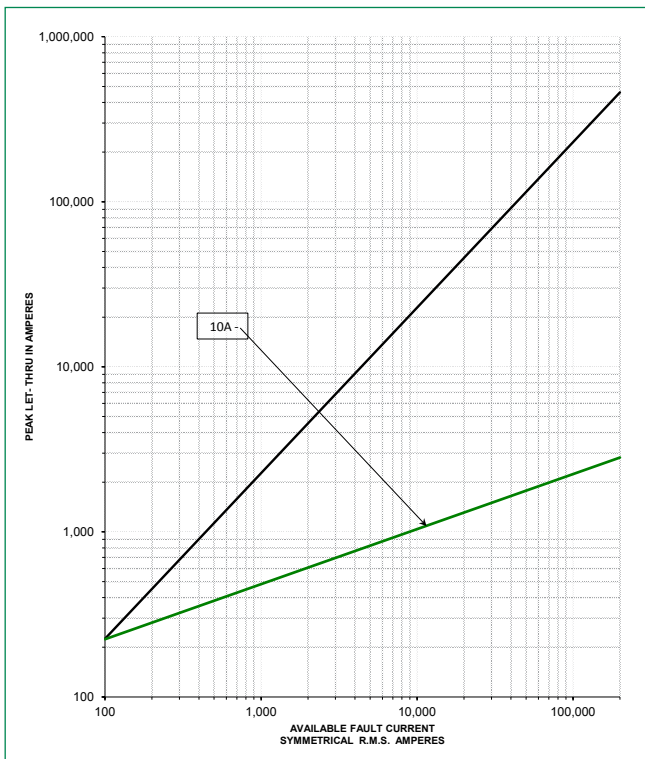
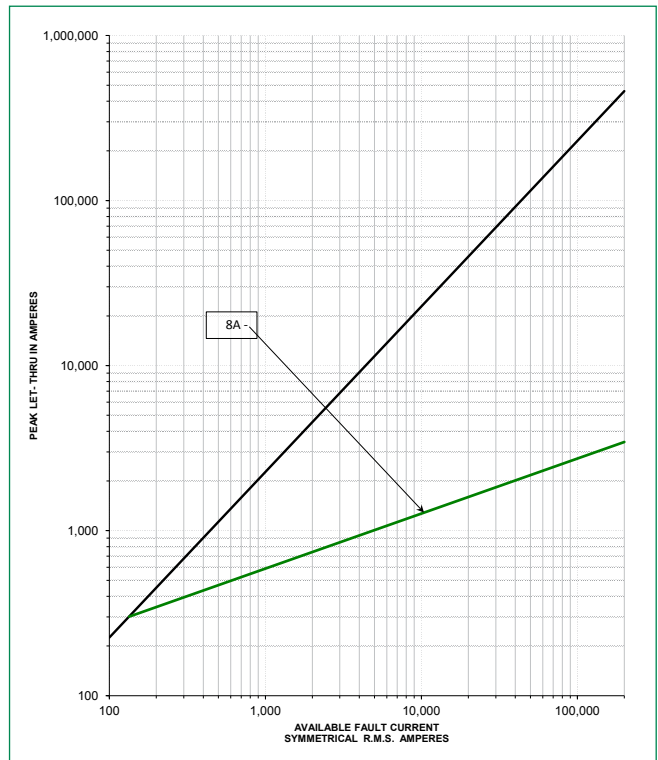
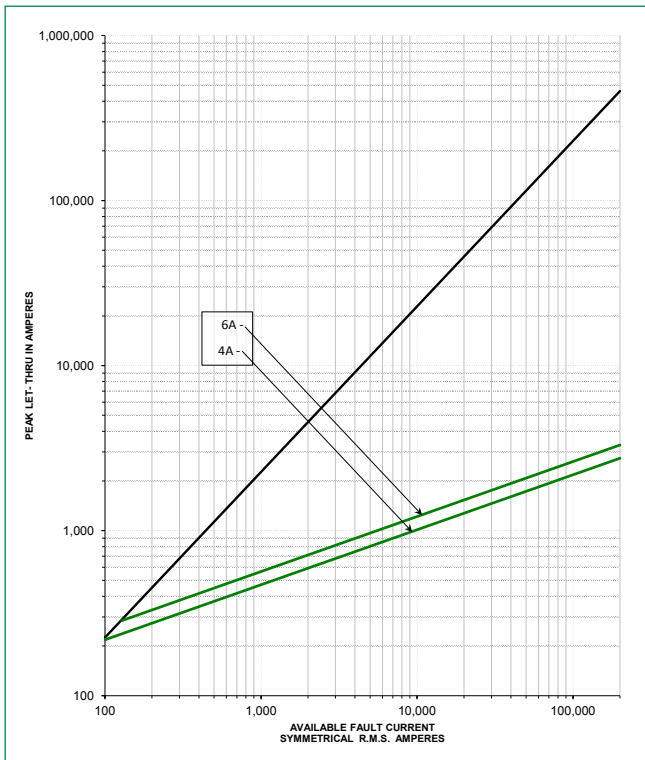
*Prospective RMS Symmetrical Amperes Short-Circuit Current
 Note: Data Derived from Peak Let-Thru Curves

Temperature Derating Curve (Temperature of Air Immediately Surrounding Fuse)



Class CC Fuses KLD R Series

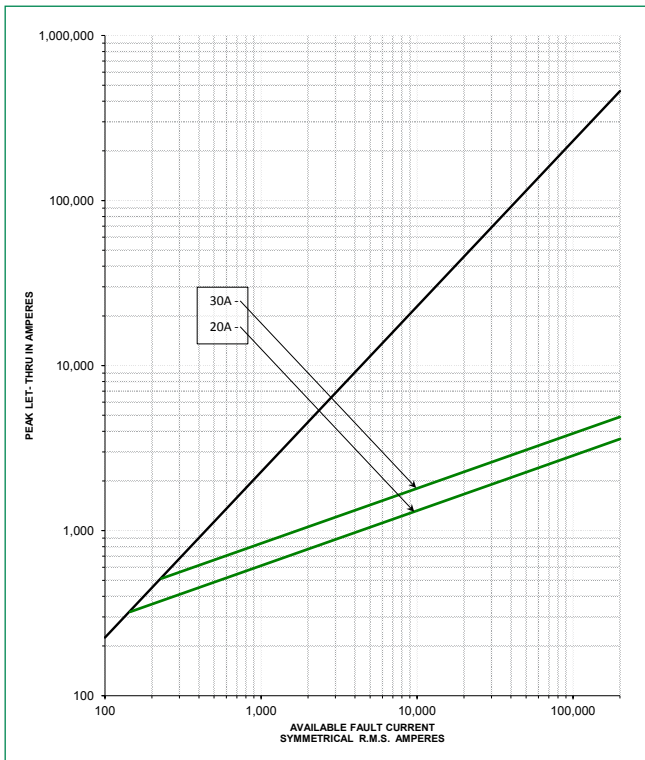
Peak Let-Thru Curves



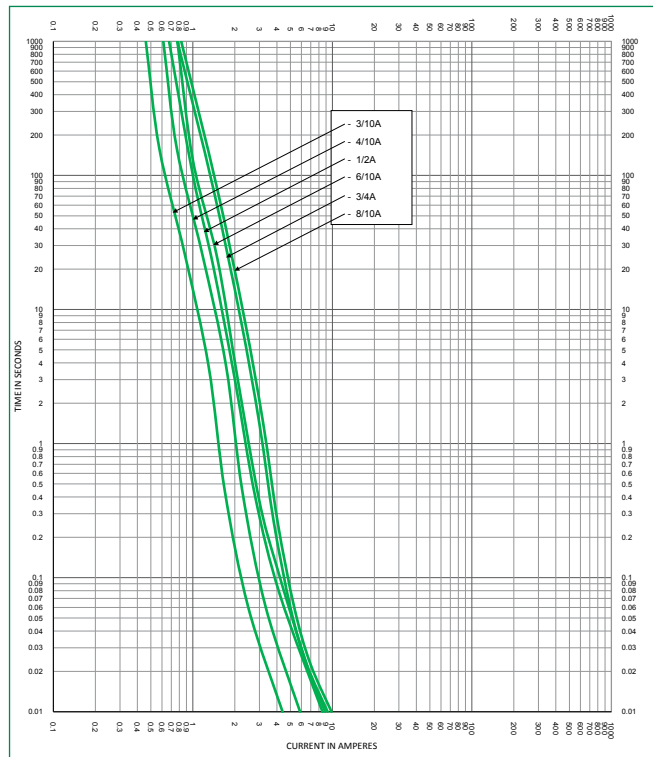
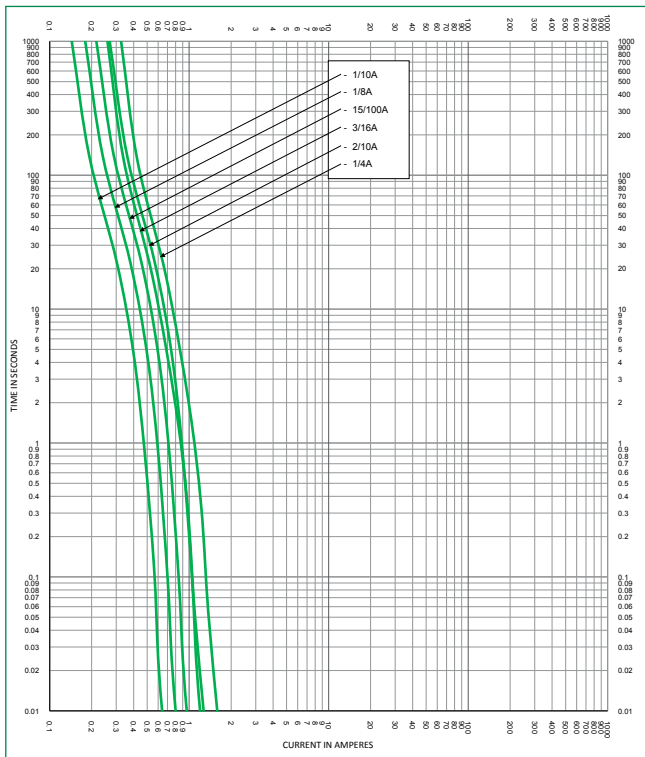
Class CC Fuses

KLDR Series

Peak Let-Thru Curves (cont.)



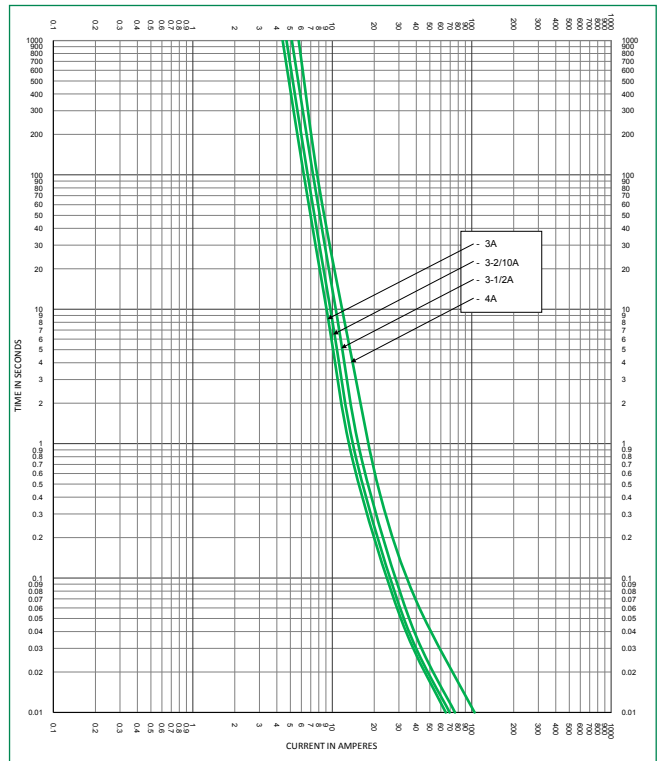
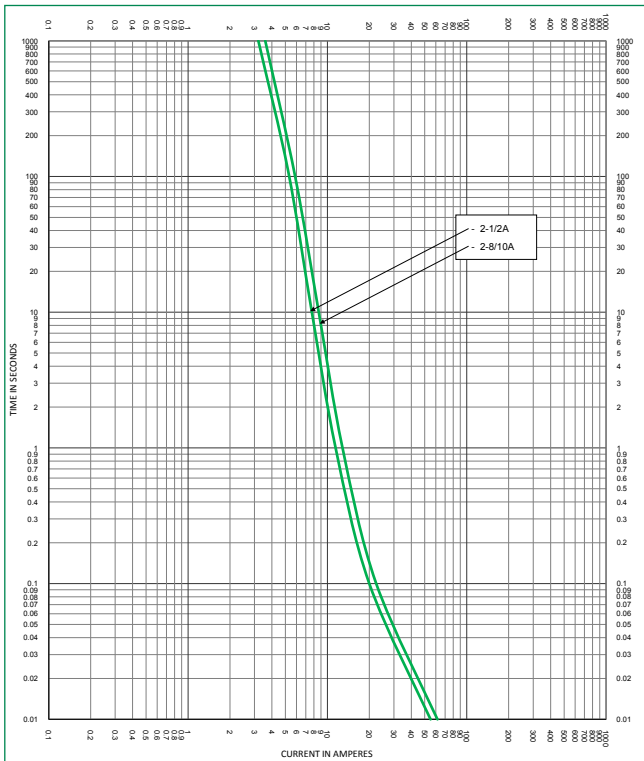
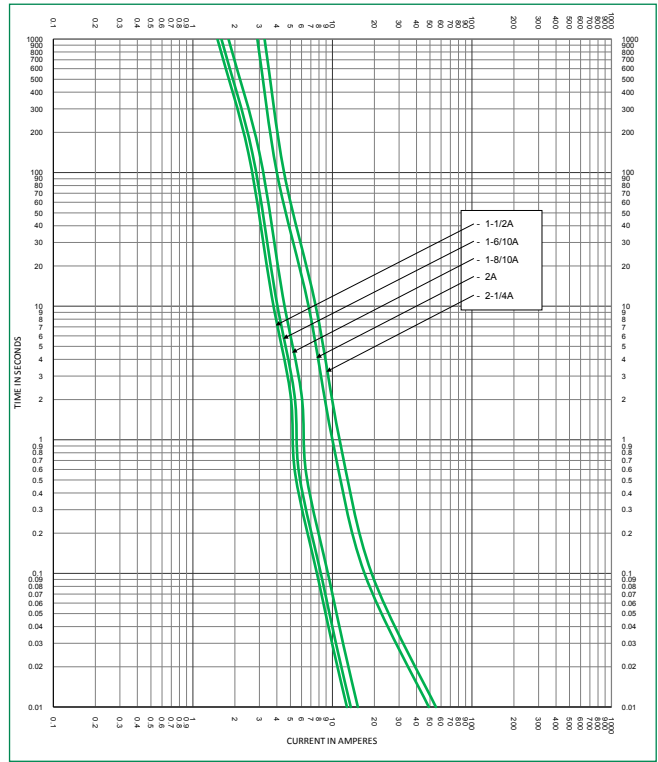
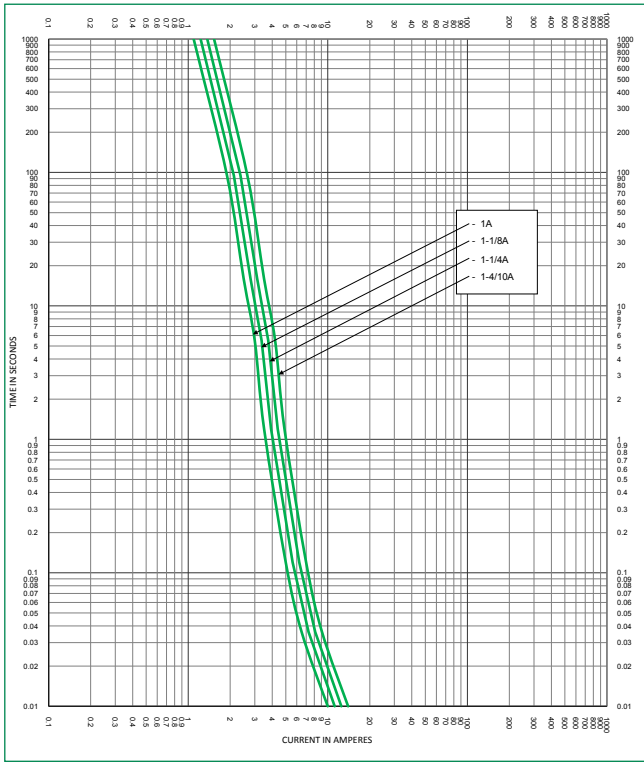
Time Current Curves



Class CC Fuses

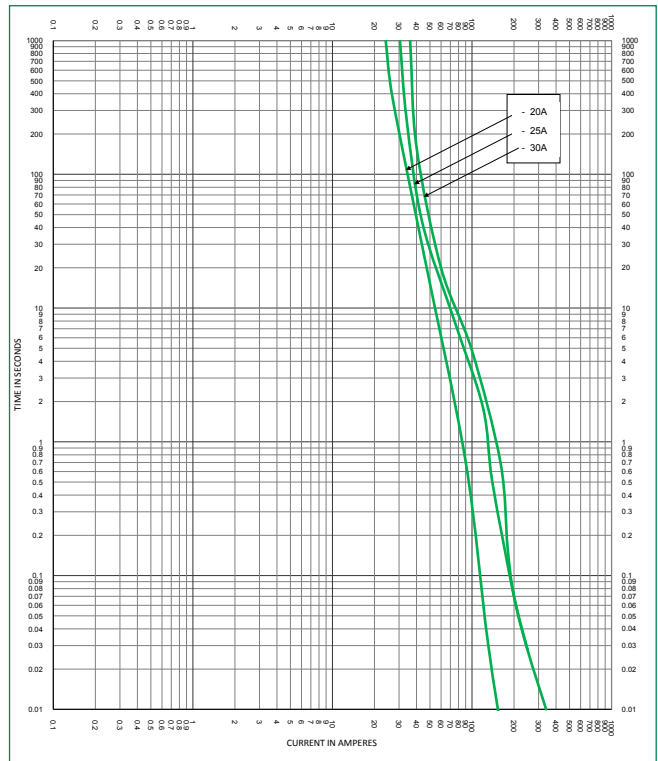
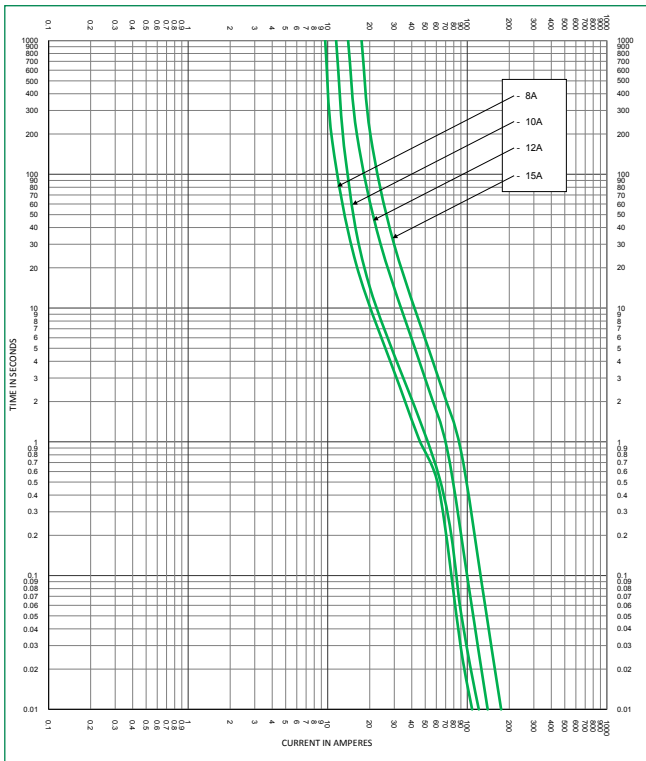
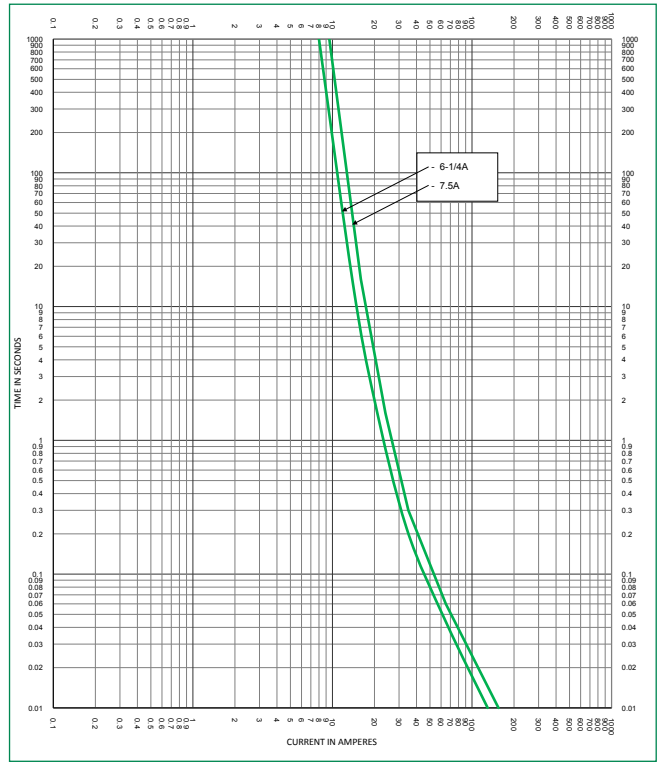
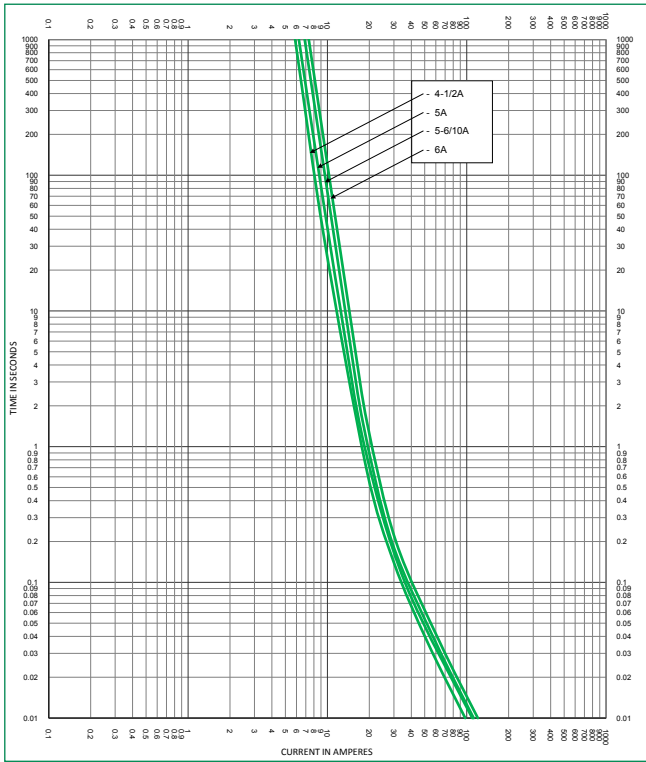
KLDR Series

Time Current Curves (cont.)



Class CC Fuses KLDR Series

Time Current Curves (cont.)



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