

CCMR SERIES POWR-PRO® FUSES

POWR-PRO® 600 VAC • Dual Element • Time-Delay • $2/_{10}$ -60 A



Description

The CCMR series is ideal for space saving protection of motors up to 40 hp*. It was designed specifically to withstand sustained starting currents of small motors. The CCMR 60 fuse is the smallest 60 A fuse available rated at 600 V. Compared to other UL Listed fuses, Class CC fuses are the most current-limiting, rating for rating.

Applications

- Motor and motor branch circuit protection

Features/Benefits

- POWR-PRO® Performance
- Extremely current-limiting
- Ratings up to 60 Amps
- 300 kA Interrupting Rating (self-certified)

Specifications

Voltage Ratings	AC: 600 V DC: 250 V (CCMR $2/_{10}$ – 2 A) (CCMR $4 1/2$ – 10 A) (CCMR 35– 60 A) 300 V (CCMR $2 1/4$ – 4 A) 500 V (CCMR 12– 30 A)
Interrupting Ratings	AC: 200 kA rms symmetrical 300 kA Littelfuse self-certified DC: 20 kA $2/_{10}$ – 60 A
Ampere Range Approvals	AC: Standard 248-4, Class CC UL Listed $1/_{10}$ -30 A (File No. E81895) Standard 248, Class CD UL Listed 35-60 A (File No. E81895) CSA Certified $1/_{10}$ -30 A (File No. LR29862) DC: Littelfuse self-certified

*Consult Motor Protection Tables on page 211 in the Technical Application Guide section for specific motor sizing information.

Ordering Information

AMPERE RATINGS						
$2/_{10}$	1	2	$3 1/2$	$6 1/4$	12	35
$1/4$	$1 1/4$	$2 1/4$	4	7	15	40
$3/_{10}$	$1 4/_{10}$	$2 1/2$	$4 1/2$	$7 1/2$	$17 1/2$	45
$1/2$	$1 1/2$	$2 8/_{10}$	5	8	20	50
$6/_{10}$	$1 6/_{10}$	3	$5 6/_{10}$	9	25	60
$8/_{10}$	$1 8/_{10}$	$3 2/_{10}$	6	10	30	

SERIES	AMPERAGE	CATALOG NUMBER	ORDERING NUMBER
CCMR	45	CCMR045	CCMR045.T

Web Resources

TC Curves, downloadable CAD drawings and other technical information: www.littelfuse.com/ccmr

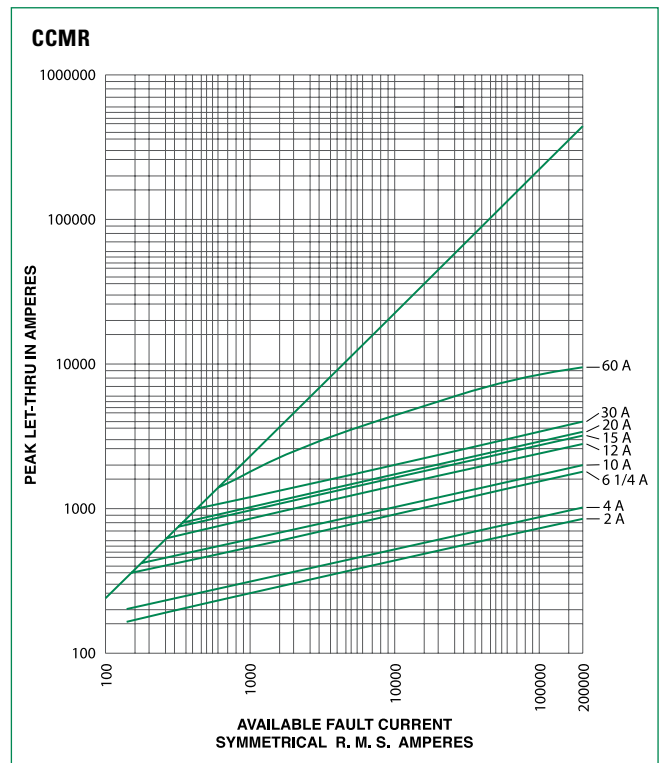
Recommended Fuse Holders

LFC600 Series	99
L60030C Series	99
LPSC Series.....	108

Dimensions

Please refer to the Class CC/CD dimensions 31

Peak Let-Thru Curve



Note: For more information, see Peak Let-Thru Table on pg. 31

CLASS CC/CD DIMENSIONS AND CURRENT-LIMITING EFFECTS

Dimensions Inches (mm)

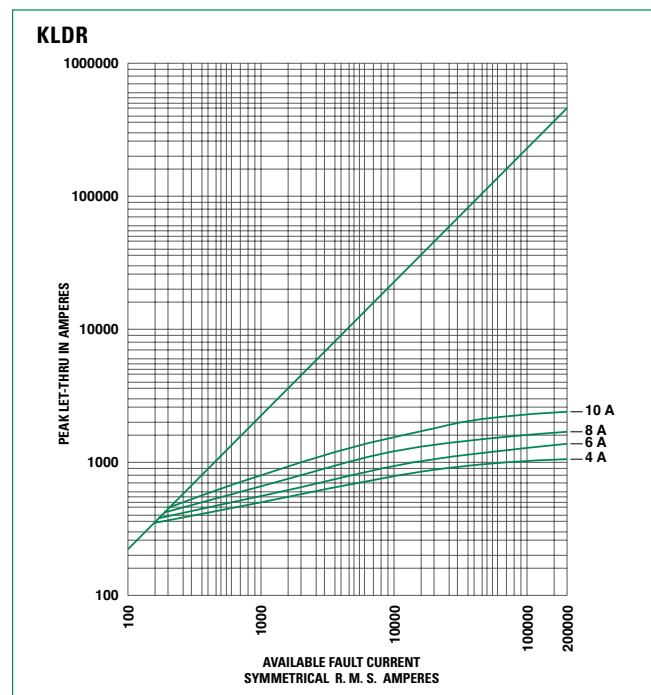


Current-Limiting Effects of CCMR (600 V) fuses

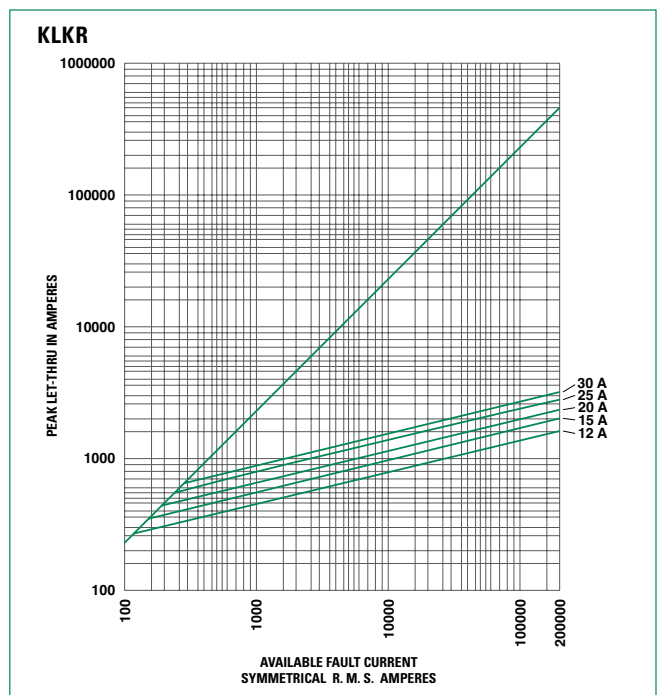
SHORT CIRCUIT CURRENT*	APPARENT RMS SYMMETRICAL CURRENT FOR VARIOUS FUSE RATINGS							
	2 A	4 A	6¼ A	10 A	12 A	15 A	20 A	30 A
5,000	160	190	330	370	525	600	625	750
10,000	180	220	400	440	600	700	725	875
15,000	200	250	430	480	675	775	800	950
20,000	220	260	460	520	720	825	850	1,000
25,000	230	280	480	550	750	850	900	1,050
30,000	240	290	500	570	800	900	950	1,125
35,000	245	300	520	590	825	925	975	1,175
40,000	255	310	550	600	850	975	1,000	1,200
50,000	260	330	570	640	875	1,000	1,100	1,300
60,000	280	340	600	670	900	1,050	1,125	1,350
80,000	300	360	625	700	1,000	1,125	1,200	1,400
100,000	310	380	650	750	1,050	1,200	1,250	1,500
150,000	340	420	700	800	1,150	1,300	1,400	1,600
200,000	350	440	750	850	1,200	1,400	1,450	1,750

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

Peak Let-Thru Curve KLDR



Peak Let-Thru Curve KLKR



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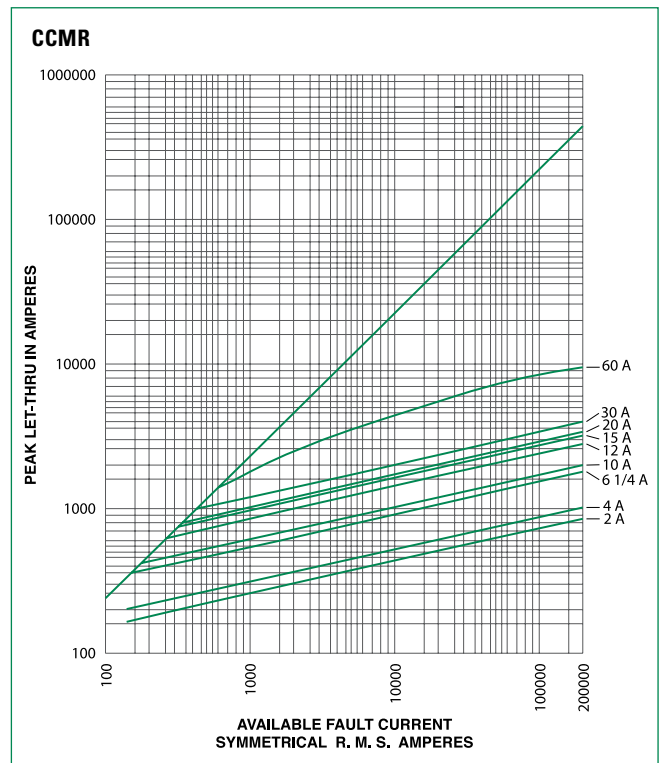
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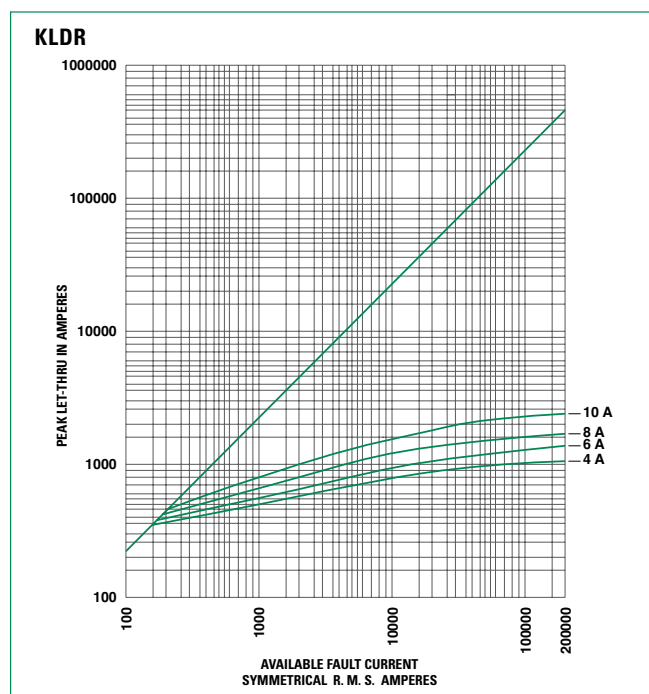


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25,000	230	280	480	550	750	850	900	1,050
30,000	240	290	500	570	800	900	950	1,125
35,000	245	300	520	590	825	925	975	1,175
40,000	255	310	550	600	850	975	1,000	1,200
50,000	260	330	570	640	875	1,000	1,100	1,300
60,000	280	340	600	670	900	1,050	1,125	1,350
80,000	300	360	625	700	1,000	1,125	1,200	1,400
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