

# CCMR Series POWR-PRO® CC Fuses

600 VAC ■ Dual-Element, Time-Delay ■ 2/10 – 60 Amperes

**Littelfuse**  
POWR-GARD™ Products



## SPECIFICATIONS

**Voltage Ratings:** AC: 600 Volts

DC: 250 Volts (CCMR 2/10 — 2A)  
(CCMR 4 1/2 — 10A)  
(CCMR 35 — 60A)  
300 Volts (CCMR 2 1/4 — 4A)  
500 Volts (CCMR 12 — 30A)

**Interrupting Ratings:** AC: 200,000 amperes rms symmetrical  
300,000 amperes rms symmetrical  
(Littelfuse self-certified)

DC: 20,000 amperes

**Ampere Range:** 2/10 — 60 amperes

**Approvals:** AC: Standard 248-4, Class CC

UL Listed 2/10 — 30 amps (File No: E81895)

Standard 248, Class CD

UL Listed 35 — 60 amps (File No: E71611)

CSA Certified 2/10 — 60 amps  
(File No: LR29862)

DC: Littelfuse self-certified

## AMPERE RATINGS

3/0	1	2	3 1/2	6 1/4	12	35
1/4	1 1/4	2 1/4	4	7	15	40
3/0	1 1/2	2 1/2	4 1/2	7 1/2	17 1/2	45
1/2	1 1/2	2 3/4	5	8	20	50
3/0	1 3/4	3	5 1/2	9	25	60
3/0	1 3/4	3 3/4	6	10	30	

Example part number (series & ampere): CCMR 40

## RECOMMENDED FUSE BLOCKS

L60030C series (CCMR 2/10 — 30A)

L60060C series (CCMR 35 — 60A)

Refer to Fuse Block section of this catalog for additional information.

For space-saving protection of motor circuits up to 40 HP\*, we recommend Littelfuse POWR-PRO® CCMR series fuses. These fuses are the only true dual-element, time-delay fuses in a package this small that are specifically engineered for motor branch circuit protection. They provide Type 2 protection (no damage) to both NEMA-rated and the more sensitive IEC (International Electrotechnical Commission) type motor circuit components.

Because CCMR fuses are the most current limiting rating for rating, and because their time-delay characteristics permit the use of smaller fuse ratings in motor circuits than would be possible with fast-acting fuses, CCMR fuses provide superior short-circuit protection. Furthermore, they provide this superior protection in a fraction of the space required by other fuse classes. For example, when 600V three-pole, 30 ampere Class R fuse blocks are replaced by Littelfuse Class CC fuse blocks, mounting space requirements may be reduced 70% or more. This is especially important when a panel contains control devices for many motors.

In addition to the UL Listed smaller sizes, Littelfuse CCMR series fuses are now available in larger sizes — from 35 to 60 amperes! **No other fuse is available with this current carrying capacity in a package this small. As a matter of fact, the 60 ampere CCMR fuse is the smallest 60A fuse available which is rated at 600 volts.**

\*Consult the Motor Protection Tables in the Fuseology section for specific motor sizing information

## APPLICATIONS

CCMR series fuses are specifically designed to withstand sustained starting currents of small motors

Provide short-circuit protection for motor branch circuits

Use with IEC- and NEMA-rated motor controllers and contactors

General purpose circuits up to 60 amps

## FEATURES/BENEFITS

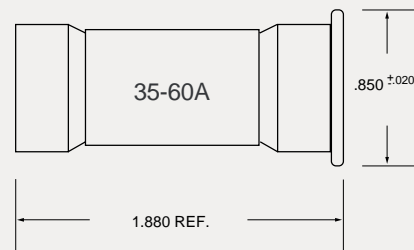
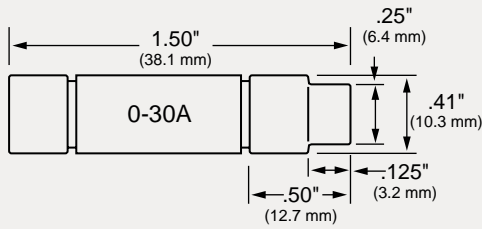
- **Space savings** — No other fuse class approved for branch-circuit protection has a 600 volt rating and 300,000 A.I.R. in a package this small.
- **Extremely current-limiting** — Reduces damage caused by heating and magnetic effects of short-circuit currents — stops damaging short-circuit currents faster than any mechanical protective device.
- **Excellent time delay** — Eliminates needless downtime caused by power surges or equipment demands . . . permits selection of fuse sizes closer to actual load conditions — provides better protection.
- **300kA Interrupting Rating** — Littelfuse self-certified to 300,000 amperes as standard. Meets future trend towards higher available short circuit currents.

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## Current-Limiting Effects of CCMR (600V) fuses

	Short Circuit Current*	Let-Thru Current** For Various Fuse Ratings							
		2A	4A	6 1/4A	10A	12A	15A	20A	30A
* Prospective RMS Symmetrical Amperes Short-Circuit Current	5,000	160	190	330	370	525	600	625	750
	10,000	180	220	400	440	600	700	725	875
** Apparent RMS Symmetrical	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
Note: Data derived from Peak Let-Thru Curves	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

