

POWR-BLOKS®



GUIDE TO DISTRIBUTION BLOCKS WITH HIGH SHORT-CIRCUIT CURRENT RATINGS (SCCR)



Short-Circuit Current Rating (SCCR) is the prospective symmetrical fault current at a nominal voltage to which an apparatus or system can be connected without sustaining damage exceeding defined acceptance criteria. (NEC Article 100)

Using current-limiting fuses is one of the easiest ways to increase the SCCR of a panel.

Please consult [Littelfuse SHORT CIRCUIT CURRENT RATINGS White Paper](#) for additional details or reach out to Techline@littelfuse.com with further SCCR calculation questions.

Pairing a POWR-BLOK with a preapproved current-limiting fuse exceeds the default 10kA SCCR (UL 508A, Table SB4.1) rating, which help fulfill high SCCR requirements.

OLD/LFD Series

POWR-BLOK DESCRIPTION							HIGH SCCR REQUIREMENTS									
LITTELFUSE ORDERING NUMBER	POLES	AMPS	RATED WIRE RANGE (OPENINGS) KCMIL/AWG		CONDUCTOR SIZE REQUIRED (KCMIL/AWG) ⁽²⁾		OVERCURRENT PROTECTION FUSE REQUIRED CLASS / LITTELFUSE SERIES / MAX AMP RATING ⁽³⁾						SCCR, IN RMS SYM AMPS ⁽¹⁾			
			LINE	LOAD	LINE	LOAD	J	T	RK1	RK5	G	CC				
							JTD_ID	JLLN OR JLLS	LLNRK OR LLSRK_ID	FLNR_ID OR FLSR_ID	SLC	CCMR, KLDR OR KLKR				
OLD14401Z	1	115	(1) 2 - 14	(4) 10 - 18	2 - 6 Cu	10 Cu	200	200	200	60	60	30	100,000			
OLD14402Z	2				2 - 10 Cu	10 - 14 Cu	150	150	100	30	30	30	100,000			
OLD14403Z	3				2 - 12	10 - 14	60	60	30	-	50	30	100,000			
OLD14404Z	4															
LFD14003Z	3	115	(1) 2 - 14	(4) 10 - 18	2 - 10	10	200	200	200	60	60 (100 kA)	30	200,000			
					2 - 14	10 - 14	30	30	30	30	60 (100 kA)					
OLD25701ZXDIN	1	175	(1) 2/0 - 14	(4) 4 - 14	2/0 - 6 Cu	4 - 10 Cu	200	200	200	100	60	30	100,000			
OLD25702ZXDIN	2				2/0 - 10 Cu	4 - 14 Cu	150	150	100	30	60	30	100,000			
OLD25703ZXDIN	3															
OLD25801ZXDIN	1	175	(1) 2/0 - 14	(6) 4 - 14	2/0 - 6 Cu	4 - 10 Cu	200	200	200	100	60	30	100,000			
OLD25802ZXDIN	2				2/0 - 10 Cu	4 - 14 Cu	150	150	100	30	60	30	100,000			
OLD25803ZXDIN	3															
LFD04013Z	3	175	(1) 2/0 - 14	(6) 4 - 14	2/0 -10 str.	4 - 10 str.	200	200	200	100	-	30	200,000			
					2/0 - 14 str.	4 - 14 str.	30	30	30	30	60 (100 kA)					
					10 - 14 sol.	10 - 14 sol.										
LFD25702Z	2	175	(1) 2/0 - 14	(4) 4 - 14	2/0 - 10	4 - 10	200	200	200	100	-	30	200,000			
					2/0 - 14	4 - 14	30	30	30	30	60 (100 kA)					
LFD25703Z	3	175	(1) 2/0 - 14	(4) 4 - 14	2/0 - 10	4 - 10	200	200	200	100	-	30	200,000			
					2/0 - 14	4 - 14	30	30	30	30	60 (100 kA)					
OLD45543ZX	3	310	(1) 350 - 6	(2) 2/0 - 14	350 - 6	2/0 - 6	400	400	200	100	60	30	100,000			
OLD45531ZX	1	335	(1) 400 - 6	(6) 2 - 14	400 - 3/0	2 - 6	600	600	600	200	60	30	100,000			
OLD45533ZX	3				400 - 6	2 - 10	300	300	200	100	60	30	100,000			
OLD45551ZX	1	350	(2) 2/0 - 14	(6) 4 - 14	2/0 - 2	4 - 8	400	400	400	100	60	30	100,000			
OLD45553ZX	3				2/0 - 6	4 - 10	200	200	200	100	60	30	100,000			
LFD35553Z	3	350	(2) 2/0 - 14	(6) 4 - 14	2/0 - 4	4	400	400	400	200	60 (100 kA)	30	200,000			
					2/0 - 14	4 - 14	30	30	30	30						
OLD55791Z	1	380	(1) 500 - 4	(6) 2/0 - 14	500 - 3/0	2/0 - 6	400	400	400	100	60	30	100,000			
OLD55792Z	2				2/0 - 4	8 - 14	200	200	200							
LFD55793Z	3	380	(1) 500 - 4	(6) 2/0 - 14	500 - 4	2/0 - 4	400	400	400	200	60 (100 kA)	30	200,000			
						2/0 - 14	30	30	30	30						
LFD35523Z	3	380	(1) 500 - 6	(4) 2 - 14	500 - 4	2	400	400	400	200	60 (100KA)	30	200,000			
					500 - 6	2 - 14	30	30	30	30		30				
LFD35533Z	3	380	(1) 500 - 6	(6) 2 - 14	500 - 4	2	400	400	400	200	60 (100 kA)	30	200,000			
					500 - 6	2 - 14	30	30	30	30						
LFD55523Z	3	380	(1) 500 - 4	(12) 2 - 14	500 - 4	2 - 4	600	600	400	200	60	30	100,000			
						2 - 14	30	30	30	30	60 (100 kA)		200,000			
OLD45851ZX	1	420	(1) 600 - 2	(8) 2 - 14	600 - 3/0	2 - 6	450	450	400	200	60	30	100,000			
OLD45853ZX	3				600 - 2	2 - 10	250	250	200	100	60	30	100,000			
					600 - 2	2 - 14	125	125	100	30	60	30	100,000			
OLD45881ZX	1	420	(1) 600 - 2	(3) 1/0 - 4 (L)	600 - 3/0	1/0 - 8 (L)	500	500	400	200	60	30	100,000			
						2 - 8 (S)										
OLD45883ZX	3	420	(1) 600 - 2	(6) 2 - 14 (S)	600 - 2	1/0 - 10 (L)	300	300	200	100	60	30	100,000			
						2 - 10 (S)										
OLD45951ZX	1	420	(1) 600 - 2	(12) 4 - 14	600 - 3/0	4 - 6	450	450	400	200	60	30	100,000			
OLD45953ZX	3				600 - 2	4 - 10	250	250	200	100						
					600 - 2	4 - 14	125	125	100	30						

*(L) = Large Opening; *(S) = Small Opening

OLD/LFD Series Continued

POWR-BLOK DESCRIPTION							HIGH SCCR REQUIREMENTS										
LITTELFUSE ORDERING NUMBER	POLES	AMPS	RATED WIRE RANGE (OPENINGS) KCMIL/AWG		CONDUCTOR SIZE REQUIRED (KCMIL/AWG) ⁽²⁾		OVERCURRENT PROTECTION FUSE REQUIRED CLASS / LITTELFUSE SERIES / MAX AMP RATING ⁽³⁾						SCCR, IN RMS SYM AMPS ⁽¹⁾				
			LINE	LOAD	LINE	LOAD	J	T	RK1	RK5	G	CC					
							JTD_ID	JLLN OR JLLS	LLNRK OR LLSRK_ID	FLNR_ID OR FLSR_ID	SLC	CCMR, KLDR OR KLKR					
OLD45961ZX	1	510	(2) 250 - 6	(12) 4 - 14	250 - 4	4 - 10	400	400	400	100	60	30	100,000				
OLD45963ZX	3				250 - 6	4 - 14	150	150	100	30							
OLD55861Z	1	760	(2) 500 - 4	(8) 2/0 - 14	500 - 250 Cu	2/0 - 4 Cu	600	600	400	200	60	30	100,000				
OLD55862Z	2	760	(2) 500 - 4	(8) 2/0 - 14	500 - 4 Cu	2/0 - 10 Cu	350	350	200	100	60	30	100,000				
LFD55863Z	3	760	(2) 500 - 4	(8) 2/0 - 14	(2) 500 - 4	2/0 - 4	600	600	400	200	60	30	100,000				
					2 - 4	2 - 4	30	30	30	30	60 (100 kA)		200,000				
OLD55921Z	1	760	(2) 500 - 4	(12) 4 - 14	500 - 250 Cu	4 - 8 Cu	400	400	200	100	60	30	100,000				
OLD55922Z	2				500 - 4 Cu	4 - 10 Cu	350	350	200	100	60	30	100,000				
LFD55923Z	3	760	(2) 500 - 4	(12) 4 - 14	(2) 500 - 4	4	600	600	400	200	60	30	100,000				
					2 - 4	4 - 14	30	30	30	30	60 (100 kA)	30	200,000				
OLD54113Z	3	840	(2) 600 - #2	(4) 3/0 - 6 (L) (4) 4-14 (S)	600-2	3/0-6 (L)	600	600	600	200	60	30	100,000				
						2-6 (S)											
						3/10-10 (L)	250	250	200	60	60	30	100,000				
						2-10 (S)											
OLD57041Z	1	950	(2) 750 - 1/0	(10) 2/0 - 14	750-1/0	2/0-2	600	700	600	200	60	-	100,000				
OLD57043Z	3					2/0-6	300	300	200	100	60	-	100,000				
OLD57051Z	1	950	(2) 750 - 1/0	(3) 250 - 6 (L) (12) 2 - 14 (S)	750-1/0	250-2 (L)	600	700	600	200	60	30	100,000				
OLD57053Z	3					250-6 (L) 2-6 (S)	300	300	200	100	60	30	100,000				
OLD57071Z	1	950	(2) 750 - 1/0	(4) 3/0 - 6 (L) (12) 2 - 14 (S)	750 - 1/0	3/0 - 2 (L)	600	700	600	200	60	30	100,000				
OLD57073Z	3					3/0 - 6 (L)	300	300	200	100							
						2 - 6 (S)	300	300	200	100							

*(L) = Large Opening; *(S) = Small Opening

OLS/LFS Series

POWR-BLOK DESCRIPTION							HIGH SCCR REQUIREMENTS						
LITTELFUSE ORDERING NUMBER	POLES	AMPS	RATED WIRE RANGE (OPENINGS) KCMIL/AWG		CONDUCTOR SIZE REQUIRED (KCMIL/AWG) ⁽²⁾		OVERCURRENT PROTECTION FUSE REQUIRED CLASS/LITTELFUSE SERIES/MAX AMP RATING ⁽³⁾						SCCR, IN RMS SYM AMPS ⁽¹⁾
			LINE	LOAD	LINE	LOAD	J	T	RK1	RK5	G	CC	
							JTD_ID	JLLN OR JLLS	LLNRK OR LLSRK_ID	FLNR_ID OR FLSR_ID	SLC	CCMR, KLDL OR KLKR	
LFS13003Z	3	115	(1) 2 - 14	(1) 2 - 14	2 - 10	2 - 10	200	200	200	100	60 (100 kA)	30	200,000
OLS13301Z	1	115	(1) 2 - 14	(1) 2 - 14	2 - 6 Cu	2 - 6 Cu	200	200	200	100	60	30	100,000
OLS13302Z	2												
OLS13303Z	3				2 - 10 Cu	2 - 10 Cu	100	100	100	30	60	30	100,000
OLS13304Z	4												
OLS25721ZXDIN	1	175	(1) 2/0 - 14	(1) 2/0 - 14	2/0 - 6	2/0 - 6	200	200	200	100	60	30	100,000
OLS25722ZXDIN	2												
OLS25723ZXDIN	3												
LFS25723Z	3	175	(1) 2/0 - 14	(1) 2/0 - 14	2/0 - 6	2/0 - 6	200	200	200	100	60 (100 kA)	30	200,000
OLS45821ZX	1	310	(1) 350 - 6	(1) 350 - 6	350 - 6	350 - 6	500	500	400	200	60	30	100,000
OLS45823ZX	3												
OLS43053ZX	3	350	(2) 2/0 - 14	(2) 2/0 - 14	2/0 - 6	2/0 - 8	400	400	200	100	60	30	100,000
OLS43601ZX	1	420	(1) 600 - 2	(1) 600 - 2	600 - 2	600 - 2	400	400	200	100	60	30	100,000
OLS43603ZX	3												
OLS43503ZX	3	620	(2) 350 - 6	(2) 350 - 6	350 - 4	350 - 4	500	500	400	200	60	30	100,000
OLS51291Z	1	620	(2) 350 - 4	(2) 350 - 4	350 - 4 Cu	350 - 4 Cu	600	600	-	-	-	-	50,000
OLS51292Z	2						450	450	400	200	60	30	100,000
OLS51293Z	3												
OLS53011Z	1	760	(2) 500 - 4	(2) 500 - 4	500 - 4 Cu	500 - 4 Cu	500	500	400	200	60	30	100,000
OLS53012Z	2												
OLS53013Z	3												

GDB Series

POWR-BLOK DESCRIPTION							HIGH SCCR REQUIREMENTS						
LITTELFUSE ORDERING NUMBER	POLES	AMPS	RATED WIRE RANGE (OPENINGS) KCMIL/AWG		CONDUCTOR SIZE REQUIRED (KCMIL/AWG) ⁽²⁾		OVERCURRENT PROTECTION FUSE REQUIRED CLASS/LITTELFUSE SERIES/MAX AMP RATING ⁽³⁾						SCCR, IN RMS SYM AMPS ⁽¹⁾
			LINE	LOAD	LINE	LOAD	J	T	RK1	RK5	G	CC	
							JTD_ID	JLLN OR JLLS	LLNRK OR LLSRK_ID	FLNR_ID OR FLRS_ID	SLC	CCMR, KLDR OR KLKR	
GDB60801Z	1	80	(1) 8 - 4	(6) 8 - 4	8 - 4	14 - 10 sol/str	80	-	-	-	-	-	100,000
GDB61151Z	1	115	(1) 8 - 2 (L)	(6) 14 - 4	8 - 2	14 - 4 sol/str	125	-	-	-	-	-	100,000
			(1) 10 - 6 (S)	(6) 14 - 4		14 - 4 sol/str		-	-	-	-	-	
GDB61153Z	3	115	(1) 8 - 2	(6) 14 - 4	8 - 2	14 - 4 sol/str	125	-	-	-	-	-	100,000
GDB61601Z	1	160	(1) 8 - 2/0	(6) 14 - 4	8 - 2/0	14 - 4 sol/str	175	-	-	-	-	-	100,000
GDB61753Z	3	175	(1) 8 - 2/0	(6) 14 - 4	8 - 2/0	14 - 4 sol/str	175	-	-	-	-	-	100,000
GDB63101Z	1	310	(1) 3/0 - 350	(2) 2 - 14	3/0 - 350	14 - 6 (Top)	350	-	-	-	-	-	100,000
				(5) 6 - 14		14 - 8 (Mid)		-	-	-	-	-	
				(4) 8 - 14		14 - 2 (Bot)		-	-	-	-	-	

*(L) = Large Opening; *(S) = Small Opening

NOTE: The connectors were tested and approved at 90 °C per UL 486 A/B - ampacity reflect 90 °C column in Table 310-16 of NEC. Current-limiting fuses, as specified above, must be installed upstream (line side) of the POWR-BLOK to achieve an increased SCCR.

(1) Short-circuit current ratings may be marked on the block or instructions provided with the terminal block

(2) Size range of conductors necessary to maintain noted SCCR

(3) Maximum size of line side overcurrent protection to provide noted SCCR

If a manufacturer has not provided the product's SCCR, then refer to Table SB4.1 in UL 508A Supplement SB, which provides an assumed maximum SCCR for the device.