

UL Class J full range high speed drive fuses

DFJ — UL Class J full range high speed fuse

600 Vac/450 Vdc (UL), 1 to 600 A

Description

UL Class J high speed, full range current-limiting fuses provide maximum protection for AC and DC drives and controllers. The UL Class J Bussmann series DFJ fuse has the lowest I^2t of any branch circuit fuse to protect power semiconductor devices that utilize diodes, GTOs, SCRs and SSRs. The DFJ fuse combines the performance of high speed fuses in a full range Class J branch circuit package, allowing the use of readily available Class J fuse blocks, holders and switches.

Specifications

Ratings

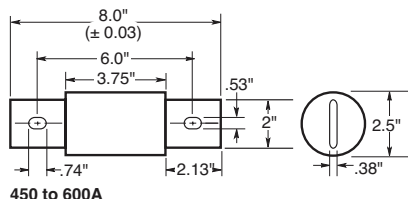
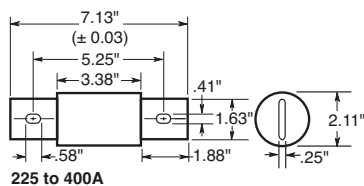
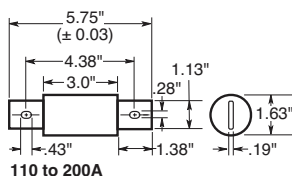
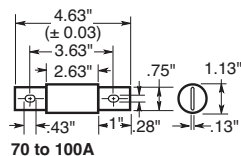
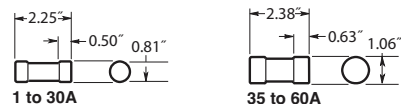
- Volts:
 - 600 Vac (UL)
 - 450 Vdc (UL) (15-600 A)
- Amps: 1-600 A
- Interrupting rating:
 - 200 kA RMS Sym.
 - 100 kA DC

Operating class: aR

Agency information

- UL Listed, Std 248-8, Class J, Guide JDDZ, File E4273
- CSA Certified, C22-2 No 248.8, Class 1422-02, File 53787

Dimensions — in



Catalog no.	Amps	I^2t (A ² Sec) @ 600 Vac/100 kA		Watts loss*
		Pre-arc	Clearing	
DFJ-1	1	—	—	—
DFJ-2	2	—	—	—
DFJ-3	3	—	—	—
DFJ-4	4	—	—	—
DFJ-5	5	—	—	—
DFJ-6	6	—	—	—
DFJ-8	8	—	—	—
DFJ-10	10	—	—	—
DFJ-12	12	—	—	—
DFJ-15	15	4	110	4.1
DFJ-17.5	17.5	—	—	—
DFJ-20	20	8	365	4.0
DFJ-25	25	12	610	4.9
DFJ-30	30	20	1000	5.5
DFJ-35	35	55	1100	6.8
DFJ-40	40	90	1900	8.6
DFJ-50	50	140	2800	8.7
DFJ-60	60	290	6000	8.5
DFJ-70	70	450	3100	12
DFJ-80	80	650	4600	13
DFJ-90	90	1010	7200	13
DFJ-100	100	1460	10,500	13
DFJ-110	110	1710	9500	17
DFJ-125	125	3580	20,000	15
DFJ-150	150	5080	28,000	19
DFJ-175	175	6310	35,000	23
DFJ-200	200	9850	54,500	24
DFJ-225	225	11,420	51,000	29
DFJ-250	250	17,000	74,500	30
DFJ-300	300	23,500	103,000	36
DFJ-350	350	38,800	170,000	39
DFJ-400	400	62,200	272,000	40
DFJ-450	450	44,600	270,000	56
DFJ-500	500	79,500	480,000	52
DFJ-600	600	138,000	830,000	57

* Watts loss at rated current.

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Recommended fuse blocks

30 and 60 amp block catalog numbers

Fuse amp range	Poles	Terminal type				Optional covers*	
		Box lug/slot screw	Box lug/hex screw	#10-32 Phil-slot screw	Pressure plate	Indicating**	Non-indicating
up to 30	1	JM60030-1CR	JM60030-1CHR	JM60030-1SR	JM60030-1PR	CVRI-J-60030	CVR-J-60030
	2	JM60030-2CR	JM60030-2CHR	JM60030-2SR	JM60030-2PR		
	3	JM60030-3CR	JM60030-3CHR	JM60030-3SR	JM60030-3PR		
35 to 60	1	JM60060-1CR	JM60060-1CHR	—	—	CVRI-J-60060	CVR-J-60060
	2	JM60060-2CR	JM60060-2CHR				
	3	JM60060-3CR	JM60060-3CHR				

* Covers sold separately, one cover per pole.

** Open fuse indication requires 90 volts minimum and closed circuit to operate.

30 and 60 amp block terminals and conductors

Terminal type	AWG type/range	AWG	Torque N·m (lb-in)
Box lug	75°C Cu 2-14, Al 2-8	2-3	5.6 (50)
		4-6	5.1 (45)
		8	4.5 (40)
		10-14	4.0 (35)
#10-32 Phil-slot screw	75/90°C Cu 10-18	10-18	2.3 (20)
Pressure plate			

Data sheet: 10488

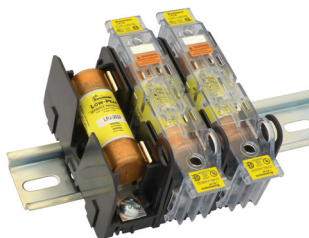
100 to 600 amp knifeblade blocks and covers

Fuse amp range			Covers*		Conductors***		
	Poles	Catalog no.	Indicating**	Non-indicating	Solid and stranded	Fine stranded	Torque N·m (lb-in)
70-100	1	JM60100-1CR	CVR-J-60100	CVRI-J-60100	—	Cu 1-3 AWG	6.2 (55)
	2	JM60100-2CR			1/0-3 AWG; (2) Cu 4-6 AWG	Cu 4-6 AWG	5.6 (50)
					2 4-6 AWG; (2) Cu 8 AWG	Cu 8 AWG	5.1 (45)
					8 AWG; (2) Cu 10-14 AWG	—	4.5 (40)
110-200	1	JM60200-1CR	CVR-J-60200	CVRI-J-60200	Cu 10-14 AWG; Al 10-12 AWG	—	4.0 (35)
	2	JM60200-2CR			250 kcmil-1 AWG	Cu 3/0-1 AWG	42 (375)
	3	JM60200-3CR			2-6 AWG; (2) Cu 2-6 AWG	Cu 2-6 AWG	31 (275)
	225-400	1			JM60400-1CR	CVR-J-60400	CVRI-J-60400
2		JM60400-2CR	500 kcmil-4 AWG	51 (450)			
3		JM60400-3CR	(2) Cu 3/0 - 4 AWG	57 (500)			
1		JM60400-1MW22	(2) Al 3/0 - 4 AWG	34 (300)			
2		JM60400-2MW22					
3		JM60400-3MW22					
450-600	1	JM60600-1CR	CVR-J-60600	CVRI-RH-60600	2 (2) 500 kcmil-4 AWG	N/A	51 (450)
	2	JM60600-2CR					
	3	JM60600-3CR					

* Covers sold separately.

** Open fuse indication requires 90 volts minimum and closed circuit to operate.

*** Ratings for copper and aluminum conductors except where otherwise noted.



DIN-Rail or panel mount 30 and 60 A modular blocks dovetail together and are available with optional IP20 finger-safe covers.



Panel mount 100 to 600 modular knifeblade blocks dovetail together and are available with optional IP20 finger-safe covers.

Data sheet: 1048