DFJ Class J high speed fuses



Catalog symbol:

- DFJ-_

Description:

The Bussmann® series DFJ drive fuse is a high speed, current-limiting fuse that provides maximum protection for AC and DC drives and controllers and meet NEC® branch circuit protection requirements. The drive fuse has the lowest I^2t of any branch circuit fuse to protect power semiconductor devices that utilize diodes, GTOs, SCRs and SSRs.

Specifications:

Ratings

- Volts
  - 600Vac (or less)
  - 450Vdc (or less, 15-600A)
- Amps 1-600A
- IR
  - 200kA RMS Sym.
  - 100kA DC

Agency information

- CE
- UL® Listed Standard 248-8, Class J, Guide JDDZ, File E4273
- CSA® Certified, Class 1422-02, File 53787
- RoHS compliant

Features:

- Easily coordinated with existing and new variable speed drives and electric controllers.
- Standard Class J dimensions allow using readily available fuse blocks, holders and switches.
- Has the lowest let-through energy of any branch circuit overcurrent protective device.

Typical applications

- Protection of AC and DC drives
- Equipment using power semiconductor devices

Recommended fuse blocks and holders:

Fuse amps	1-Pole	2-Pole	3-Pole
Modular ferrule blocks (data sheet No. 10289)			
0-30	JM60030-1_	JM60030-2_	JM60030-3_
35-60	JM60060-1_	JM60060-2_	JM60060-3_
"Pyramid" blocks (data sheet No. 1108)			
0-30	—	—	JP60030-3_
CH holders (data sheet No. 2144)			
0-30	CH30J1_	CH30J2_	CH30J3_
35-60	CH60J1_	CH60J2_	CH60J3_
Safety J™ holders (data sheet No. 1152)			
0-30	JT60030_	—	—
35-60	JT60060_	—	—
JM modular knifeblade fuse blocks (data sheet No. 3192)			
70-100	JM60100-1CR	JM60100-2CR	JM60100-3CR
110-200	JM60200-1CR	JM60200-2CR	JM60200-3CR
225-400	JM60400-1CR	JM60400-2CR	JM60400-3CR
450-600	JM60600-1CR	JM60600-2CR	JM60100-3CR
Power distribution fuse blocks (data sheet No. 10192)			
70-100	JM60100-1MW14	JM60100-2MW14	JM60100-3MW14
110-200	JM60200-1MW16	JM60200-2MW16	JM60200-3MW16
225-400	JM60400-1MW16	JM60400-2MW16	JM60400-3MW16
	JM60400-1MW26*	JM60400-2MW26*	JM60400-3MW26*

* Lineside dual box lug terminal.

Powering Business Worldwide

Electrical characteristics:

Catalog number	Amps	I²t (A² Sec) @ 600Vac/100kA		Watts loss
		Pre-arc	Clearing	
DFJ-15	15	4	110	4.1
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

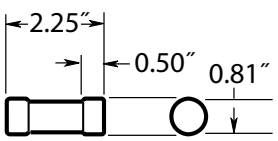
Catalog numbers (amps):

DFJ-1	DFJ-15	DFJ-70	DFJ-225
DFJ-2	DFJ-20	DFJ-80	DFJ-250
DFJ-3	DFJ-25	DFJ-90	DFJ-300
DFJ-4	DFJ-30	DFJ-100	DFJ-350
DFJ-5	DFJ-35	DFJ-110	DFJ-400
DFJ-6	DFJ-40	DFJ-125	DFJ-450
DFJ-8	DFJ-45	DFJ-150	DFJ-500
DFJ-10	DFJ-50	DFJ-175	DFJ-600
DFJ-12	DFJ-60	DFJ-200	

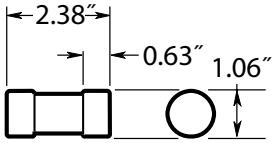
Carton quantity:

Amp rating	Carton qty.
1–60	10
70–200	5
225–600	1

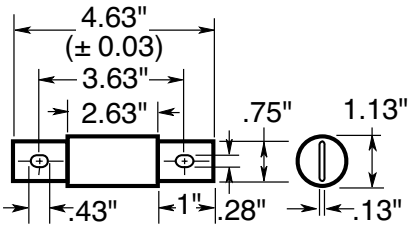
Dimensions - in:



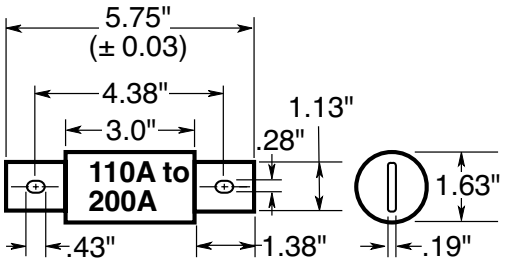
1A to 30A

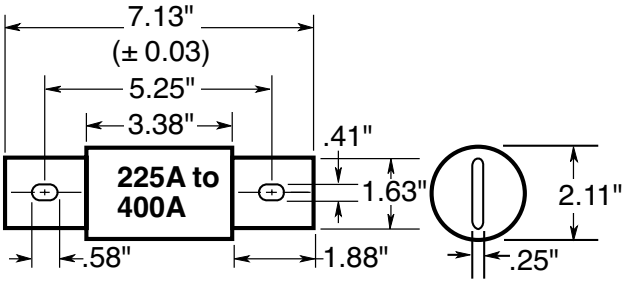


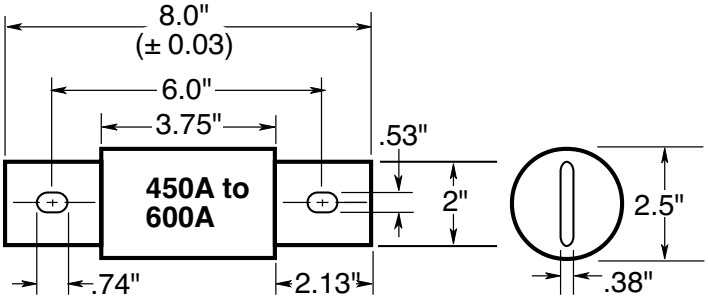
35A to 60A



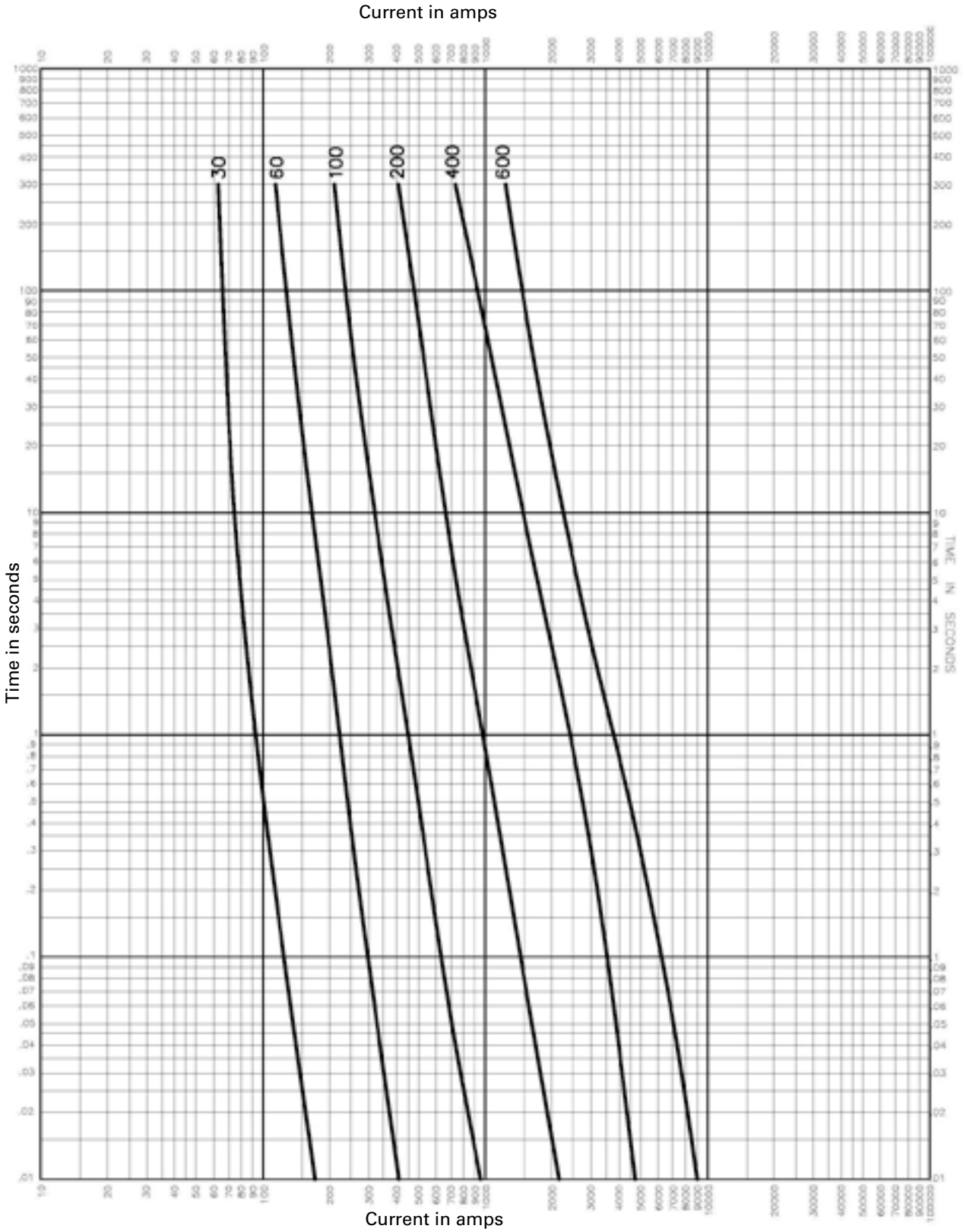
70A to 100A



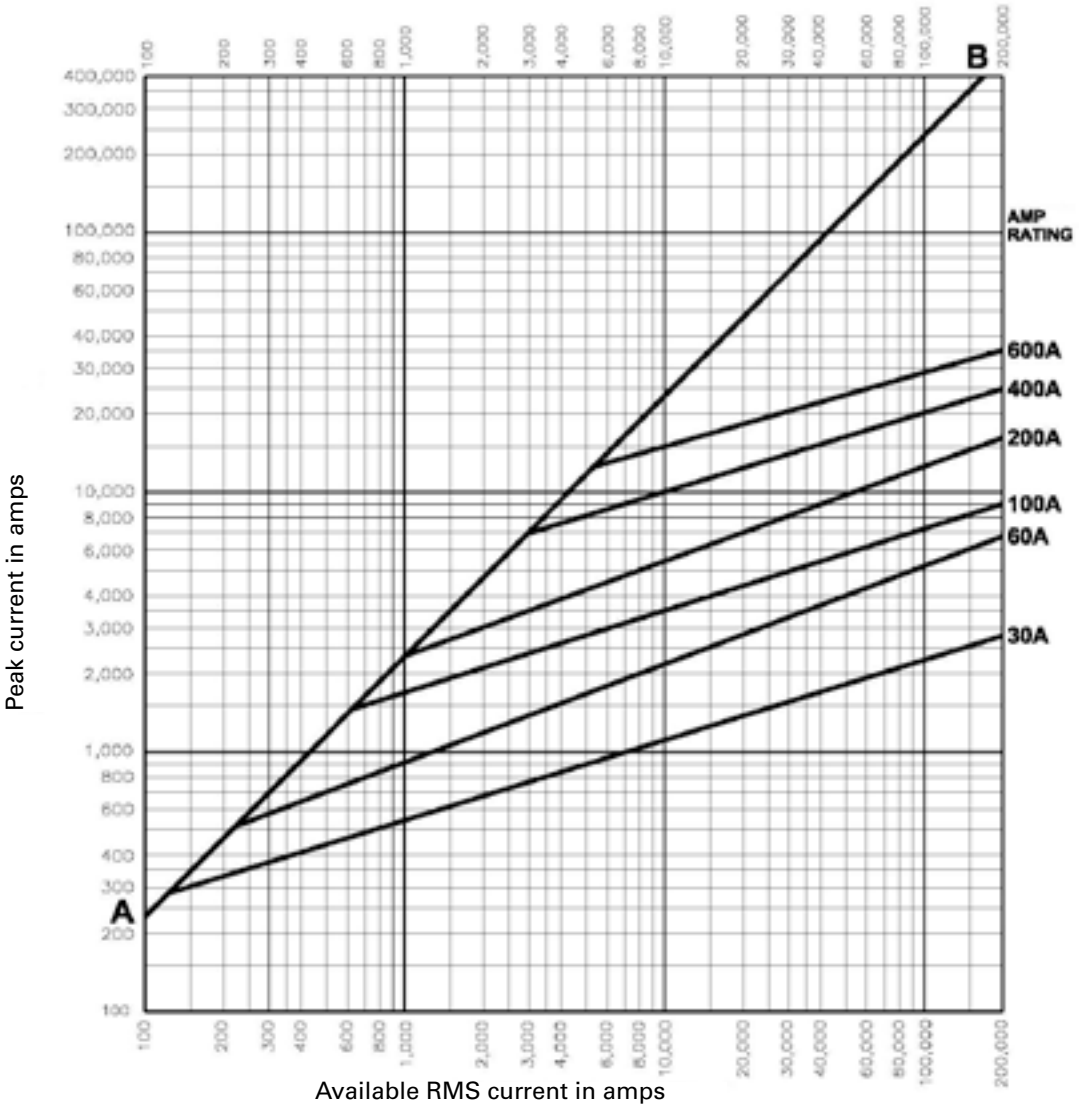




Time-current curves — average melt



Current-limitation curves



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Eaton
1000 Eaton Boulevard
Cleveland, OH 44122
United States
Eaton.com

Bussmann Division
114 Old State Road
Ellisville, MO 63021
United States
Eaton.com/bussmannseries

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