

DFJ – 600Vac/450Vdc, 1-600A High Speed Fuse



Description: High speed, current-limiting fuse. The Bussmann Drive Fuse will provide maximum protection for AC and DC drives and controllers and meet NEC® branch circuit protection requirements. The Drive Fuse has the lowest I²t of any branch circuit fuse to protect power semiconductor devices that utilize diodes, GTOs, SCRs and SSRs.

Construction: Melamine tube with silver fuse element.

Ratings:

Volts — 600Vac (or less), 450Vdc (or less, 30-600A)

Amps — 1-600A

IR — 200kA RMS Sym., 100kA DC

Agency Information:

CE, Std. 248-8, Class J, UL Listed, Guide JDDZ, File E4273, CSA Certified, Class 1422-02, File 53787.

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

Features and Benefits

- Easily coordinated with existing and new variable speed drives and electric controllers.
- Standard Class J dimensions allowing the use of readily available fuse blocks, holders, and switches.
- Allows the lowest let-thru 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
Open Blocks			
0-30	J60030-1_	J60030-2_	J60030-3_
35-60	J60060-1_	J60060-2_	J60060-3_
“Pyramid” Blocks			
0-30	—	—	JP60030-3_
CH Series Holders			
0-30	CH30J1_	CH30J2_	CH30J3_
35-60	CH60J1_	CH60J2_	CH60J3_
Safety J™ Holders			
0-30	JT60030_	—	—
35-60	JT60060_	—	—
JM Series Modular Knifeblade Fuse Blocks			
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

For additional information on the open Class J fuse blocks and holders, see data sheets # 1114 (open blocks), #1108 (pyramid blocks), # 2144 (CH Series) and # 1152 (Safety J).

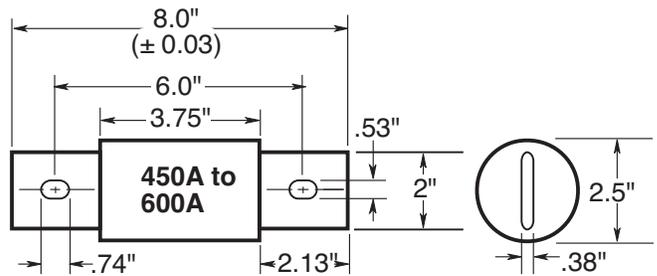
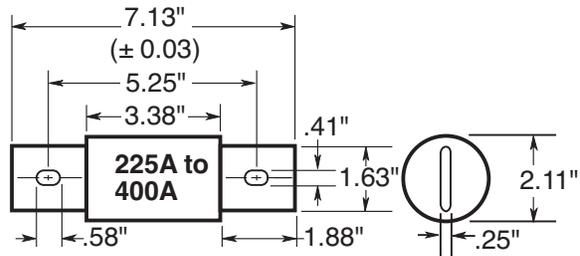
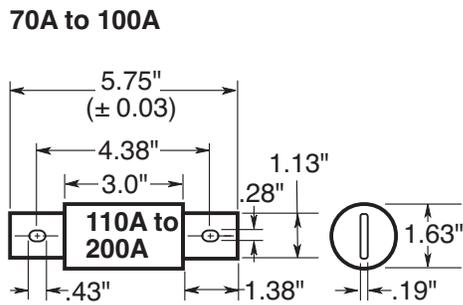
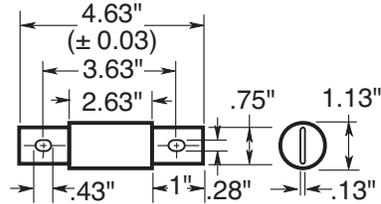
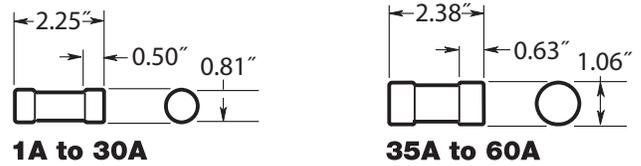
For additional information on the JM Series of modular knifeblade fuse blocks, see product brochure # 3192.

DFJ – 600Vac/450Vdc, 1-600A High Speed Fuse

Electrical Characteristics

Catalog Number	Rated Current Amps	I ² t (A ² 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	10500	13
DFJ-110	110	1710	9500	17
DFJ-125	125	3580	20000	15
DFJ-150	150	5080	28000	19
DFJ-175	175	6310	35000	23
DFJ-200	200	9850	54500	24
DFJ-225	225	11420	51000	29
DFJ-250	250	17000	74500	30
DFJ-300	300	23500	103000	36
DFJ-350	350	38800	170000	39
DFJ-400	400	62200	272000	40
DFJ-450	450	44600	270000	56
DFJ-500	500	79500	480000	52
DFJ-600	600	138000	830000	57

Dimensions - in

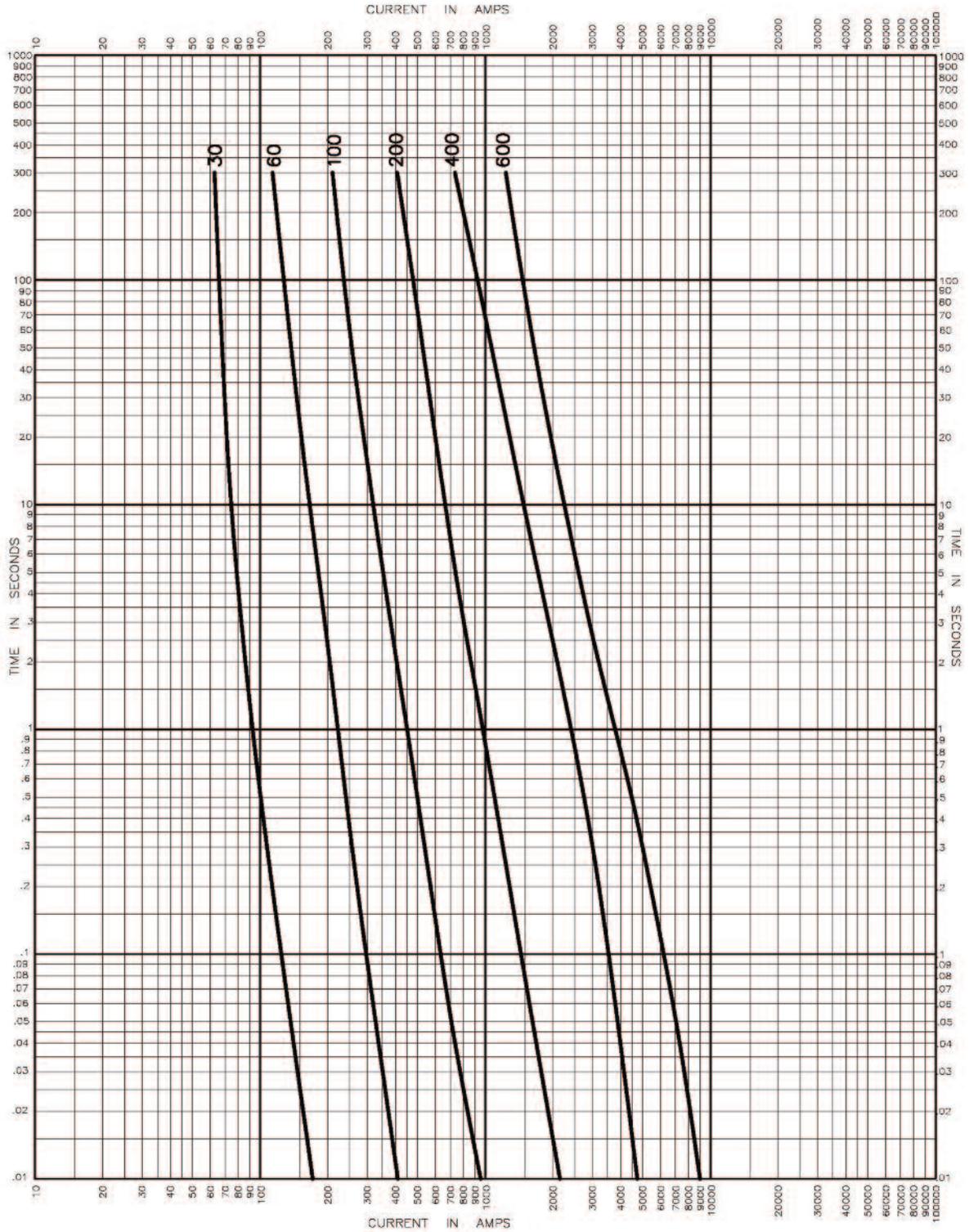


Drive Fuse Class J



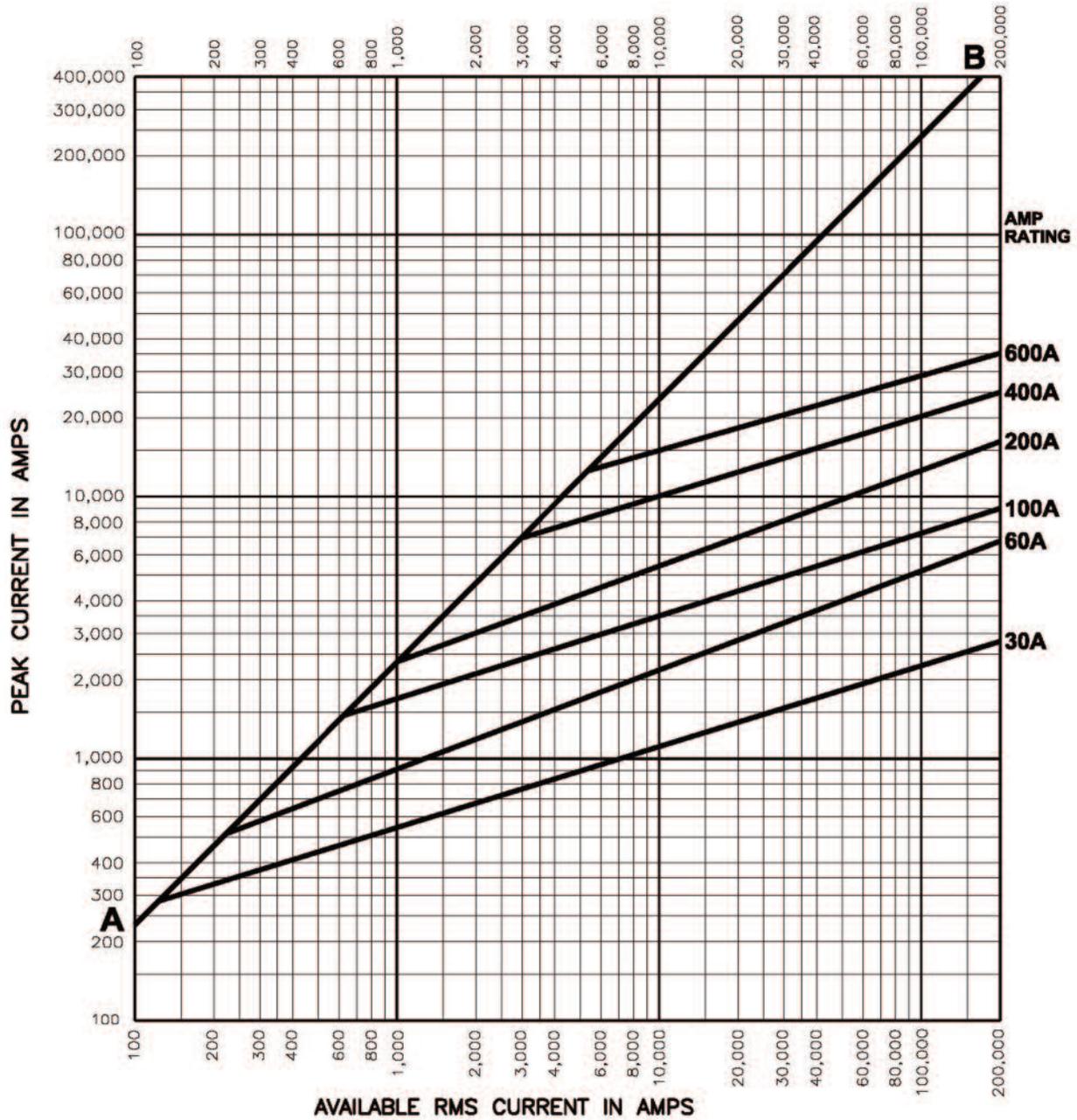
DFJ – 600Vac/450Vdc, 1-600A High Speed Fuse

Time-Current Curves - Average Melt



DFJ – 600Vac/450Vdc, 1-600A High Speed Fuse

Current-Limitation Curves



The only controlled copy of this Data Sheet is the electronic read-only version located on the Bussmann Network Drive. All other copies of this document are by definition uncontrolled. This bulletin is intended to clearly present comprehensive product data and provide technical information that will help the end user with design applications. Bussmann reserves the right, without notice, to change design or construction of any products and to discontinue or limit distribution of any products. Bussmann also reserves the right to change or update, without notice, any technical information contained in this bulletin. Once a product has been selected, it should be tested by the user in all possible applications.