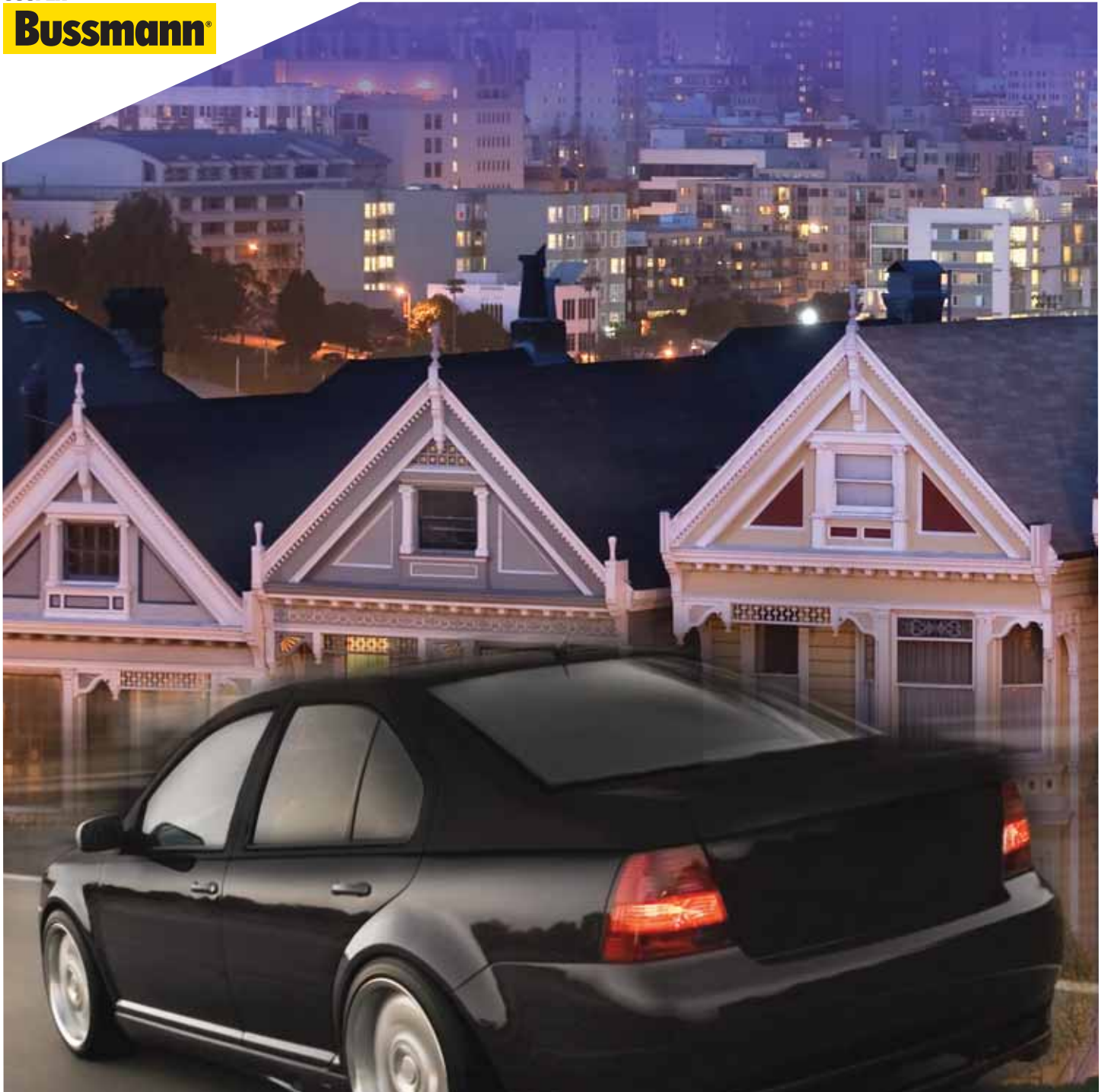


COOPER

Bussmann®



Consumer Aftermarket Product Catalog

Cartridge Fuses

COOPER Bussmann

Cartridge Fuses

Cartridge fuses are used to protect motors and branch circuits where higher amps or volt ratings are required. They are available in a wide variety of sizes, amp and volt ratings up to 600Vac and 600 amps. Cartridge fuses are used extensively in commercial, industrial and agricultural applications as well as residential fuse panels, air conditioning, pumps, appliances and other equipment.

Cartridge fuses are available in two types. General Purpose fuses have no time-delay and protect fuse panels, appliances and branch circuits. Heavy-Duty fuses have a time-delay feature, allowing momentary motor startups.

Both are available in 250Vac and 600Vac versions with catalog symbol and amp rating stamped on the knife blade or end cap.

General Purpose NON & NOS

Used in lighting circuits, main panel protection and other circuits that don't contain large electric motors or inductive loads. One to 60 amp fuses UL Listed Class K5 (IR: 50kA). 70 to 600A fuses UL Class H (IR: 10kA).

NON 250Vac General Purpose Non-Current Limiting Class K5 & H Fuses

Part No. (Amps*)	Blister Pack
NON-2	
NON-3	
NON-5	
NON-6	
NON-10	
NON-15	X
NON-20	X
NON-25	X
NON-30	X
NON-35	X
NON-40	X
NON-45	X
NON-50	X
NON-60	X
NON-70	X
NON-80	
NON-90	
NON-100	X
NON-125	
NON-150	
NON-200	
NON-250	
NON-300	
NON-400	

*See Price Sheet for all available ratings.



NOS 600Vac General Purpose Non-Current Limiting Class K5 & H Fuses

Part No. (Amps*)
NOS-6
NOS-10
NOS-15
NOS-20
NOS-25
NOS-30
NOS-35
NOS-40
NOS-50
NOS-60
NOS-100
NOS-200

*See Price Sheet for all available ratings.



FRN-R and FRS-R Heavy-Duty Time-Delay Fuses

Now FRN-R Fuses Available with easyID™ Blown Fuse Indication!

Used in motor protection. When sized correctly, they help protect motors from burnout caused by overloads or single-phasing. The time-delay feature allows the initial startup current surge for typical motors to pass, but opens prior to motor burnout when longer, dangerous overloads are present. **The FRN-R easyID™ option helps locate the blown fuse faster.** In addition, the dual-element design opens in as little as 0.004 second if the fuse experiences short-circuit conditions. All fuses UL Listed Class R (IR: 200kA). Groove in end cap or notch in knife blade permit the fuse to be used in Class H, Class K or Class R fuse blocks.

FRN-R 250Vac Dual-Element, Time-Delay Class RK5 Fuses

Part No. (Amps*)	Blister Pack	easyID™ Blister Pack
FRN-R-1		
FRN-R-2		
FRN-R-3		
FRN-R-4		
FRN-R-5		
FRN-R-6		
FRN-R-6½		
FRN-R-7		
FRN-R-8		
FRN-R-10	X	
FRN-R-12		
FRN-R-15	X	X
FRN-R-17½		
FRN-R-20	X	X
FRN-R-25	X	X
FRN-R-30	X	X
FRN-R-35	X	
FRN-R-40	X	X
FRN-R-45	X	
FRN-R-50	X	X
FRN-R-60	X	X
FRN-R-70		
FRN-R-75		
FRN-R-80		
FRN-R-90		
FRN-R-100	X	
FRN-R-150		
FRN-R-200		

*See Price Sheet for all available ratings.

easyID™ Blown Fuse Indication



Good

Fuse is Blown



Up to 60A

70A & Over

Cartridge Fuses

FRS-R 600Vac Dual-Element, Time-Delay Class RK5 Fuses

Part No. (Amps*)
FRS-R-2
FRS-R-3
FRS-R-3½
FRS-R-4
FRS-R-5
FRS-R-6
FRS-R-6¼
FRS-R-7
FRS-R-8
FRS-R-10
FRS-R-12
FRS-R-15
FRS-R-17½
FRS-R-20
FRS-R-25
FRS-R-30
FRS-R-35
FRS-R-40
FRS-R-45
FRS-R-50
FRS-R-60
FRS-R-70
FRS-R-80
FRS-R-90
FRS-R-100
FRS-R-125
FRS-R-150
FRS-R-175
FRS-R-200



*See Price Sheet for all available ratings.

CDN Type D and PON Type P CSA Certified Standard Code Fuses

Economical fuses for a variety of applications where available short-circuit current is relatively low.

CDN 250Vac CSA Type D Time-Delay Fuses

Part No. (Amps*)	Blister Pack
CDN10	
CDN12	
CDN15	X
CDN20	X
CDN25	X
CDN30	X
CDN35	X
CDN40	X
CDN45	X
CDN50	X
CDN60	X
CDN100	
CDN110	
CDN175	
CDN200	

*See Price Sheet for all available ratings.



PON 250Vac Type P One-Time Fuses

Part No. (Amps*)	Blister Pack
PON15	X
PON20	X
PON25	X
PON30	X
PON35	X
PON40	X
PON45	X
PON50	X
PON60	X

*See Price Sheet for all available ratings.



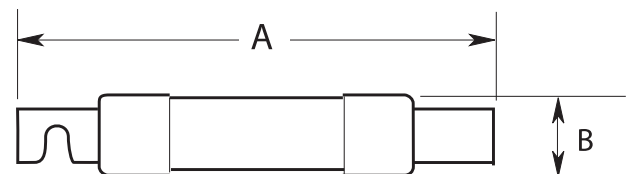
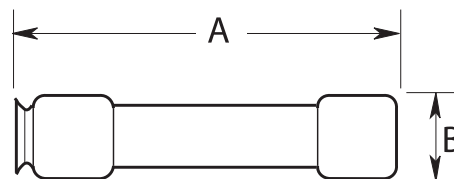
Page 38 & 39 Cartridge Fuse Dimensions - in (mm)

Ferrule Styles

Amp Range	250V		600V	
	A	B	A	B
1/10-30	2 (50.8)	0.56 (14.3)	5.0 (127.0)	0.81 (20.6)
35-60	3 (76.2)	0.81 (20.6)	5.5 (139.7)	1.06 (27.0)

Blade Styles

Amp Range	250V		600V	
	A	B	A	B
70-100	5.88 (149.2)	1.06 (26.9)	7.88 (200.0)	1.34 (34.0)
110-200	7.13 (181.0)	1.56 (39.6)	9.63 (244.5)	1.84 (46.7)
225-400	8.63 (219.1)	2.06 (52.3)	11.63 (295.3)	2.59 (65.8)
450-600	10.38 (263.5)	2.59 (65.8)	13.38 (339.7)	3.13 (79.5)



Cartridge Fuses

Midget Fuses

Midget fuses are $1\frac{3}{32}$ " x $1\frac{1}{2}$ " cartridge fuses available in a wide variety of volt and amp ratings to provide supplemental protection to industrial, commercial, agricultural, heating, ventilating and air conditioning equipment. Due to their small size, midget fuses are often used to protect internal components such as control circuit wiring, motor control transformers or small motors. The National Electrical Code® now requires more protection of internal components. This will lead to increased replacement demand for these fuses.

Class CC

The rejection versions of Midget fuses are Class CC and are suitable for both branch circuit and supplemental protection.

BAF 250Vac Fast-Acting $1\frac{3}{32}$ " x $1\frac{1}{2}$ " Midget Fuses

Part No. (Amps)*
BAF-1
BAF-3
BAF-5
BAF-6
BAF-10
BAF-15
BAF-20
BAF-25
BAF-30



*See Price Sheet for all available ratings.

KTK 600Vac Fast-Acting $1\frac{3}{32}$ " x $1\frac{1}{2}$ " Midget Fuses

Part No. (Amps)*	Blister Pack	Poly Bag
KTK-1	X	
KTK-2	X	
KTK-3		X
KTK-4		
KTK-5	X	X
KTK-6		
KTK-10	X	X
KTK-15	X	X
KTK-20	X	X
KTK-25		
KTK-30		X



*See Price Sheet for all available ratings.

KTK-R 600Vac Fast-Acting $1\frac{3}{32}$ " x $1\frac{1}{2}$ " Class CC Branch Circuit Fuses

Part No. (Amps)*	Poly Bag
KTK-R- $\frac{1}{2}$	
KTK-R-1	X
KTK-R-2	X
KTK-R-3	X
KTK-R-4	
KTK-R-5	X
KTK-R-6	X
KTK-R-8	
KTK-R-10	X
KTK-R-12	
KTK-R-15	X
KTK-R-20	X
KTK-R-25	
KTK-R-30	X



*See Price Sheet for all available ratings.

Cartridge Fuses

FNM 250Vac Time-Delay $1\frac{3}{32}$ " x $1\frac{1}{2}$ " Midget Fuses

Part No. (Amps)*	Blister Pack	Poly Bag
FNM- $\frac{1}{2}$		
FNM- $\frac{9}{10}$		
FNM-1		X
FNM-2		X
FNM-2 $\frac{1}{2}$		
FNM-3		X
FNM-3 $\frac{1}{10}$		
FNM-3 $\frac{1}{2}$		
FNM-4		
FNM-5	X	X
FNM-6		
FNM-6 $\frac{1}{4}$		
FNM-7		
FNM-8		
FNM-9		
FNM-10	X	
FNM-12	X	
FNM-15	X	
FNM-20	X	
FNM-25		
FNM-30	X	



*See Price Sheet for all available ratings.

FNQ 500Vac Time-Delay $1\frac{3}{32}$ " x $1\frac{1}{2}$ " Midget Fuses

Part No. (Amps)*	Poly Bag
FNQ- $\frac{1}{2}$	
FNQ-1	
FNQ-1 $\frac{1}{2}$	
FNQ-2	
FNQ-2 $\frac{1}{2}$	
FNQ-3	
FNQ-4	
FNQ-5	
FNQ-6	
FNQ-7	
FNQ-8	
FNQ-10	X
FNQ-12	
FNQ-15	X
FNQ-20	X
FNQ-25	
FNQ-30	



*See Price Sheet for all available ratings.

FNQ-R 600Vac Time-Delay $1\frac{3}{32}$ " x $1\frac{1}{2}$ " Class CC Branch Circuit Fuses

Part No. (Amps)*	Poly Bag
FNQ-R- $\frac{1}{2}$	
FNQ-R-1	
FNQ-R-2	
FNQ-R-3	
FNQ-R-4	X
FNQ-R-5	X
FNQ-R-6	
FNQ-R-6 $\frac{1}{4}$	
FNQ-R-7 $\frac{1}{2}$	
FNQ-R-8	
FNQ-R-10	
FNQ-R-12	
FNQ-R-15	
FNQ-R-20	
FNQ-R-30	



*See Price Sheet for all available ratings.

Specialty Class G SC Rejection Fuses

600Vac Fast-Acting ($\frac{1}{2}$ -6A)

600Vac Time-Delay (7-20A)

480Vac Time-Delay (25-60A)

These highly compact branch circuit fuses are used in residential, mobile home and industrial applications. They have a minimum 300 volt rating and are available up to 60A. All SC fuses are $1\frac{3}{32}$ " in diameter with varying lengths to provide a rejection feature that prevents over fusing (installing a 30 amp fuse in a 20A circuit). One half to 6A SC fuses are fast-acting, while 7 to 60A SC fuses are time-delay to permit temporary overloads to pass without nuisance openings.

Fuse Length	Part No. (Amps)*	Blister Pack	Poly Bag
1.31"	SC-2		
1.31"	SC-3		
1.31"	SC-5		
1.31"	SC-6		
1.31"	SC-8		
1.31"	SC-10		
1.31"	SC-15	X	X
1.41"	SC-20	X	X
1.62"	SC-25	X	X
1.62"	SC-30	X	X
2.25"	SC-40		
2.25"	SC-60		



*See Price Sheet for all available ratings.