

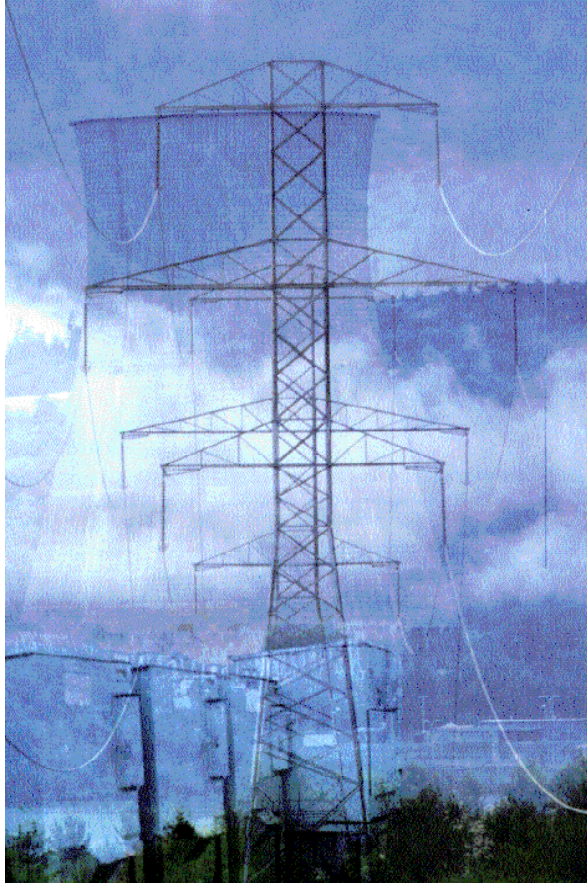
USA Electrical Fuse Products



A Guide to USA products

**COOPER** Bussmann

Medium Voltage Fuses



E-Rated Fuses

- **Transformer Protection**

R-Rated Fuses

- **Motor Protection**

Potential Transformer Fuses

USA MV Fuses

E Rated

Part numbers

For VT fuses

Typical JCD, JCW, JCE

For power fuses

JCX, JCY, JCU, JCZ

Amps ratings are:-

1E, 2E to 5E for VT

1/2E to 750E for power

These are the AMP ratings



R Rated

Part numbers:-

JCK, JCH, JCL

-2R, 3R, 4R, 5R

(Not amp ratings)

Typical 2R = 70A

3R = 100A

Up to 24R - 450A



Low Voltage Fuses

Cable Limiters



Supplemental / Misc. Fuses

'Midget' Fuses

- See FLC p. 43-48
 - Varying Voltage and IR
 - Same Size (13/32" x 1-1/2" 10 x 38mm)



FNA



FNM



FNQ



FNW



BAF



BAN



KTK



MIC



MIN

Power Fuses:

Class L

Class RK1

Class J

RK5

RK5



LOW-PEAK®
 (Time-Delay)
 KRP-C_SP (600V)
 601 to 6000A
 300,000AIR
 Current-Limiting
 STD 248-10 CLASS L
 UL Guide #JFHR
 UL File #E56412
 CSA Class #1422-02
 CSA File #53787

The all-purpose silver linked fuse for both overload and



LOW-PEAK®
 (Dual-Element, Time-Delay)
 LPS-RK_SP (600VAC, 300VDC)
 LPN-RK_SP (250VAC, 125VDC)
 $\frac{1}{10}$ to 600A
 300,000AIR
 Current-Limiting
 STD 248-12 CLASS RK1
 UL Guide #JFHR
 UL File #E56412
 CSA Class #1422-02
 CSA File #53787



LOW-PEAK®
 (Dual-Element, Time-Delay)
 LPJ_SP (600V)
 1 to 600A
 300,000AIR
 Current-Limiting
 STD 248-8 CLASS J
 UL Guide #JFHR
 UL File #E56412
 CSA Class #1422-02
 CSA File #53787

Space saving LPJ fuses have the advantage of time-



FUSETRON®
 (Dual-Element, Time-Delay)
 FRS-R (600VAC, 300VDC)
 FRN-R (250VAC, 125VDC)
 $\frac{1}{10}$ to 600A
 200,000AIR
 Current-Limiting
 STD 248-12 CLASS RK5
 UL Guide #JDDZ
 UL File #E4273
 CSA Class #1422-02
 CSA File #53787

Time-delay affords the same



DURALAG®
 (Dual-Element, Time-Delay)
 Construction Grade Fuses
 DLS-R (600VAC, 300VDC)
 DLN-R (250VAC, 125VDC)
 1 to 600A
 200,000 AIR
 Current-Limiting
 STD 248-12 CLASS RK5
 UL Guide #JDDZ
 UL File # E4273
 CSA Class #1422-02
 CSA File #53787

Designed for contractor needs

Power Fuses:

Class L



LIMITRON®
 (Fast-Acting)
 KTU (600V)
 601 to 6000A
 200,000AIR
 Current-Limiting
 STD 248-10 CLASS L
 UL Guide #JDDZ
 UL File #E4273
 CSA Class #1422-02
 CSA File #53787

Silver-linked fuse. Single-ele-

Class RK1



LIMITRON®
 (Fast-Acting)
 KTS-R (600V)
 KTN-R (250V)
 1 to 600A
 200,000AIR
 Current-Limiting
 STD 248-12 CLASS RK1
 UL Guide #JDDZ
 UL File #E4273
 CSA Class #1422-02
 CSA File #53787

Class J



LIMITRON®
 (Fast-Acting)
 JKS (600V)
 1 to 600A
 200,000AIR
 Current-Limiting
 STD 248-8 CLASS J
 UL Guide #JDDZ
 UL File #E4273
 CSA Class #1422-02
 CSA File #53787
 JKS LIMITRON fuses are basi-

Class H



ONE-TIME
 (General Purpose)
 NOS (600V) NON (250V)
 1/8 to 600A
 Non-Current-Limiting
 (NON 1/8-60A) 50,000AIR
 (NOS 1-60A) 50,000AIR
 STD 248-9 CLASS K5
 UL Guide #JDDZ
 UL File #E4273
 CSA Class #1421-01
 CSA File #53787

Class T



T-TRON®
 (Fast-Acting)
 JJS (600V) 1-800A
 JJN (300V) 1-1200A
 200,000AIR
 Current-Limiting
 STD 248-15 CLASS T
 UL Guide #JDDZ
 UL File #E4273
 CSA Class #1422-02
 CSA File #53787

The space-savers. Counter-

Renewable (Class H)

REN-(AMP) - 250V, 1/8A - 600A

RES-(AMP) - 600V, 1A - 600A



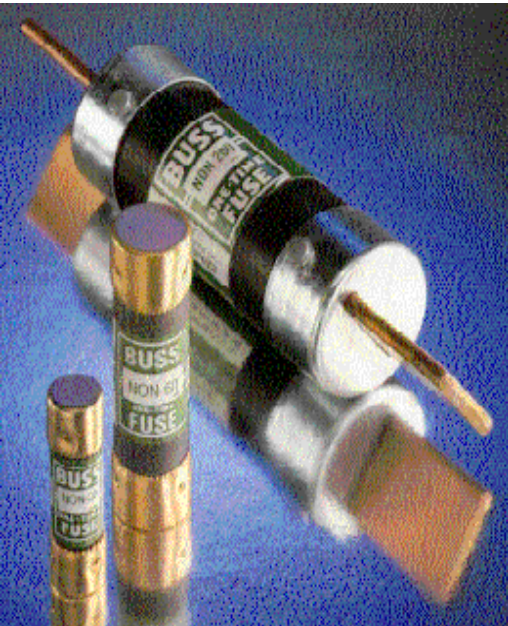
- Dimensions of Class R fuses, however, no rejection feature.
- Interrupting rating 10kA
- Time-lag (more than other Class H fuses)
- Renewable Fuses, allow element replacement in lieu of entire fuse replacement

ONE-TIME (Class H & K5)

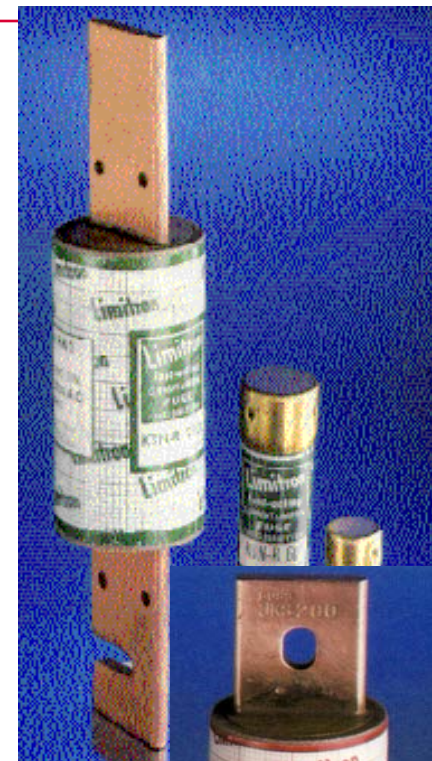
NON-(AMP) - 250V, 1/8A - 600A

NOS-(AMP) - 600V, 1A - 600A

- Dimensions of Class R fuses, however, no rejection feature.
- **Class H: 10kA I.R.**
 - NON(70-600), NOS(0-12 & 70-600)
- **Class K5: 50kA I.R.**
 - NON(0-60), NOS(15-60)
- **General applications**



Fast-Acting
Highest Degree of Current
Limitation
200kA Interrupting Rating
Resistive and Non-Inductive
Loads



Class L

- KTU-(amp) – 600V, 601 - 6000A

Class RK1

- KTN-R-(amp) – 250V, 1/10 - 600A
- KTS-R-(amp) – 600V, 1/10 - 600A

Class J

- JKS-(amp) – 600V, 1 - 600A



Class CC

- KTK-R-(amp) – 600V, 1/10 - 30A

Supplemental

- KTK-(amp) – 600V, 1/10 - 30A
 - 100,000 AIR
- KLM-(amp) – 500V, 1/10 - 30A
 - 500VDC



Time-Delay
Dual-Element
Lower Degree of Current
Limitation than LIMITRON[®]
200kA Interrupting Rating
Motors, Transformers,
Inductive Loads



LOW-PEAK[®] Fuses

Dual-Element Time Delay

Highest Degree of Current Limitation

300kA Interrupting Rating
Motors, Transformers,
and Inductive Loads



So, Which Power fuse to Use?

Consider Application

Lot of factors to Consider like:

Time Delay or Fast Acting

Interrupting Rating

Current Limitation (Component Protection)

Physical Size

Cost

If you Remember...

LIMITRON®

Current Limitation for maximum protection

FUSETRON®

Dual-Element Time-Delay for heavy inrush circuits e.g. motors

Both have 200kA IR

Best Current Limitation

Equipment Protection

Dual-Element Time-Delay

Pass Harmless Inrushes

Highest Interrupting Rating (300kA)

Best in Class. Can replace other fuses in same class

Consolidate Inventory

Upgrade Protection

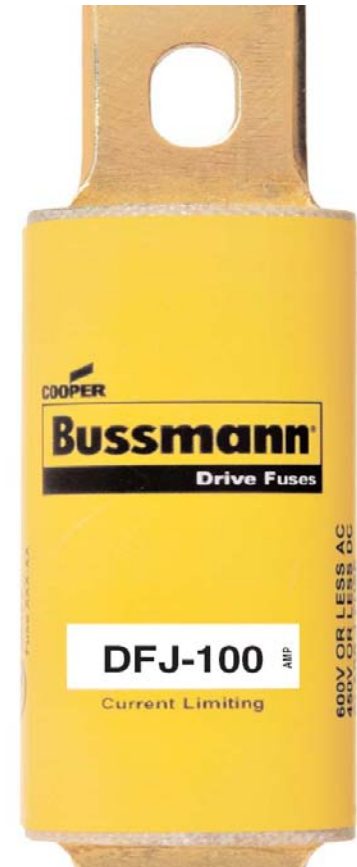
Drive Fuse

Class J Dimensions

Combines high speed and general purpose technology

Very low let through energy

Meets all UL and CSA requirements for branch (Distribution) circuit protection.



Fuse blocks

Very large selection available.

Fuse blocks for Power Fuses

UL Class Fuses (Class R, J, CC, etc.)

Fuse blocks for Supplemental Fuses

(10 x 38)

Fuse Blocks

Class R

Accepts FRN-R,
FRS-R, KTN-R,
KTS-R, LPN-RK,
and LPS-RK fuses

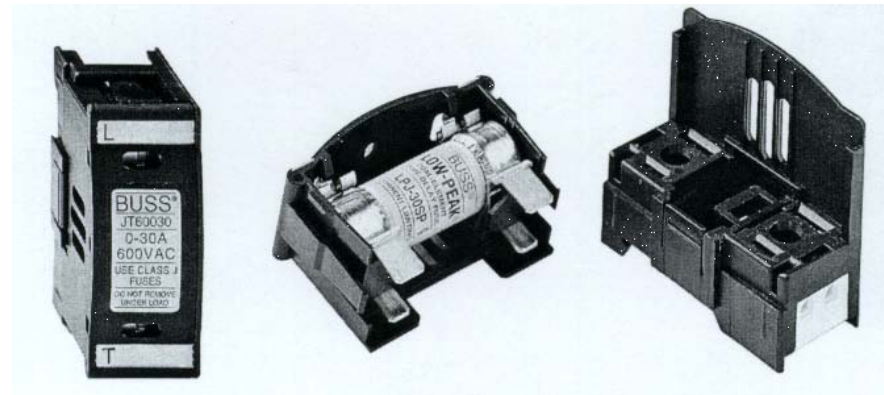
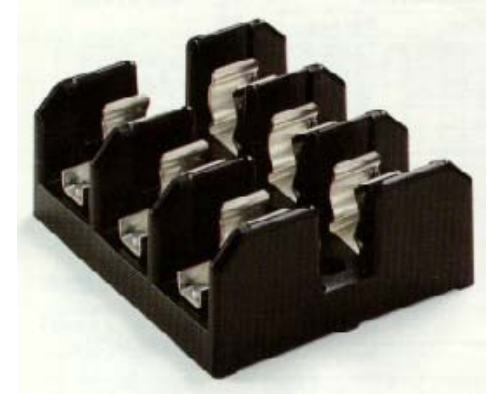
Page 243 to 247 FLC



Fuse Blocks

Class J
Accepts LPJ
and JKS fuses

Page 248 to 250 FLC



Fuse Blocks

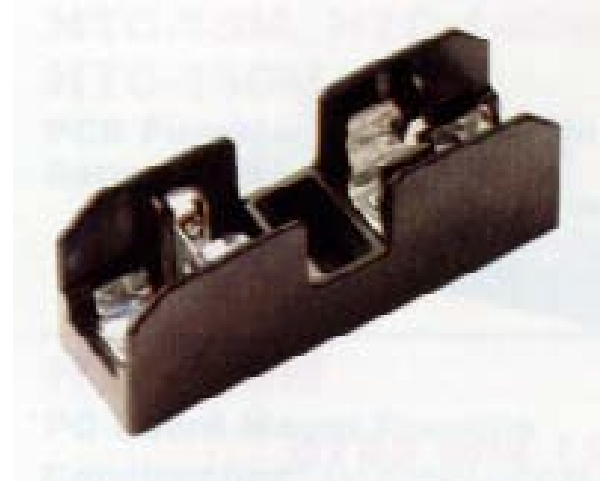
Class CC

Accepts LP-CC,

FNQ-R,

and KTK-R fuses

With rejection feature



UL FUSES

Questions?