COOPER Bussmann

# Cooper Bussmann® Fuse Cross Reference & Low-Peak® Upgrade

The left column represents Cooper Bussmann and competitors' part numbers. The right column represents the Cooper Bussmann upgrades.

The Cooper Bussmann® fuse upgrade offers superior performance while reducing the number of SKUs that need to be in stock. Low-Peak® fuses feature a high degree of current limitation, which will provide the best component protection and may reduce the arc-flash hazard. Listings are alpha-numerical by fuse class and fuse catalog symbol.

This list is only a consolidated cross reference to some of our most common products. For a much more extensive database please consult the ***Product Profiler*** competitor cross-reference.

## Class CC and Midget

| Existing Fuse | Low-Peak® Upgrade |
|---|---|
| A6Y (type 2B) | LP-CC |
| ABU | |
| AGU | |
| ATDR | |
| ATM | |
| ATMR | |
| ATQ | |
| BAF | |
| BAN | |
| BLF | |
| BLN | |
| CCMR | |
| CM | |
| CMF | |
| CNM | |
| CNQ | |
| CTK | |
| CTK-R | |
| FLM | |
| FLQ | |
| FNM | |
| FNQ | |
| GGU | |
| HCLR | |
| KLK | |
| KLK-R | |
| KTK | |
| KTK-R | |
| MCL | |
| MEN | |
| MEQ | |
| MOF | |
| MOL | |
| OTM | |
| TRM | |
| 6JX | LP-CC |
| ***FNQ-R suggested on primary of control transformers.** | |
| ATQR | |
| FNQ-R | FNQ-R |
| KLDR | |


## Class J

| Existing Fuse | Low-Peak® Upgrade |
|---|---|
| A4J | LPJ_SP |
| AJT | |
| CJ | |
| CJS | |
| GF8B | |
| HRCXXJ | |
| J | |
| JA | |
| JCL | |
| JDL | |
| JFL | |
| JHC | |
| JKS | |
| JLS | |
| JTD | LPJ_SP |


## Class L

| Existing Fuse | Low-Peak® Upgrade |
|---|---|
| A4BQ | KRP-C_SP |
| A4BT | |
| A4BY | |
| A4BY (type 55) | |
| CLASS L | |
| CLF | |
| CLL | |
| CLU | |
| HRC-L | |
| KLLU | |
| KLPC | |
| KLU | |
| KTU | |
| L | |
| LCL | |
| LCU | KRP-C_SP |

## 250 Volt Class R

| Existing Fuse | Low-Peak® Upgrade |
|---|---|
| A2D | LPN-RK_SP |
| A2D-R | |
| A2K | |
| A2K-R | |
| A2Y (type 1) | |
| AT-DE | |
| CHG | |
| CRN-R (type 3) | |
| CTN-R | |
| DEN | |
| DLN | |
| DLN-R | |
| ECN | |
| ECN-R | |
| ERN | |
| FLN | |
| FLN-R | |
| FRN | |
| FRN-R | |
| FTN-R | |
| GDN | |
| HAC-R | |
| HB | |
| KLN-R | |
| KON | |
| KTN-R | |
| LENRK | |
| LKN | |
| LLN-RK | |
| LON-RK | |
| NCLR | |
| NLN | |
| NON | |
| NRN | |
| OTN | |
| REN | |
| RFN | |
| RHN | |
| RLN | |
| TR | |
| 655 | |
| 660 | |
| 10KOTN | |
| 50KOTN | LPN-RK_SP |


## 600 Volt Class R

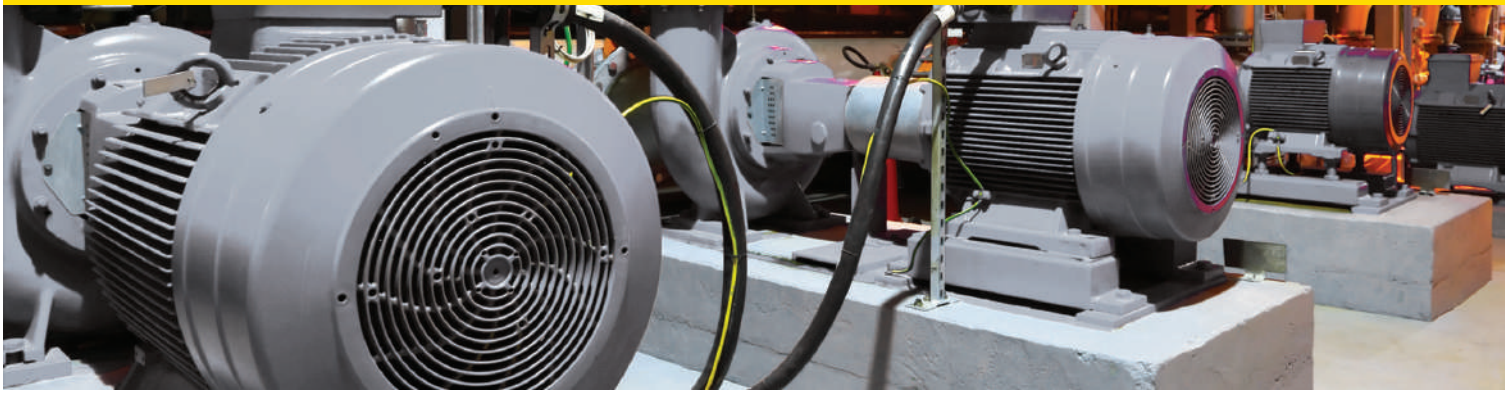
| Existing Fuse | Low-Peak® Upgrade |
|---|---|
| A6D | LPS-RK_SP |
| A6K-R | |
| A6X (type 1) | |
| ATS-DE | |
| CHR | |
| CTS-R | |
| DES | |
| DES-R | |
| DLS | |
| DLS-R | |
| ECS-R | |
| ERS | |
| FLS | |
| FLS-R | |
| FRS | |
| FRS-R | |
| FTS-R | |
| GDS | |
| HA | |
| KLS-R | |
| KOS | |
| KTS-R | |
| LES | |
| LES-R | |
| LES-RK | |
| LKS | |
| LLS-RK | |
| LOS-RK | |
| NLS | |
| NOS | |
| NRS | |
| OTS | |
| RES | |
| RFS | |
| RHS | |
| RLS | |
| SCLR | |
| TRS | |
| TRS-R | |
| 656 | |
| 10KOTS | |
| 50KOTS | LPS-RK_SP |


The comparative catalog numbers shown were derived from the latest available published information from various manufacturers. Because competitors' products may differ from Cooper Bussmann products, it is recommended that each application be checked for required electrical and mechanical characteristics before substitutions are made. Cooper Bussmann is not responsible for misapplications of our products. Overcurrent protection is application dependent.

Fuses Made Simple™

BUSSMANN SERIES

# The easiest and fastest way to select and specify the right fuse



EATON
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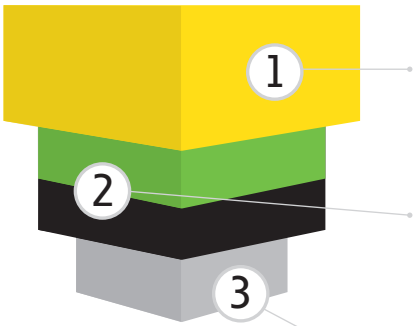
# Fuse selection
made simple

# Fuses Made Simple™ with Bussmann™ series fuses

## Three tiers of protection help speed up specification and selection




Each tier of protection offers distinct levels of performance benefits.

Ulitimate protection – The best worry-free protection in virtually any application. Unique dual-element construction delivers a powerful combination of all performance options in one fuse - fast short-circuit protection, current limitation, and time-delay performance with up to 300 kA interrupting ratings.

Advanced protection – Application specific protection for sensitive devices and critical components or motors and transformers. Choose between fast short-circuit, current limiting performance or energy efficient, current limiting, time-delay performance based on the application. Featuring 200 kA interrupting ratings.

Basic protection – Basic single-element protection for service, feeder and branch circuit applications. Featuring up to 100 kA interrupting ratings.

## Four fuse families make fuse selection and replacement easy

Each fuse family is categorized by key protection characteristic and performance benefits.

Ulitimate protection
- Low-Peak™ (yellow) - 50% more protection than any other listed fuse*

Advanced protection
- Fusetron™ (green) - 23% more energy efficient*** and the best time-delay performance
- Limitron™ (black) - 10x better current limitation than basic circuit breakers or fuses**

Basic protection
- General purpose (gray) - Basic circuit protection

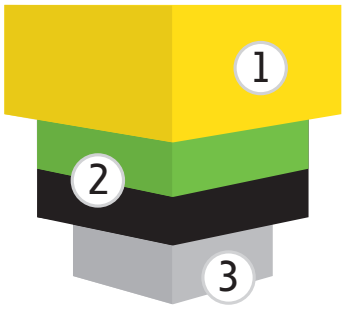

## QuikShip™ Service - get the fuse you need, when you need it


- The Bussmann series QuikShip Everyday Service assures the most common part numbers are in stock and ship within 24 hours. In fact, 90% of our orders are shipped the same day.
- Emergency and after-hours orders are possible with Bussmann series QuikShip Emergency Service. Orders are taken 24 hours a day, 365 days a year and product can be placed on the next flight out.

* 50% higher IR (300kA) than any other UL and CSA Listed Fuse. Includes Class J, L and R fuses.
** Does not include current limiting circuit breakers or current limiting fuses. Protection determined by comparing published values for let–through for Class CC, J, R, and T fuses versus a symmetrical RMS waveform at 200kA.
*** Test results are based on weighted sales volume of FUSETRON and Ferraz Shawmut (Mersen) fuses by selected amp and volt rating combination. Next leading brand refers to Ferraz Shawmut based on third-party fuse market share data for a twenty-seven month period (July 2008 through September 2010).

# Three tiers of protection

## Follow the **tiers of protection** to find the right level of protection for your application




The four **Fuses Made Simple** families are grouped into three tiers of protection to meet the needs of any application.

When you move up to the next level of protection, you can get enhanced performance compared to the fuses in the lower tier. For example, Fusetron fuses can replace your general purpose fuses in branch circuit applications and Low-Peak can be used in any application, giving you worry free, enhanced performance.

| | LOW-PEAK | FUSETRON | LIMITRON | GENERAL |
|---|---|---|---|---|
| **1 Ultimate protection** | | | | |
| Industry's only UL® and CSA® listed fuse with up to 300 kA interrupting rating | ✓ | | | |
| Combines Limitron fast short-circuit protection and Fusetron dual-element time-delay for ultimate protection | ✓ | | | |
| Best in class Arc Flash Protection in all applications reduces hazard to personnel | ✓ | | | |
| Reduce inventory up to 33% by replacing General Purpose, Limitron, and Fusetron with Low-Peak fuses | ✓ | | | |
| Consistent 2:1 selective coordination ratios for all Low-Peak fuses | ✓ | | | |
| **2 Advanced protection** | | | | |
| Dual-element time-delay allows for superior protection of motors and transformers | ✓ | ✓ | | |
| 23% more energy efficient than the next leading brand*** | ✓ | ✓ | | |
| Best time-delay performance | ✓ | ✓ | | |
| 200 kA interrupting rating allows for use in virtually any application | ✓ | ✓ | ✓ | |
| Fast short-circuit protection of critical devices or loads | ✓ | | ✓ | |
| Arc flash protection in selected applications reduces hazard to personnel | ✓ | | ✓ | |
| 10x better current limitation on average compared to basic circuit breakers and fuses** | ✓ | | ✓ | |
| **3 Basic protection** | | | | |
| Meets basic requirements for service, feeder, and branch circuit protection | ✓ | ✓ | ✓ | ✓ |

# Four fuse families

## Low-Peak

**Delivers 50% more protection than any other listed fuse***
Ultimate protection for any application

- Industry's only UL and CSA listed fuse with a 300 kA interrupting rating allows for simple, worry-free installation in virtually any application
- Fast short-circuit protection and dual element, time-delay performance for ultimate protection
- Consistent 2:1 coordination ratios for all Low-Peak fuses make selective coordination easy
- Broad fuse family including Class CC, J, L, and R

## Fusetron

**23% More Energy Efficient*** and the Best Time-Delay Performance***
Advanced protection and save more money

- FUSETRON fuses are on average 23% more energy efficient than the next leadingbrand**
- Dual-element feature provides the best time-delay performance
- Allows for closer sizing to load and better equipment protection
- Ideal for protection of motors and transformers
- Class RK5 fuses with 200 kA interrupting rating

## Limitron

**10x better current limitation than basic circuit breakers or fuses****
Advanced protection for sensitive devices and critical components

- Provides short circuit protection that is on average 10x faster than basic circuit breakers or fuses**
- Fast-acting fuses help prevent equipment damage caused by short-circuit events
- Ideal for critical components in industrial or commercial applications
- Class CC, J, L, R and T fuses with 200 kA interrupting rating

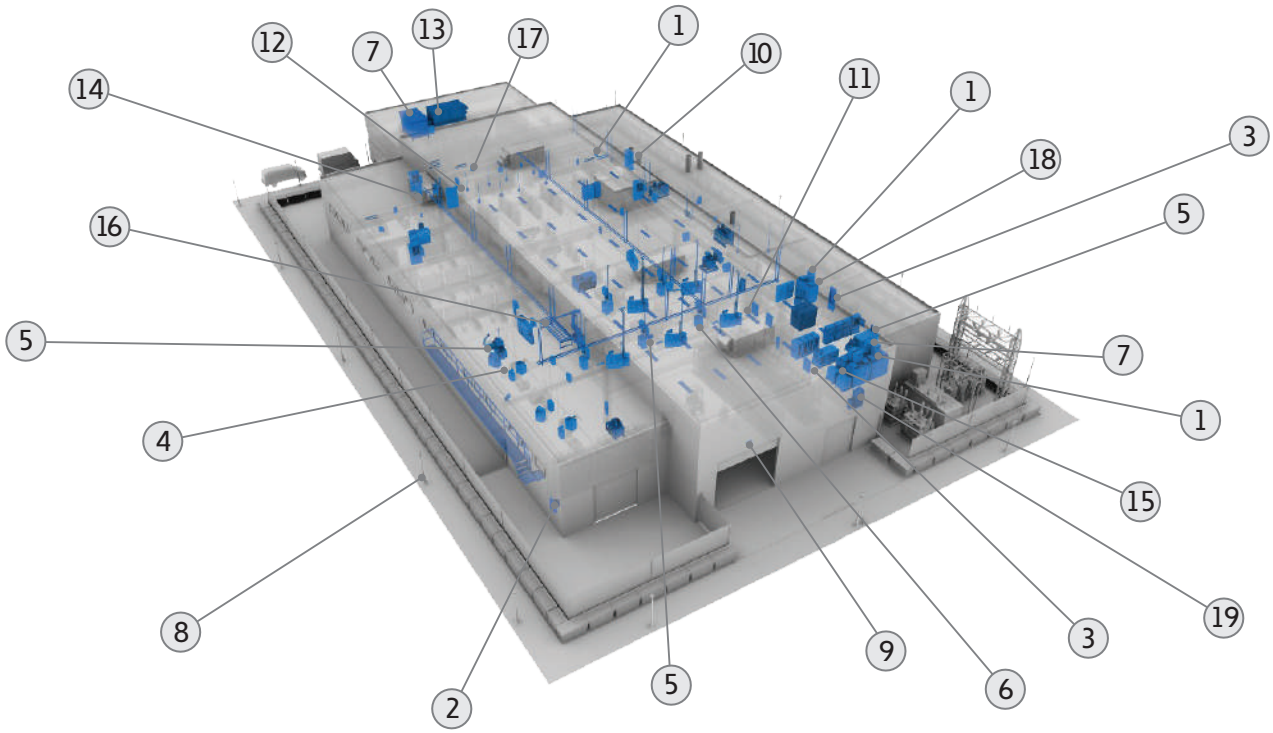
## General purpose

**Basic circuit protection**
Basic overcurrent protection

- Meets basic NEC®, CEC, UL and CSA requirements for service, feeder and branch circuit protection
- Class H/K and G fuses with up to 100 kA interrupting rating

* 50% higher IR (300kA) than any other UL and CSA Listed Fuse. Includes Class J, L and R fuses.
** Does not include current limiting circuit breakers or current limiting fuses. Protection determined by comparing published values for let–through for Class CC, J, R, and T fuses versus a symmetrical RMS waveform at 200kA.
*** Test results are based on weighted sales volume of FUSETRON and Ferraz Shawmut (Mersen) fuses by selected amp and volt rating combination. Next leading brand refers to Ferraz Shawmut based on third-party fuse market share data for a twenty-seven month period (July 2008 through September 2010).

# Simplify fuse selection by application




| | Industrial and commercial applications | LOW-PEAK | FUSETRON | LIMITRON | GENERAL |
|---|---|---|---|---|---|
| 1 | Service, feeder and branch circuit protection | ✓ | ✓ | ✓ | ✓ |
| 2 | Interior lighting | ✓ | ✓ | ✓ | |
| 3 | Distribution panels | ✓ | ✓ | ✓ | |
| 4 | Disconnect switches | ✓ | ✓ | ✓ | |
| 5 | Motor/motor control center | ✓ | ✓ | | |
| 6 | Capacitors | ✓ | ✓ | | |
| 7 | Transformers | ✓ | ✓ | | |
| 8 | Outdoor lighting | ✓ | | ✓ | |
| 9 | Emergency lighting | ✓ | | ✓ | |
| 10 | Electric heat | ✓ | | ✓ | |
| 11 | Welding circuits | ✓ | | ✓ | |
| 12 | Plant lighting | ✓ | | ✓ | |
| 13 | HVAC chillers/blowers | ✓ | | | |
| 14 | Forklift battery charging station | ✓ | | | |
| 15 | Emergency generator | ✓ | | | |
| 16 | Conveyor system | ✓ | | | |
| 17 | UPS backup power supplies | ✓ | | | |
| 18 | Switchboards | ✓ | | | |
| 19 | Elevator control centers | ✓ | | | |

# Easy fuse selection by family

## Ultimate protection

LOW-PEAK

CLASS RK1


LPN-RK-SP


LPN-RK


LPS-RK-SP


LPS-RK

CLASS J


LPJ


LPJ

CLASS L


KRP-C

CLASS CC


LP-CC

## Advanced protection

FUSETRON

CLASS RK5


FRN-R


FRN-R


FRS-R


FRS-R

## Advanced protection

LIMITRON

CLASS RK1


KTN-R


KTN-R


KTS-R


KTS-R

CLASS J


JKS


JKS

CLASS L


KTU


KLU

CLASS T


JJN


JJN


JJS


JJS

CLASS CC


FNQ-R


KTK-R

## Basic protection

GENERAL

CLASS H/K


NON


NON


NOS


NOS

CLASS G

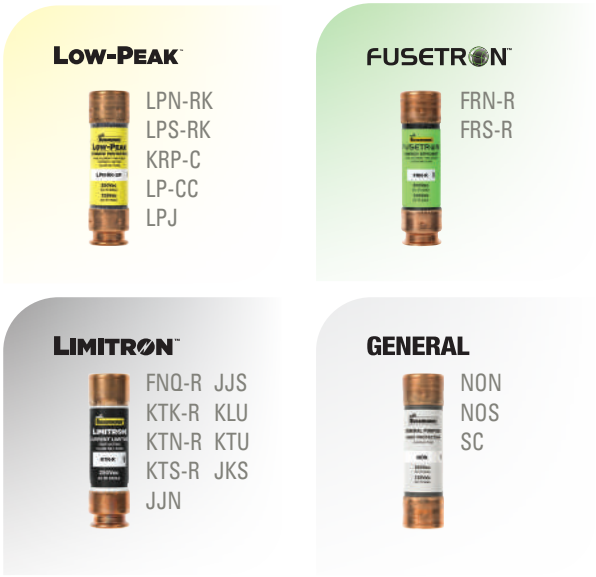

SC

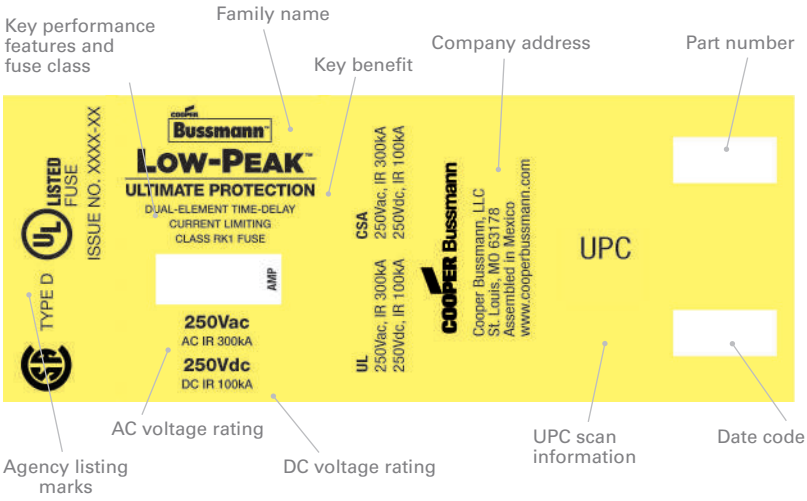

SC

# Speed up fuse replacement

## Color-coded by family

Each fuse label has a unique identifying color representing the family it belongs to. When it's time to replace a fuse, Bussmann series products makes it easier to search for the replacement. When a "yellow fuse" needs replacing, now you can narrow your search by looking for only the "yellow fuses" in your crib.



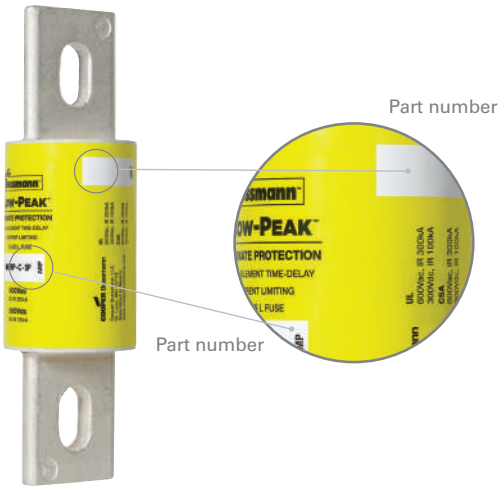




## Consistent look for each label

Every fuse label now has a consistent look. Critical fuse information is presented in an easy-to-read format across the entire Bussmann UL low voltage portfolio to help speed replacement.

## Easy to find part numbers

To ensure you can easily find the part number when you need to replace fuses, the new label design has the part number located in multiple places of large body size blade fuses. With this updated look, you can easily find the important information regardless of the angle in which the fuse is installed.



# Enhance safety and relilability while reducing fuse inventory

## Low-Peak Upgrade program

Eaton's Bussmann series Low-Peak Upgrade program leverages our ultimate protection fuses to deliver enhanced safety, improved system reliability and a simplified inventory.

With just three simple steps, it's easier than ever to improve your circuit protection while reducing your fuse inventory and cost. What's more, you'll save time and increase productivity - all by using Low-Peak fuses.

Let our team of experts walk you through the audit, analysis and implementation of a Low-Peak Upgrade and start realizing savings today.

### Enhance safety

- Superior current-limitation helps reduce arc flash hazards.
- Interrupting ratings up to 300kA for high fault currents.
- Helps achieve code compliance with OSHA, NFPA® and IEEE®.

### Improve system reliability

- Type 2 "no damage" motor starter protection reduces downtime.
- Optional fuse indication to speed troubleshooting.
- Easily meet selective coordination requirements with 2:1 amp ratio with any fuse in the Bussmann series Low-Peak family.

### Simplify inventory

- One Bussmann series Low-Peak fuse can replace multiple fuses in a variety of applications.

In just three simple steps, our team of experts will guide you through the Low-Peak Upgrade program:

1. **Audit**
2. **Analyze**
3. **Implement**

Throughout the Bussmann series Low-Peak Upgrade process, you'll have a dedicated team that includes a Bussmann series product authorized distributor and sales representative. Together, they will walk you through the three steps of the program, making it as easy and effortless for you as possible.

# Complementary products

The broad portfolio of Bussmann series products include more than just UL low voltage fuses.

## Fuse blocks, holders and PDBs

Modular knifeblade fuse blocks

Power distribution blocks

Compact modular fuse holders

## Disconnect switches and safety switches

Fused rotary disconnect switches

Quik-Spec™ safety switches

Compact Circuit Protector

## Additional fuse portfolio

High speed fuses

Medium voltage fuses

CUBEFuses™

## Surge protection

Data signal surge

Type 1 SurgePOD™ surge protective devices

DIN-Rail surge protective devices

**Limitron™ advanced protection fuses**

BUSSMANN SERIES

# 10X better current limitation than basic circuit beakers or fuses

Bussmann series Limitron fuses provide advanced fuse protection.

**Product description:**

Eaton's Bussmann™ series Limitron™ fuses provide short-circuit protection that is, on average, 10X faster than basic circuit breakers or fuses*.

These current-limiting UL® Listed and CSA® Certified fuses are available in Class CC, J, R, and T – all with a 200kA interrupting rating.

*Does not include current limiting circuit breakers or current limiting fuses. Protection determined by comparing published values for let–through for Class CC, J, R, and T fuses versus a symmetrical RMS waveform at 200kA.

**Features and benefits:**

- Advanced current limitation helps prevent equipment damage caused by short-circuits.
- Ideal for critical industrial or commercial applications that have specific current limitation requirements.
- Broad fuse portfolio includes Class CC, J, L, R, and T with 200kA interrupting ratings to provide circuit protection for many applications.
- Most common fuses are in stock and ready to ship within 24 hours with our QuikShip Everyday Service.

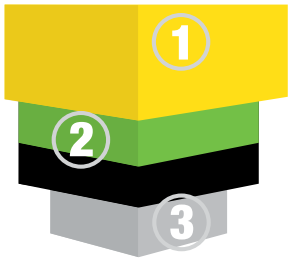

Fast-acting Limitron fuses are ideally suited for protecting sensitive devices and critical components.

EATON

*Powering Business Worldwide*

## Fuses Made Simple™ is the easiest and fastest way to select and specify fuses

Four fuse familes in three tiers of protection offer distinct levels of performance benefits to help speed up specification and selection:




**Ultimate protection**

The best worry-free protection in virtually any application. Low-Peak™ (yellow) fuses 50%* higher interrupting rating than any other similar fuse. Unique dual-element construction delivers a powerful combination of all performance options in one fuse - fast short-circuit protection, current limitation, and time-delay performance with up to 300kA interrupting ratings.

**Advanced protection**

Application specific protection for sensitive devices and critical components or motors and transformers.

Limitron™ (black) fuses offer 10X better current limitation than basic circuit breakers or fuses**. Fusetron™ (green) fuses are 23% more energy efficient*** and the best time-delay performance.

Based on the application, you can choose between fast short-circuit, current limiting performance of Limitron fuses or energy efficient, current limiting, time-delay performance of Fustron fuses and still get a 200kA interrupting rating.

**Basic protection**

General purpose (grey) delivers basic single-element fuse protection for service, feeder and branch circuit applications. Featuring up to 50kA interrupting ratings.

*50% higher IR (300kA) than any other UL and CSA Class J, L and R fuses.
**Does not include current limiting circuit breakers or current limiting fuses. Protection determined by comparing published let–through values for Class CC, J, R, and T fuses versus a RMS symmetrical waveform at 200kA.
***Test results are based on weighted sales volume of Fusetron and Ferraz Shawmut (Mersen) fuses by selected amp and volt rating combination. Next leading brand refers to Ferraz Shawmut based on third-party fuse market share data for a twenty-seven month period (July 2008 through September 2010).

### 600V FNQ-R Class CC time-delay fuses

**Ratings:**
- Volts
  - 600Vac
- Amps
  - 1/4 to 30A
- IR
  - 200kA AC
- Data sheet
  - No. 1014

RoHS

### 600V KTK-R Class CC fast-acting fuses

**Ratings:**
- Volts
  - 600Vac
- Amps
  - 1/10 to 30A
- IR
  - 200kA AC
- Data sheet
  - No. 1015

RoHS

### 600V JKS Class J fast-acting fuses

**Ratings:**
- Volts
  - 600Vac
- Amps
  - 1-600
- IR
  - 200kA AC
- Data sheet
  - No. 1026 (0-60A)
  - No. 1027 (70-600A)

### 600V KLU Class L time-delay fuses

**Ratings:**
- Volts
  - 600Vac
- Amps
  - 601 to 4000A
- IR
  - 200kA AC
- Data sheet
  - No. 1013

RoHS

### 600V KTU Class L fast-acting fuses

**Ratings:**
- Volts
  - 600Vac
- Amps
  - 601 to 6000A
- IR
  - 200kA AC
- Data sheet
  - No. 1010

RoHS

### 250V KTN-R Class RK1 fast-acting fuses

**Ratings:**
- Volts
  - 250Vac
- Amps
  - 1 to 600A
- IR
  - 200kA AC
- Data sheet
  - No. 1043

### 600V KTS-R Class RK1 fast-acting fuses

**Ratings:**
- Volts
  - 600Vac
- Amps
  - 1 to 600A
- IR
  - 200kA AC
- Data sheet
  - No. 1044

### 300V JJN Class T very fast-acting fuses

**Ratings:**
- Volts
  - 300Vac
- Amps
  - 1 to 1200A
- IR
  - 200kA AC
- Data sheet
  - No. 1025

RoHS

### 600V JJS Class T very fast-acting fuses

**Ratings:**
- Volts
  - 600Vac
- Amps
  - 1 to 800A
- IR
  - 200kA AC
- Data sheet
  - No. 1029

RoHS

Powering Business Worldwide

# The easiest and fastest way to select and specify the right control circuit fuse


**Control Circuits**

Find the Bussmann series control circuit fuse you need in just three simple steps.

**Product description:**

Eaton's Bussmann™ series Fuses Made Simple™ program provides the easiest and fastest way to select and specify the right fuse.

Whether it's branch circuit or control circuit (supplemental) fuses, we take the guesswork out.

With Bussmann series Fuses Made Simple - Control Circuits, we now make it simple and easy to replace control circuit fuses with six, voltage-based color codes that help make it easy to identify the right fuse.

Control circuit fuses have many different voltage ratings, ranging from 32 to 600Vac.

Because their physical size does not vary with voltage ratings, the most frequent cause of misapplication is due to improper voltage selection.

Now, each fuse label has a unique identifying color band that represents the fuse's maximum voltage rating. This makes selection easy, replacement simple, and enhances the safety of the entire system.

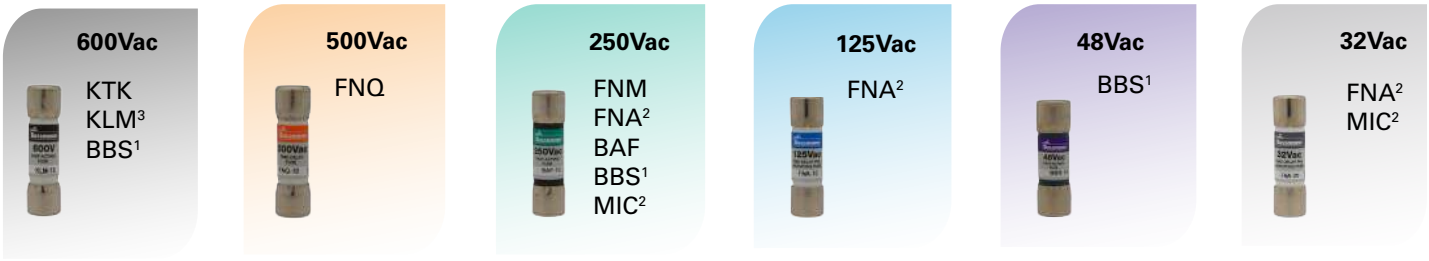
Additionally, each fuse label now has a consistent look. Critical fuse information is presented in an easy-to-read format across the entire Bussmann series control circuit fuse portfolio to help speed replacement.

**Find the Bussmann series control circuit fuse you need in three simple steps:**

1. **Type**
   Select the fuse type. Select from time-delay (for inductive loads) or fast-acting (for resistive loads).
2. **Voltage**
   Select the voltage rating needed. Keep in mind that the fuse voltage rating must be equal to or greater than the circuit voltage.
3. **Interrupting rating**
   Verify that the interrupting rating of the fuse selected is sufficient for the circuit application. Keep in mind that the interrupting rating must be equal to or greater than the available fault current.

## Color-coded by voltage

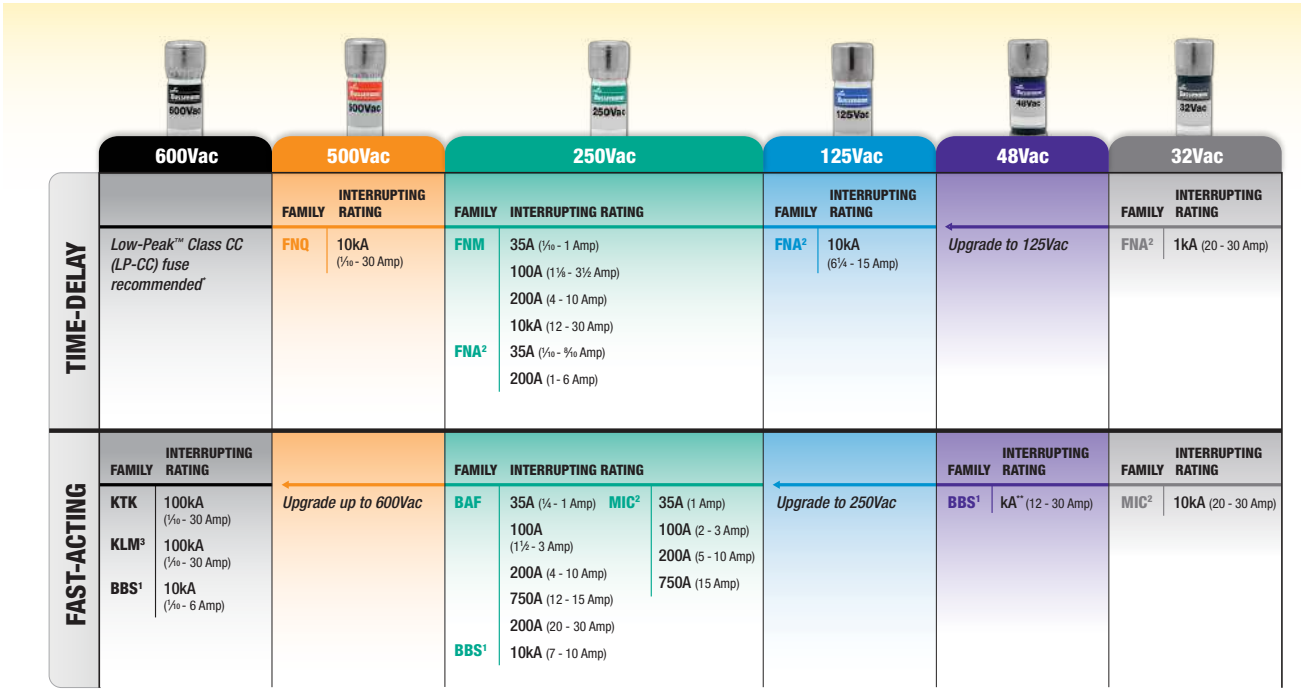
Each fuse has a unique, identifying color band that represents the fuse's maximum voltage rating. When it's time to replace a fuse, Eaton makes it easy to search for the replacement. Select the voltage needed by simply looking for the Bussmann series fuse with the right color band in the storage bin. This narrows the search and speeds replacement time.




Notes:

1. Fuse is 1-3/8" long
2. Fuse is pin indicating
3. Fuse is also rated for 600Vdc

Use the following table to find and select the right Bussmann series control circuit fuse:



| | 600Vac | 500Vac | 250Vac | 125Vac | 48Vac | 32Vac |
|---|---|---|---|---|---|---|
| TIME-DELAY | *Low-Peak™ Class CC (LP-CC) fuse recommended** | FAMILY: FNQ; INTERRUPTING RATING: 10kA (⅛ - 30 Amp) | FAMILY: FNM; INTERRUPTING RATING: 35A (⅛ - 1 Amp), 100A (1⅛ - 3½ Amp), 200A (4 - 10 Amp), 10kA (12 - 30 Amp); FAMILY: FNA²; INTERRUPTING RATING: 35A (⅛ - ⅝ Amp), 200A (1 - 6 Amp) | FAMILY: FNA²; INTERRUPTING RATING: 10kA (6¼ - 15 Amp) | *Upgrade to 125Vac* | FAMILY: FNA²; INTERRUPTING RATING: 1kA (20 - 30 Amp) |
| FAST-ACTING | FAMILY: KTK; INTERRUPTING RATING: 100kA (⅛ - 30 Amp); FAMILY: KLM³; INTERRUPTING RATING: 100kA (⅛ - 30 Amp); FAMILY: BBS¹; INTERRUPTING RATING: 10kA (⅛ - 6 Amp) | *Upgrade up to 600Vac* | FAMILY: BAF; INTERRUPTING RATING: 35A (¼ - 1 Amp), 100A (1½ - 3 Amp), 200A (4 - 10 Amp), 750A (12 - 15 Amp), 200A (20 - 30 Amp); FAMILY: BBS¹; INTERRUPTING RATING: 10kA (7 - 10 Amp); FAMILY: MIC²; INTERRUPTING RATING: 35A (1 Amp), 100A (2 - 3 Amp), 200A (5 - 10 Amp), 750A (15 Amp) | *Upgrade to 250Vac* | FAMILY: BBS¹; INTERRUPTING RATING: kA** (12 - 30 Amp) | FAMILY: MIC²; INTERRUPTING RATING: 10kA (20 - 30 Amp) |

For ultimate protection, any of the control circuit fuses above can be upgraded to a branch circuit rated Low-Peak Class CC fuse (LP-CC).

[1]Fuse is 1-3/8" long
[2]Fuse is pin indicating
[3]Fuse is also rated for 600Vdc.

*For primary protection of control transformers, use FNQ-R.
**For interrupting rating, contact factory.

Powering Business Worldwide

# LIMITRON™ FNQ-R Class CC 600Vac, 1/4-30A, time-delay fuses

RoHS


| Catalog numbers (amps) | | | |
|---|---|---|---|
| FNQ-R-1/4 | FNQ-R-1-3/10 | FNQ-R-3-2/10 | FNQ-R-8 |
| FNQ-R-3/10 | FNQ-R-1-4/10 | FNQ-R-3-1/2 | FNQ-R-9 |
| FNQ-R-4/10 | FNQ-R-1-1/2 | FNQ-R-4 | FNQ-R-10 |
| FNQ-R-1/2 | FNQ-R-1-6/10 | FNQ-R-4-1/2 | FNQ-R-12 |
| FNQ-R-6/10 | FNQ-R-1-8/10 | FNQ-R-5 | FNQ-R-15 |
| FNQ-R-3/4 | FNQ-R-2 | FNQ-R-5-6/10 | FNQ-R-17-1/2 |
| FNQ-R-8/10 | FNQ-R-2-1/4 | FNQ-R-6 | FNQ-R-20 |
| FNQ-R-1 | FNQ-R-2-1/2 | FNQ-R-6-1/4 | FNQ-R-25 |
| FNQ-R-1-1/8 | FNQ-R-2-8/10 | FNQ-R-7 | FNQ-R-30 |
| FNQ-R-1-1/4 | FNQ-R-3 | FNQ-R-7-1/2 | |

## Catalog symbol:

- FNQ-R-(amp)

## Description:

Advanced protection Class CC current-limiting, time-delay fuses.

## Specifications:

### Ratings

- Volts
  - 600Vac
  - 300Vdc (15 & 20A)
- Amps 1/4-30A
- IR
  - 200kA Vac RMS Sym.
  - 20kA Vdc (15 & 20A)

### Agency information

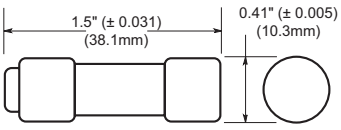
- UL® Listed, Std. 248-4, Class CC, Guide JDDZ, File E4273
- CSA® Certified, Class CC CSA, Class 1422-01, File 53787–HRC-MISC
- CE
- RoHS compliant*

* FNQ-R-1/4 not RoHS complaint.

## Carton quantity:

| Amp rating | Carton qty. |
|---|---|
| 1/4-30 | 10 |

## Dimensions - in:




## Features:

- Provides 10X better current limitation to help prevent equipment damage caused by short-circuit events.
- 200kA interrupting rating complies with NEC® Section 110.9 for today's large capacity systems.
- Fast-acting fuse helps prevent equipment damage caused by short-circuit events.
- Rejection type fuse fits both standard and rejection-style holders.
- The Class CC FNQ-R Limitron fuse meets the needs of control circuit transformer protection.
- FNQ-R fuses can be sized according to NEC® and UL requirements and still allow the high inrush currents, with significantly more time-delay than the UL minimum value of 12 seconds at 200% for Class CC fuses.
- Ideal for critical industrial or commercial applications that have specific current limitation requirements.

# LIMITRON™ FNQ-R Class CC 600Vac, 1⁄4-30A, time-delay fuses

## Applications:

- Branch circuits
- Line protection
- Small control transformers
- Industrial control

## Recommended fuse blocks and holders:

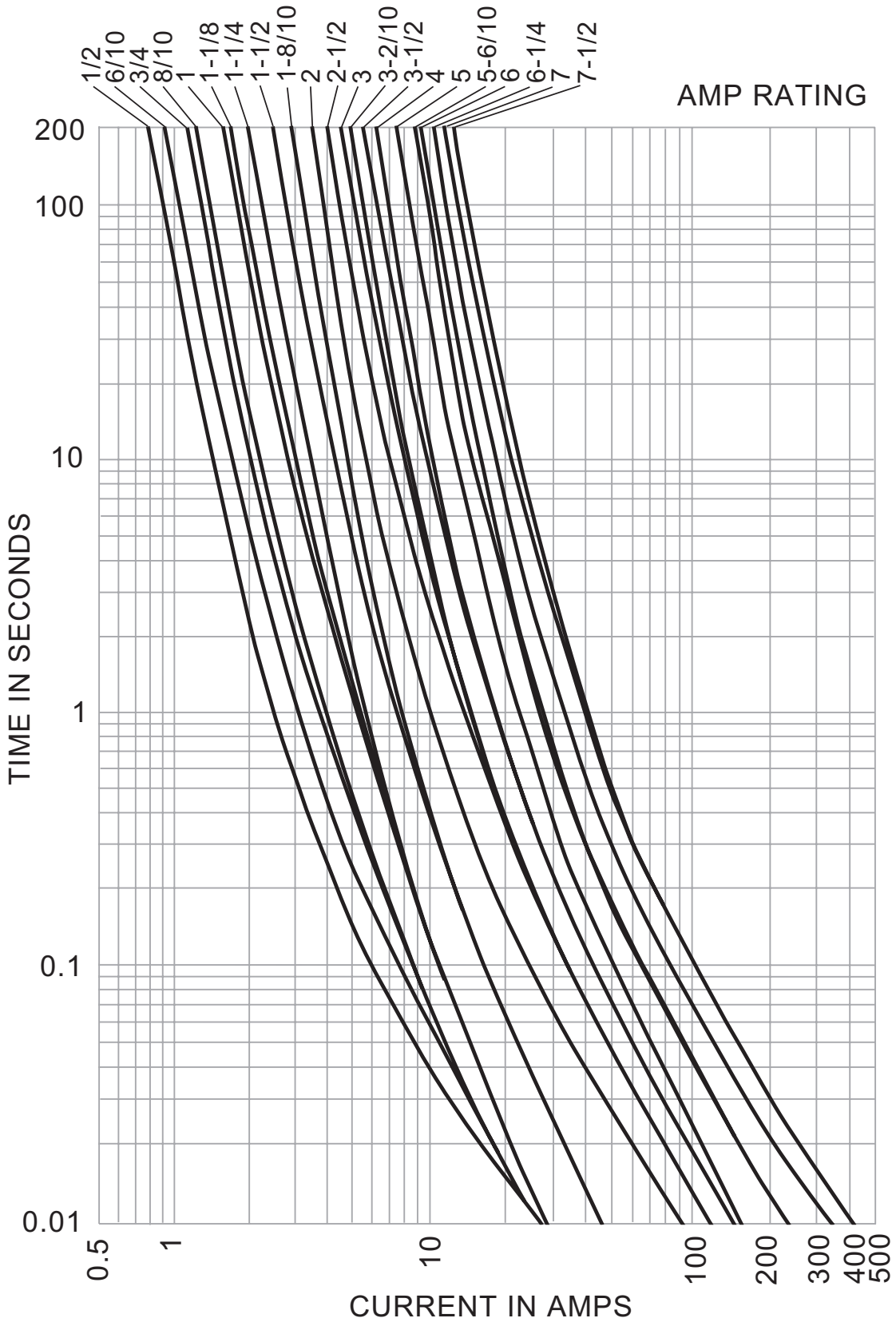
| Fuse amps | 1-Pole | 2-Pole | 3-Pole |
|---|---|---|---|
| Modular open blocks | | | |
| 0-30 | BCM603-1_ | BCM603-2_ | BCM603-3_ |
| DIN-Rail holders | | | |
| | CHCC1D_ | CHCC2D_ | CHCC3D_ |
| 0-30 | — | — | OPM-NG-_ |
| | — | — | OPM-1038_ |
| | — | — | OPM-1038_SW |
| Panel mount holders | | | |
| 0-30 | HPS | — | — |
| | HPF | — | — |
| In-line holders | | | |
| 0-30 | — | HEY | — |
| | HEZ | — | — |

For additional information on Class CC fuse blocks and holders, see data sheets:

- Modular open blocks # 10241 (BCM)
- DIN-Rail holders No. 3185 (CHCC), No. 1109 (OPM), No. 1102 (OPM-1038), No. 1103 (OPM-1038_SW)
- Panel mount holders No. 2113 (HPS), No. 2114 (HPF)
- In-line holders No. 2126 (HEY), No. 2130 (HEZ)

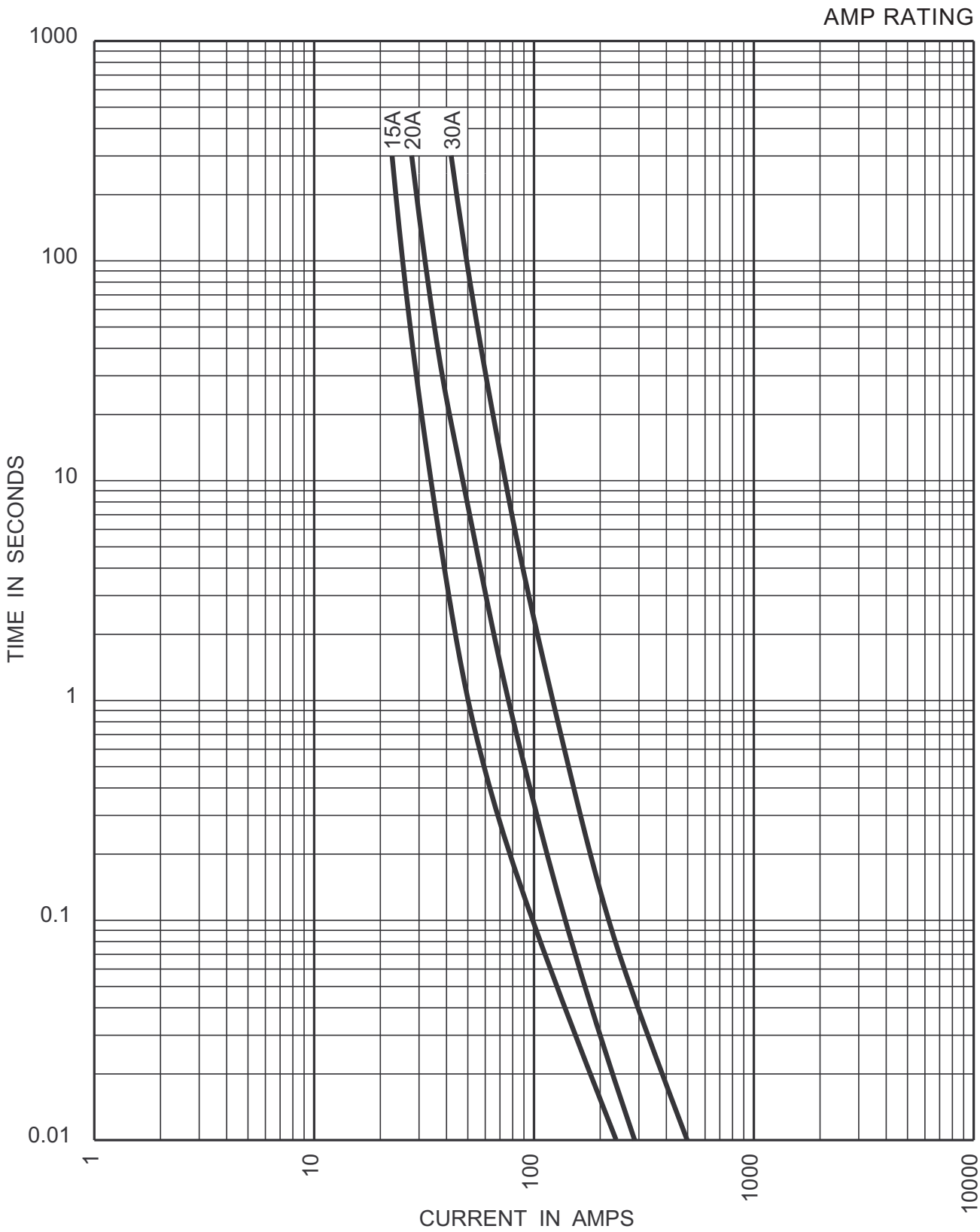
**Time-current curves - average melt:**

**1⁄2 to 71⁄2 amps**



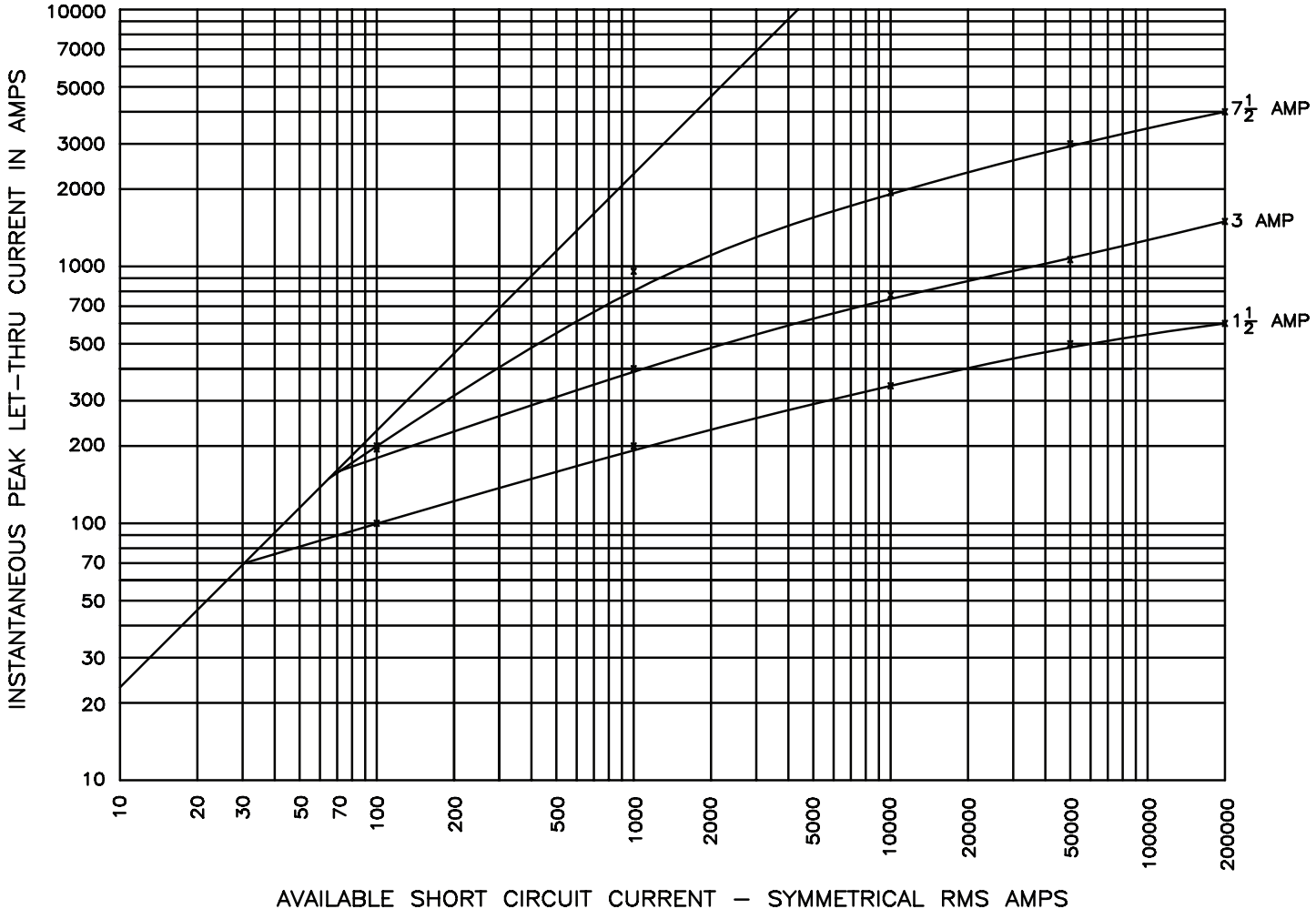
**Time-current curves - average melt:**

**15 to 30 Amps**



## Current-limitation curves:

**1-1⁄2 to 7-1⁄2 amps**



## Current-limitation curves:

**10 to 30 amps**