

Low-Peak Upgrade program

BUSSMANN SERIES



Get the most out of your fuse inventory

Take advantage of the Bussmann™ series Low-Peak™ Upgrade program and enjoy three major benefits:

1

Enhanced safety

- Superior current-limitation performance minimizes incident energy associated with an arc flash. This helps to reduce arc flash hazards to their lowest levels possible. Replacing fuses with Bussmann series Low-Peak fuses improves the safety level of the electrical system.
- UL® Listed interrupting rating up to 300 kA allows the fuse to safely interrupt a circuit under the worst fault conditions.
- Finger-safe design of the Class CF CUBEFuse™ offers protection against shock hazards.
- Compliance with safety standards such as NFPA 70E, NEC® 110.16, IEEE® 1584, OSHA® 29 CFR® 1910 and 1926 and UL 508E helps minimize risk to employees.

2

Improved system reliability

- Type 2 "No damage*" motor starter protection allows the contactor and overloads to be put back in service after a fault without an expensive outage for repair or replacement. Preventing equipment damage helps reduce downtime associated with destructive fault currents.
- Optional fuse indication** on Class CF, J and RK1 fuses allows for faster troubleshooting.
- Superior current-limitation feature helps increase equipment short-circuit current ratings by reducing fault currents and can help comply with NEC 110.10.
- 2:1 amp ratio between upstream and downstream Bussmann series Low-Peak fuses makes confirmation of selective coordination quick and easy, which helps prevent blackouts.

3

Simplified inventory

- Bussmann series Low-Peak fuses are available in UL Class CC, CF, J, L and RK1, so there is a fuse to meet the vast majority of 250 and 600 V overcurrent protection needs.
- One Low-Peak fuse can be used for multiple applications, which reduces the number of SKUs that need to be kept in stock by up to 33%. This saves time and money associated with ordering and stocking fuses. The estimated annual savings is calculated at \$125 per SKU eliminated.
- Signature Low-Peak yellow label enables visible recognition and allows for quick and easy replacement. Each label has been designed with a consistent look and feel with critical information presented in an easy-to-read format.

And most of all, peace of mind knowing that the industry's most respected fuses are protecting your equipment, building and people. In fact, Bussmann series Low-Peak fuses offer 50% more protection than any other Listed fuse.***

Bussmann series Low-Peak ultimate protection fuses

Class RK1



LPN-RK_SP LPN-RK_SP LPS-RK_SP LPS-RK_SP

Class J



LPJ_SP LPJ_SP

Class CF



TCF_RN

Class L



KRP-C

Class CC



LP-CC

*With properly sized Low-Peak fuses

**Available on Class CF, J and RK1 Low-Peak fuses

***50% higher interrupting rating (IR) than any other Class J, L and R, UL and CSA fuse.

Easy as 1, 2, 3

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

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

1

Audit

First, our team visits your facility and conducts a physical inventory of your fuses. We gather all the data we'll need to analyze and prepare our summary reports. This includes the part number, description, manufacturer, quantity on hand and bin location.

-OR-

If you already have a list of your inventory with this information, simply submit that to our team and we'll take it from there. However, please be aware that it is important to physically verify what is in your storeroom for the best results. Once the data is gathered, it is submitted to our in-house team of experts for analysis.

2

Analyze

Next, our team conducts a thorough analysis of your inventory using our proprietary software. After careful examination, we produce a detailed inventory summary and consolidation report. The report includes the SKU reduction and estimated savings, a recommended inventory list and a quote for the purchase of new Bussmann series Low-Peak fuses, including options when applicable.

3

Upgrade

After review of the recommended inventory and consolidation report, the final step to achieve ultimate protection while realizing cost savings is to implement the proposed inventory plan. Simply place a purchase order with your authorized Bussmann series product distributor. We help you minimize your upgrade costs by offering a one-time buy back credit for your existing inventory. When the order arrives, our team will collect your old inventory and dispose of it in an environmentally-friendly manner.

We will then work with you to schedule and conduct training for your facility. In addition to training on our Bussmann series Low-Peak fuses, we are happy to cover other topics related to circuit protection and electrical safety that may be beneficial to you and your employees, including arc flash mitigation.



How the Low-Peak Upgrade program works

How much does this program cost? **FREE**

We are so confident that our Bussmann series Low-Peak fuses will help you achieve ultimate protection while reducing your inventory, that we offer this service free of charge.

How long does the process take? **APPROXIMATELY 1 WEEK**

Once your inventory is physically counted and submitted to our team, the development of the reports generally takes about 5 business days. We'll let you know if we need more information.

What will I receive? **DETAILED REPORT**

When we've completed our analysis, we'll provide a detailed consolidation report that includes:

- Number of SKUs eligible for upgrade and elimination
- Percentage of inventory reduction
- Estimated annual savings
- Quote to purchase new Bussmann series Low-Peak fuses
- One-time buy back credit offer in exchange for existing inventory being recommended
- Detailed recommended inventory list

When the Low-Peak Upgrade program is implemented, we provide training on our Bussmann series Low-Peak fuses and any other circuit protection topic needed as well as convenient cross reference materials for your storeroom.

What happens to my existing inventory?

After you place your order and receive your new Low-Peak fuses and move forward with implementation, we will extend a one-time buy back credit for your existing inventory. Our team will even come pick up the old inventory and recycle it appropriately.

How do I get started?

Reach out to your local Bussmann series product sales representative or authorized distributor – or call us at 855-BUSSMANN (1-855-287-7626). For more information, visit www.cooperbussmann.com/lowpeakupgrade.



Case study

A power plant used various types and sizes of fuses in their facilities panelboards, motor control centers and control panels. Over the years, they had accumulated a mixed inventory and stocked over 236 different fuse SKUs.

After completing the Bussmann series Low-Peak Upgrade program and implementing the proposed consolidation, the customer eliminated 55 fuses from inventory. At \$125* per line item, this amounted to an annual savings of \$6,875 and a 23% reduction in fuse inventory.

Additionally, the customer took advantage of our buy-back program to establish a fresh, optimized inventory.

*Estimated cost savings based on the cost of forecasting, purchasing, receiving, invoicing, stocking and shipping inventory.

Industries served

The Bussmann series Low-Peak Upgrade program is ideal for a variety of industries, including:

- Automotive
- Commercial
- Education
- Food and beverage
- Government
- Healthcare
- Industrial manufacturing
- Mineral and mining
- Machine building
- Oil and gas
- Pulp and paper
- Water/wastewater
- Steel mills
- and more...

Bussmann series Low-Peak fuse portfolio

Class CC fuses

LP-CC time-delay, rejection-type fuses

- Small Class CC size
 - Permits space saving branch circuit protection up to 30 amps, 600 volts
- Current-limiting
 - Provides fast response to damaging short-circuits
- 200 kA interrupting rating
 - Helps ensure future expansion of the electrical system will not obsolete the circuit protection
- Lighting and heating loads
 - Easy to size at just 125% of continuous load
- Easily replaces lower-rated 1-1/2" x 13/32" midget fuses for ultimate protection without the need to change fuse blocks or holders
- Selective coordination ratio of 2:1 (within Low-Peak fuse family) prevents electrical shutdowns from extending beyond the failed circuit
- Time-delay coupled with Class CC current-limiting response provides close sizing on small motor and relay circuits, and maximum component short-circuit current rating protection

Product	Volts	Amps	IR
LP-CC	600 Vac	1/2 - 30 A	200 kA AC 20 kA DC
	300 Vdc*		
	150 Vdc		

*1/2 - 2 8/10A and 20-30A



Typical applications

- Branch circuit protection
- Specialized circuits
- Industrial controls and panels
- Isolated in-line fuse holders

Agency information

UL Listed Std 248-4, Class CC, Guide JDDZ, File E4273, CSA Certified, Class 1422-02, File 53787, RoHS compliant (20-30 A), CE



CCP2-_-30CC
Compact Circuit Protector for Class CC fuses



CCPLP-_-30CC
Low profile Compact Circuit Protector for Class CC fuses



BCM
Modular fuse block for Class CC fuses

Class CF CUBEFuse

TCF dual-element, time-delay finger-safe

Unique, finger-safe Bussmann series Low-Peak CUBEFuse and fuse holder system provides the same Class J performance and up to 300 kA interrupting rating as the LPJ_SP.

- Size-rejecting holders
 - 30, 60, 100, 200, 225 and 400 amp versions help prevent overfusing
- Built-in test points
 - Permits safe troubleshooting of suspect circuits
- Lighting and heating loads
 - Easy to size at just 125% of continuous load
- Motor protection and sizing the same as Class J
- Optional indication speeds troubleshooting by providing visual indication of the open fuse
- Motor rated Compact Circuit Protector (CCP) disconnect switch
 - 30, 60, 100, 200 and 400 A ratings on 1-, 2- and 3-pole versions

Product	Volts	Amps	IR
TCF	600 Vac 300 Vdc	1-100 A	300 kA AC (UL)
		1-100 A	200 kA AC (CSA)
		110-400 A	200 kA AC (UL)
		1-400 A	100 kA DC (UL)
		1-100 A	100 kA DC (CSA)



CCP_CF
1-, 2-, and 3-pole switched disconnects in 30, 60, 100, 200 and 400 A versions



TCFH_N
30, 60, 100, 200, 225 and 400 A holders



Typical applications

- Electrical panelboards
- Machinery disconnects
- Industrial controls and panels
- Required finger-safe systems

Agency information

UL Listed Guide JDDZ, File E4273, CSA Certified, Class 1422-02, File 53787, RoHS compliant, CE

Bussmann series Low-Peak fuse portfolio

Class J fuses

LPJ_SP dual-element, time-delay

- 300 kA RMS Sym. interrupting rating
- Protects low short-circuit current rated circuit components
 - Excellent current limitation allows for protection of downstream circuit breakers and equipment
- Motor branch circuit protection
 - Sizing as low as 150% of motor full load current provides superior short-circuit protection
- Optional open fuse indication
 - Permits faster troubleshooting for less downtime
- Lighting and heating loads
 - Easy to size at just 125% of continuous load
- Selective coordination ratio of 2:1 (within Low-Peak fuse family) prevents electrical shutdowns from extending beyond the failed circuit

Product	Volts	Amps	IR
LPJ_SP	600 Vac	1-600 A	300 kA AC
	300 Vdc	1-600 A	100 kA DC



Typical applications

- Power panelboards
- Branch circuit breaker panelboard mains
- Machinery disconnects
- Industrial control

Agency information

UL Listed Guide JDDZ, File E4273, CSA Certified Class J per CSA 22.2 No 248.8, Class 1422-02, File 53787, RoHS compliant, CE

Class L fuses

KRP-C_SP time-delay

- Minimum 4-second delay at 500% of rated amps
 - Permits closer sizing to large motor and transformer loads without nuisance openings caused by high inrush currents
- High interrupting rating
 - At 300 kA, permits fusing mains and feeders with enough interrupting rating to handle any future expansion of the electrical system
- Lighting and heating loads
 - Easy to size at just 125% of continuous load

Product	Volts	Amps	IR
KRP-C_SP	600 Vac	601-6000 A	300 kA AC
	300 Vdc	601-2000 A	100 kA DC



Typical applications

- Large distribution switchboards
- Power panelboards
- Large machinery disconnects

Agency information

UL Listed 248-10, Guide JFHR, File E56412, CSA Certified, Class 1422-02, File 53787, Class L per CSA C22.2, No 248.10, RoHS compliant, CE

Class RK1 fuses

LPN-RK_SP and LPS-RK_SP dual-element, time-delay

- 300 kA RMS Sym. interrupting rating
- Branch circuit, wire and cable protection
 - Current let-through is kept below the 1/2 cycle withstand of equivalently sized cables
- Lighting and heating loads
 - Easy to size at just 125% of continuous load
- Motor starter protection
 - Provides Type 2 "No Damage" protection when properly sized. Dual-element permits sizing at only 130% of full load current. Current-limitation cuts short-circuit current off before it reaches dangerous levels
- Optional open fuse indication
 - Permits faster troubleshooting for less downtime
- Selective coordination ratio of 2:1 (within Low-Peak fuse family) prevents electrical shutdowns from extending beyond the failed circuit

Product	Volts	Amps	IR
LPN-RK_SP	250 Vac	1/10 - 600 A	300 kA AC 100 kA DC
	125 Vdc		
	(0-60 A)		
LPS-RK_SP	250 Vdc	1/10 - 600 A	300 kA AC 100 kA DC
	(70-600 A)		
	600 Vac		
	300 Vdc		



Typical applications

- Large distribution switchboards
- Power panelboards
- Large machinery disconnects

Agency information

UL Listed, Guide JDDZ, File E4273, CSA Certified Class RK1 per CSA 22.2 No 248.12, Class 1422-02, File 53787, CE

Low-Peak fuse cross reference

The Low-Peak Upgrade program offers superior performance while reducing the number of SKUs that need to be in stock. Bussmann series Low-Peak fuses feature a high degree of current limitation to help provide the superior component protection and help mitigate arc flash hazard.

Listed below are fuse upgrades by branch circuit class.

The left column contains catalog symbols for Bussmann series and competitor products.

The right column contains the Low-Peak upgrade for consolidating and simplifying inventory.

To find out more about the advantages offered by the Low-Peak Upgrade program, visit Eaton.com/bussmannseries.

This is only a consolidated cross reference of the most common fuses. For a more extensive cross reference for fuses, please visit Eaton.com/bussmannseries/FuseFinder.

250 Volt Class R/H(K)

Fuse symbol	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/H(K)

Fuse symbol	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



Class CC and Midget

Fuse symbol	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	
FLO	
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

Fuse symbol	Low-Peak upgrade
A4J	LPJ_SP
AJT	
CJ	
CJS	
GF8B	
HRCXXJ	
J	
JA	
JCL	
JDL	
JFL	
JHC	
JKS	
JLS	
JTD	LPJ_SP



Class L

Fuse symbol	Low-Peak upgrade
A4BQ	KRP-C_SP
A4BT	
A4BY	
A4BY (Type 55)	
CLF	
CLL	
CLU	
HRC-L	
KLLU	
KLPC	
KLU	
KTU	
L	
LCL	
LCU	KRP-C_SP



† Obsolete, must be replaced with a another electrically equivalent fuse.
 †† 70 to 600 amp versions obsolete. Must be replaced with a another electrically equivalent fuse.

† Obsolete, must be replaced with a another electrically equivalent fuse.
 †† 70 to 600 amp versions obsolete. Must be replaced with a another electrically equivalent fuse.

The competitive fuse catalog symbols shown were derived from published information for various manufacturers. Because competitive products may differ from Bussmann series products, it is recommended that each selected product be checked for required electrical and mechanical characteristics before substitutions are made. Eaton is not responsible for misapplications of our products.

Overcurrent protection is application dependent. Consult the latest catalogs and application literature, or contact our Application Engineers toll free, 7:00 a.m. to 5:00 p.m. Central time, Monday-Friday at 855-287-7626 (855-BUSSMANN).



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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