

### Want More

- Downtime Reduction
- Workplace Safety
- Code Compliance
- ...With Less Inventory?

## Get the Low-Peak® Advantage

Only From Cooper Bussmann

# Electrical Reliability and Safety are Critical for Productivity, and Protecting Personnel and Equipment

To meet these objectives we created the Cooper Bussmann® Low-Peak® family of current-limiting fuses for use in main, feeder and branch circuits (up to 600V), or for supplemental protection in equipment, panels or assemblies.

Unlike circuit breakers, Cooper Bussmann Low-Peak fuses are the overcurrent protection solutions that never require maintenance or calibration – providing constant, reliable performance.



## More Downtime Reduction:

- Type 2 “No Damage” motor starter/controller protection prevents equipment damage.
- Faster troubleshooting with fuse indication – finding the problem circuit is now easier and faster.
- Low-Peak fuses are available in Class L, J, CC and RK1 to meet virtually all 600 volt system needs for overcurrent protection.

## More Code Compliance:

- Low-Peak fuses help reduce fault currents to meet new assembly Short-Circuit Current Rating (SCCR) requirements.
- Selective coordination is easy with a 2:1 amp ratio between upstream and downstream Low-Peak fuses.

## More Workplace Safety:

- Current-limiting feature minimizes incident energy to reduce arc-flash hazards to their lowest levels possible.
- Low-Peak CUBEFuse® is IP20 finger-safe.
- Interrupting ratings up to 300kA minimize the worst fault current conditions.

## ...With Less Inventory

- Reduce fuse inventory by up to 33 percent.
- Reduce buying, stocking and reordering.



In a fraction of a second, arcing faults can release tremendous energy. This can result in serious injury or death. Current-limiting Low-Peak fuses reduce the energy released to help improve worker safety and equipment protection.



# The Cooper Bussmann® Low-Peak

## 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 300kA permits fusing mains and feeders with plenty of interrupting capacity for future expansion of electrical system.

Product	Volts	Amps	IR
KRP-C	600Vac	601-6000A	300kA ac
	300Vdc	601-2000A	100kA dc



KRP-C upgrades the following:			
A4BQ	CLASS L	HRC-L	KTU
A4BT	CLF	KLLU	L
A4BY	CLL	KLPC	LCL
A4BY TYPE 55	CLU	KLU	LCU

### Typical Applications

- Large distribution switchboards
- Power panelboards
- Large machinery disconnects

## Class RK1 Fuses

### LPN-RK & LPS-RK Dual-Element, Time-Delay

- **Wire & Cable Protection:** Current let-through is kept below the ½ cycle withstand of most cables.
- **Lighting & Heating Loads:** Easy to size at just 125% of continuous load.
- **Motor Protection:** Provides Type 2 “No Damage” protection when properly sized. Dual-element permits sizing at only 130% of full load current, not 300% of traditional non time-delay fuses. Current-limiting cuts short-circuit current off before it reaches dangerous levels.
- **Optional Open-Fuse Indication:** Permits faster troubleshooting for less downtime.

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



LPN-RK upgrades the following:			
A2D	DLN-R	HB	NRN
A2D-R	ECN	KLN-R	OTN
A2K	ECN-R	KON	REN
A2K-R	ERN	KTN-R	RFN
A2Y TYPE1	FLN	LENRK	RHN
AT-DE	FLN-R	LKN	RLN
CHG	FRN	LLN-RK	TR
CRN-R TYPE 3	FRN-R	LON-RK	655
CTN-R	FTN-R	NCLR	660
DEN	GDN	NLN	10KOTN
DLN	HAC-R	NON	50KOTN

LPS-RK upgrades the following:			
A6D	ERS	LES	RFS
A6K-R	FLS	LES-R	RHS
AGX TYPE 1	FLS-R	LES-RK	RLS
ATS-DE	FRS	LKS	SCLR
CHR	FRS-R	LLS-RK	TRS
CTS-R	FTS-R	LOS-RK	TRS-R
DES	GDS	NLS	656
DES-R	HA	NOS	10KOTS
DLS	KLS-R	NRS	50KOTS
DLS-R	KOS	OTS	
ECS-R	KTS-R	RES	

### Typical Applications

- Power panelboards
- Motor control centers
- Machinery disconnect switches

For details on amp ratings, time-current curves and other specifications, see the following Data Sheets on line at [www.cooperbussmann.com/datasheets/ULCSA](http://www.cooperbussmann.com/datasheets/ULCSA):

Class L		Data Sheet
KRP-C_SP	601-2000 amps	1008
	2001-6000 amps	1009

Class RK1		Data Sheet
LPN-RK_SP	250V 0-60 amps	1003
	250V 70-600 amps	1004
LPN-RK_SPI	250V 70-600 amps with indication	1066
LPS-RK_SP	600V 0-60 amps	1001
	600V 70-600 amps	1002
LPS-RK_SPI	600V 0-60 amps with indication	1061
	600V 70-600 amps with indication	1064

Class J		Data Sheet
LPJ_SP	0-60 amps	1006
	70-600 amps	1007
LPJ_SPI	0-60 amps with indication	1062
	70-600 amps with indication	1063
TCF* & TCFH	1-100 amps	9000

Class CC		Data Sheet
LP-CC	0-30 amps	1023

\*Class J Performance

# Family of Current-Limiting Fuses

## Class J Fuses

### LPJ-SP Dual-Element, Time-Delay

- **Protecting Low IR Circuit Components:** High 300kA interrupting rating protects downstream circuit breakers and distribution blocks.
- **Motor Branch Circuit Protection:** Sizing at just 150% of motor full load current provides superior short-circuit protection.
- **Optional Open-Fuse Indication:** Permits faster troubleshooting for less downtime.

Product	Volts	Amps	IR
LPJ	600Vac	1-600A	300kA ac
	300Vdc	1-60A	100kA dc



### LPJ-SP upgrades the following:

A4J	GF8B	JCL	JKS
AJT	HRCXXJ	JDL	JLS
CJ	J	JFL	JTD
CJS	JA	JHC	

If your Class J fuse application requires high-speed performance, ask for our DFJ drive fuse. It's the easy, drop-in replacement solution.

### Typical Applications

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

## Class J Performance Fuses & Fuse Holders

### TCF Dual-Element, Time-Delay IP20 Finger-Safe

Unique IP20 finger-safe Low-Peak CUBEFuse® and fuse holder system provides the same Class J performance and 300kA interrupting rating as the LPJ-SP.

- **Size-Rejecting Holders:** In 30, 60 and 100 amp versions help prevent overfusing.
- **Built-In Test Points:** Permits safely troubleshooting suspect circuits.

Product	Volts	Amps	IR
TCF	600Vac	1-100A	300kA ac (UL)
	300Vdc		200kA ac (CSA)
			100kA dc



DIN or panel-mount holder. Available in 30, 60 and 100A case sizes to help prevent overfusing.

### Typical Applications

- Electrical panelboards
- Machinery disconnects
- Industrial control
- Required finger-safe systems

## Class CC

### LP-CC Time-Delay Fuses

- **Small Class CC Size:** Permits space saving branch circuit protection up to 30 amps.
- **Current-Limiting:** Provides fast response to damaging short-circuits with higher interrupting rating than is possible with circuit breakers.
- **200kA Interrupting Rating:** Helps assure future growth will not obsolete the electrical system.

Product	Volts	Amps	IR
LP-CC	600Vac	½-30A	200kA ac
	300Vdc (½-2 % <sub>0</sub> A & 20-30A)		20kA dc
	150Vdc (3-15A)		



### LP-CC upgrades the following:

A6Y TYPE 2B	BLN	FLQ	MCL
ABU	CCMR	FNM	MEN
AGU	CM	FNQ	MEQ
ATDR	CMF	FNW	MOF
ATM	CNM	GGU	MOL
ATMR	CNQ	HCLR	OTM
ATQ	CTK	KLK	TRM
BAF	CTK-R	KLK-R	6JX
BAN	FLM	KTK	
BLF	FLQ	KTK-R	

### Typical Applications

- Specialized circuits
- Industrial control
- Branch circuits

## Electrical System Review for a Total System Approach



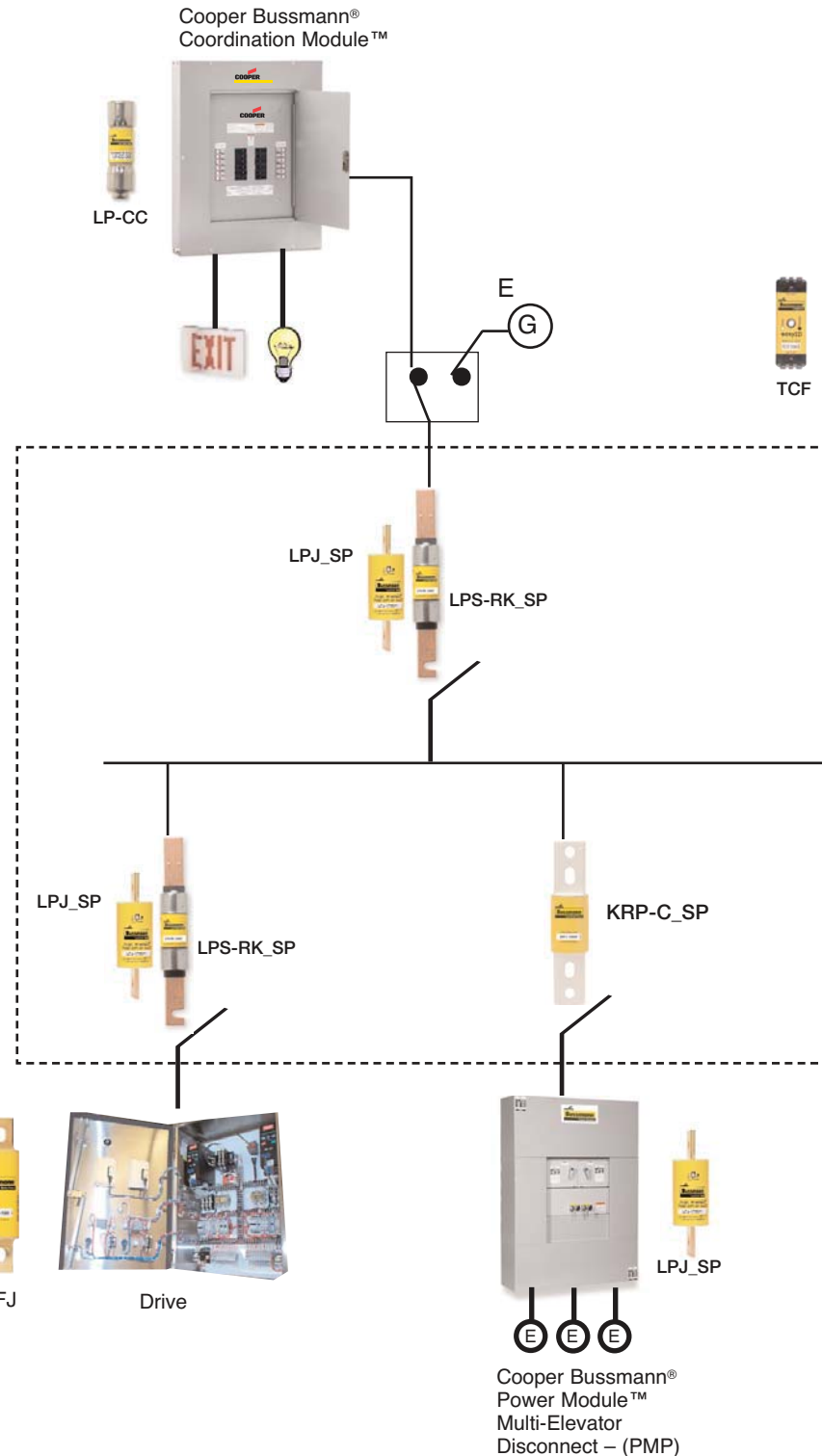
In addition to consolidating your fuse inventory for better protection with fewer fuses, Cooper Bussmann offers engineering services.


We provide the following engineering services:

- Short-circuit analysis
- Arc-flash hazard analysis
- Selective coordination studies

Whether a system is old or new, good electrical practice requires periodic assessment to assure maximum safety and reliability. For details on our engineering services, contact your Cooper Bussmann representative or call 636-207-3294.

## Low-Peak® Family of Enhance Electrical System Reliability & Performance



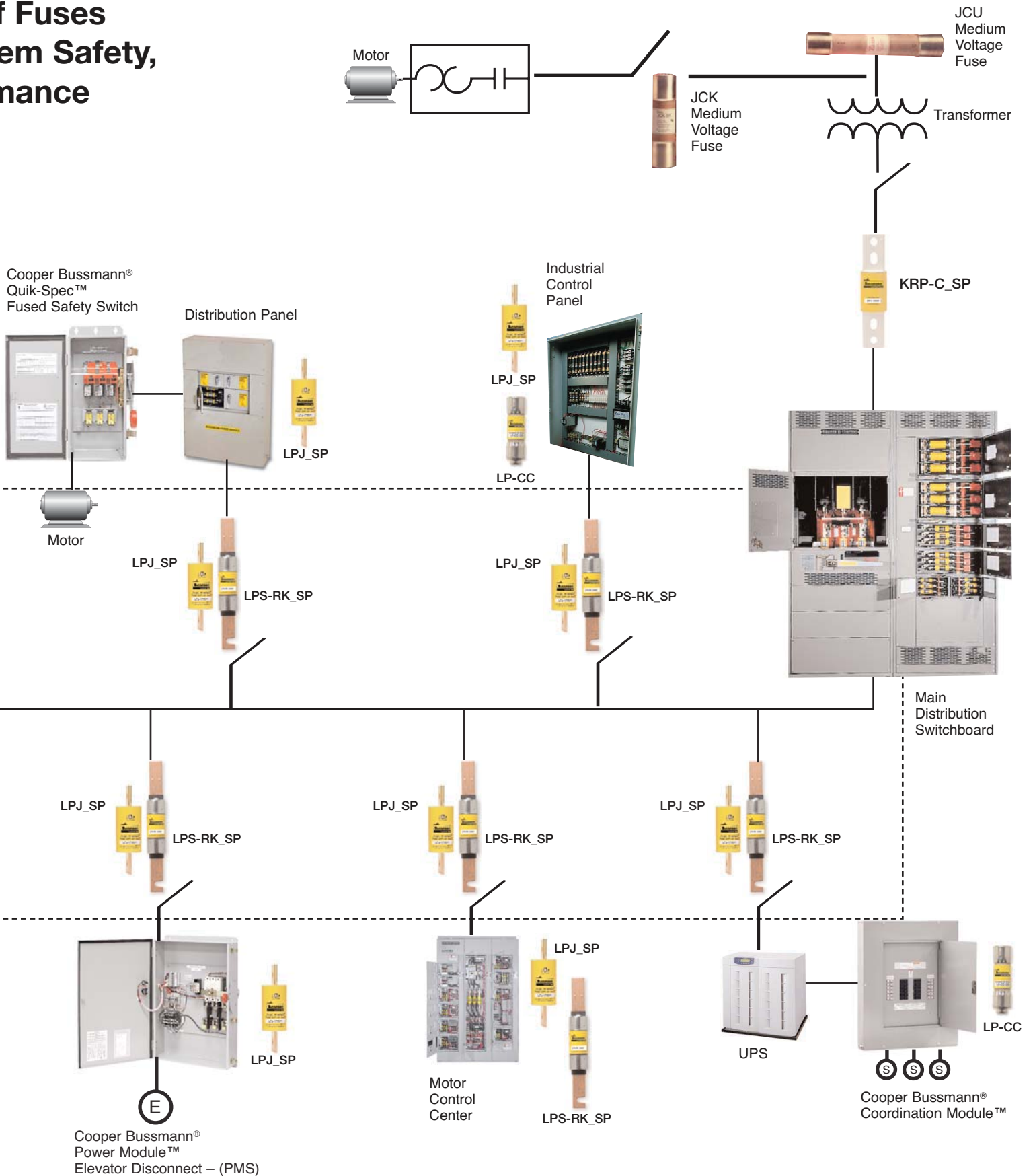




**OSCAR™ 2.0**  
**Compliance Software**

Compute Assembly SCCR Calculations with Ease & Confidence

[www.cooperbussmann.com/OSCAR](http://www.cooperbussmann.com/OSCAR)

# Types of Fuses for System Safety, Performance



# Cooper Bussmann: Leading the Industry in Downtime Reduction, Workplace Safety & Code Compliance Solutions

## Customer Assistance

### Customer Satisfaction Team

The Cooper Bussmann® Customer Satisfaction Team is available to answer questions regarding Cooper Bussmann products and services. Calls should be made Monday – Friday, 8:00 a.m. – 4:30 p.m. for all US time zones.

The Customer Satisfaction Team can be reached via:

- Phone: 636-527-3877
- Toll-free fax: 800-544-2570
- E-mail: [busscustsat@cooperindustries.com](mailto:busscustsat@cooperindustries.com)

### Emergency and After-Hours Orders

To accommodate time-critical needs, Cooper Bussmann offers emergency and after-hours service for next flight out or will call. Customers pay only standard price for the circuit protection device, rush freight charges and a modest emergency fee for this service. Emergency and after-hours orders should be placed through the Customer Satisfaction Team. Call:

- Monday – Friday, 8:00 a.m. – 4:30 p.m. Central Time 636-527-3877
- After hours 314-995-1342

### C<sup>3</sup> – The Enhanced, Online Cooper Customer Center

Providing real time product availability, net pricing, order status and shipment tracking across six Cooper divisions: B-Line, Bussmann, Crouse-Hinds, Lighting, Power Systems & Wiring Devices. Available at:

- [www.cooperc3.com](http://www.cooperc3.com)
- 877-995-5955 for log-in assistance.

### Application Engineering

Application Engineering assistance is available to all customers. The Application Engineering team is staffed by degreed electrical engineers and available by phone with technical and application support Monday – Friday, 8:00 a.m. – 5:00 p.m. Central Time.

Application Engineering can be reached via:

- Phone: 636-527-1270
- Fax: 636-527-1607
- E-mail: [fusetech@cooperindustries.com](mailto:fusetech@cooperindustries.com)

### Services

- Engineering: electrical system review, arc-flash hazards, selective coordination, labeling requirements
- Training: electrical safety and safety programs, code compliance
- Testing: component testing for agency certifications

Contact us for more information on services:

- Phone: 636-207-3294
- E-mail: [services@cooperindustries.com](mailto:services@cooperindustries.com)

### Online Resources

Visit [www.cooperbussmann.com](http://www.cooperbussmann.com) for the following resources:

- Product cross reference
- Arc-flash calculator
- OSCAR™ 2.0 compliance software
- Training modules