

Fuse Selectivity Ratio Guide

Simply adhering to fuse selectivity ratios makes it easy to design and install fusible systems that are selectively coordinated. See the Cooper Bussmann Selectivity Ratio Guide. The top horizontal axis shows loadside fuses and the left vertical axis shows lineside fuses. These selectivity ratios are for all levels of overcurrents up to the fuse interrupting ratings or 200,000A, whichever is lower. The ratios are valid even for fuse opening times less than 0.01 second. The installer just needs to install the proper fuse type and amp rating. It is not necessary to plot time-current curves or do a short-circuit current analysis (if the available short-circuit current is less than 200,000A or the interrupting rating of the fuses, whichever is less). All that is

necessary is to make sure the fuse types and amp rating ratios for the mains, feeders and branch circuits meet or exceed the applicable selectivity ratios. If the ratios are not satisfied, then the designer should investigate another fuse type or design change.

Notice the Low-Peak® fuses (LPJ_SP, LPN-RK_SP, LPS-RK_SP, and KRP-C_SP) as well as the CUBEFuse® (TCF) only require a 2:1 amp rating ratio to achieve selective coordination. This simplifies the design process and flexibility.

Selectivity Ratio Guide (Lineside to Loadside)¹

Circuit					Loadside Fuse										
Current Rating					601-6000A	601-4000A	0-600A		601-6000A	0-600A	0-1200A	0-600A	0-60A	0-30A	
Type					Time-Delay	Time-Delay	Dual-Element Time-Delay		Fast-Acting	Fast-Acting	Fast-Acting	Fast-Acting	Time-Delay		
Trade Name Class					Low-Peak (L)	Limitron (L)	Low-Peak (RK1)	Low-Peak (J)	Fusetron (RK5)	Limitron (L)	Limitron (RK1)	T-Tron (T)	Limitron (J)	SC (G)	(CC)
Cooper Bussmann Symbol					KRP-C_SP	KLU	LPN-RK_SP LPS-RK_SP	LPJ-SP TCF ²	FRN-R FRS-R	KTU	KTN-R KTS-R	JJN JJS	JKS	SC	LP-CC FNQ-R KTK-R
Lineside Fuse	601 to 6000A	Time-Delay	Low-Peak® (L)	KRP-C_SP	2:1	2.5:1	2:1	2:1	4:1	2:1	2:1	2:1	2:1	2:1	2:1
	601 to 4000A	Time-Delay	Limitron® (L)	KLU											
	0 to 600A	Dual-Element	Low-Peak (RK1)	LPN-RK_SP LPS-RK_SP LPJ-SP TCF ²	-	-	2:1	2:1	8:1	-	3:1	3:1	3:1	4:1	2:1
	600A	ment	Fusetron® (RK5)	FRN-R FRS-R	-	-	1.5:1	1.5:1	2:1	-	1.5:1	1.5:1	1.5:1	1.5:1	2:1
	601 to 6000A		Limitron (L)	KTU	2:1	2.5:1	2:1	2:1	6:1	2:1	2:1	2:1	2:1	2:1	2:1
	0 to 600A	Fast-Acting	Limitron (RK1)	KTN-R KTS-R	-	-	3:1	3:1	8:1	-	3:1	3:1	3:1	4:1	
	0 to 1200A		T-Tron® (T)	JJN JJS	-	-	3:1	3:1	8:1	-	3:1	3:1	3:1	4:1	
	0 to 600A		Limitron (J)	JKS	-	-	2:1	2:1	8:1	-	3:1	3:1	3:1	4:1	
0 to 60A	Time-Delay	SC (G)	SC	-	-	3:1	3:1	4:1	-	2:1	2:1	2:1	2:1		

1. Where applicable, ratios are valid for indicating and non-indicating versions of the same fuse. At some values of fault current, specified ratios may be lowered to permit closer fuse sizing. Consult with Cooper Bussmann. Ratios given in this Table apply only to Cooper Bussmann® fuses. When fuses are within the same case size, consult Cooper Bussmann.

2. TCF (CUBEFuse®) is 1 to 100A Class J performance; dimensions and construction are unique, finger-safe IP20 design.

NOTE: All the fuses in this table have interrupting ratings of 200kA or greater, except the SC fuses have 100kA IR.