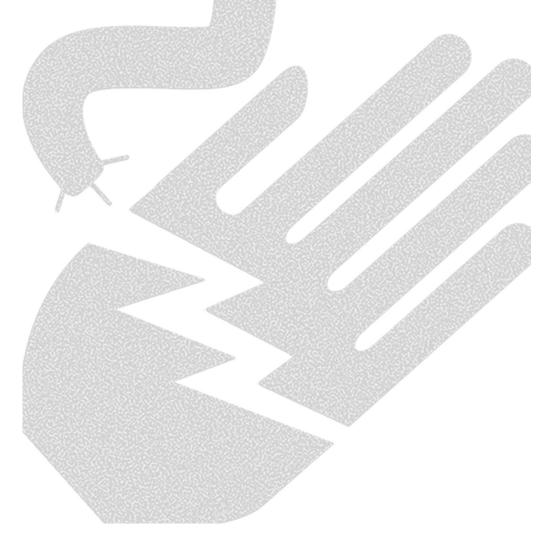
Panelboard and switchboards series rating information manual

Play it safe...read this manual!







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Introduction

The purpose of this publication is to explain the proper application of series ratings in Eaton's panelboards and switchboards.

Effective: April 2014

Industry standards and NFPA® 70—the National Electrical Code® (NEC®) require protection of the entire electrical distribution system from damage due to short-circuit faults. NEC Article 110.10 states "The overcurrent protective devices... shall be selected and coordinated to permit the circuit-protective devices used to clear a fault to do so without extensive damage to the electrical components of the circuit." The entire distribution system is required to meet this standard. Series rated systems have become an effective method of meeting these requirements.

There are three protection systems used to protect low voltage power distribution conductors and equipment. They are:

- Fully rated protection
- Fully rated, selectively coordinated protection
- Series rated protection

Fully Rated Protection: Where all overcurrent devices are rated for the full prospective short-circuit current at their line side terminals throughout the system.

Selectively Coordinated Protection: Is a fully rated system where the overcurrent device closest to the fault will open first, thus isolating the faulty circuit.

Series Rated Protection: A short-circuit interrupting rating assigned to a combination of two or more overcurrent protective devices that are connected in series and which the rating of the downstream device(s) in the combination is less than the series rating.

The short-circuit interrupting rating of the first device in the series must be equal to or greater than the available fault current. Downstream breakers, however, are not fully rated for the system's available fault current.

Series ratings are also known in the industry as integrated ratings, series combination ratings, and series connected ratings. The upstream overcurrent device in the series may be either internally or externally feeding downstream devices.

UL Issues

In a series rated system, the overcurrent devices in series in the protective scheme must have been tested and listed by Underwriters Laboratories® (UL®), for series combination use in the system.

All of Eaton's series ratings are in full compliance with all applicable requirements of the latest editions of UL 489, 891, and 67.

The *UL Recognized Components Directory* (the Yellow Book) contains breaker manufacturers' series connected listings. These are intended only as a guideline for use by others who are responsible for their own testing, labeling, and listing. Therefore, the *UL Recognized Components Directory* can not be used to interpret series-connected ratings in equipment.

Code Issues

Requirements of NFPA 70—the National Electrical Code for series ratings may be met by equipment marked with ratings adequate for the available fault current at the point of application in the electrical system. Eaton's panelboards and switchboards are marked consistent with NEC Article 240.86 for tested combinations.

NEC 240.86 Motor Contribution. Series ratings shall not be used where:

- Motors are connected on the load side of the higherrated overcurrent device and on the line side of the lower-rated device.
- 2. The sum of the full-load currents exceeds 1% of the interrupting rating of the lower-rated breaker.

Note: NEC 240.86 is additive and both conditions must be met to apply.

Additionally, NEC Article 110.22 requires field marking on equipment where series ratings are used. This label is supplied with Eaton panelboards and switchboards using series combination ratings and reads "Caution—Series Combination System Rated _____ Amperes Available. Identified Replacement Component Required."



Note to Installing Electrician: NEC 110.22 requires the installer to properly apply and complete this label. Label(s) must be placed on all equipment where series ratings are used.



CAUTION: Do not apply fuses using the up-over-down method for sizing a current-limiting fuse that protects a downstream molded-case circuit breaker with a specified rms symmetrical interrupting rating. The method can lead to erroneous and unsafe conclusions and should not be used.

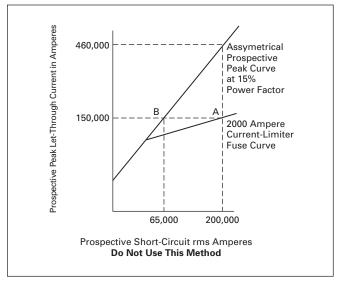


Figure 1.

Conclusion: This conclusion is wrong when the downstream service has a blow-open contact assembly, as does a molded-case circuit breaker or similar device. It may be valid when the current-limiting fuse is sized to protect a passive bus bar system.

The up-over-down method ignores dynamic impedance (the inherent current-limiting of the downstream molded-case circuit breaker). Such impedance is developed directly by the forces of the let-through current created when the contacts are blown open.

Some breakers rated 15 to 50 amperes, 120/240 volt maximum have been investigated and found suitable for use in panelboards from a different manufacturer. These are identified as "Classified" breakers. DO NOT USE SERIES RATINGS WITH "CLASSIFIED" BREAKERS! Series ratings apply ONLY to those Eaton breakers listed and published in this booklet.



DANGER: Use of other devices can cause explosion, severe injury, or death!

Applying Series Ratings

The following is provided to use the series rating tables on the following pages:

- Step 1. Determine the available system voltage and fault current.
- Step 2. Select the appropriate table using the system voltage.
- Step 3. Use the appropriate "Series Equipment Rating" column equal to, or greater than, the available fault current, to determine the allowable UL recognized combinations of main (upstream) and branch (downstream) overcurrent devices. Main devices are shown in bold/shaded areas. Respective branch breakers are shown directly below their associated main device. If a rating is not initially found in a column, first look to the columns to the right for higher "Series Equipment Ratings" within the same table. If still not found, use ratings from table of a higher system voltage (higher numbered table).

Example 1:

208Y/120 volt, 3-phase, 4-wire, AC system with available fault current of 26,438 amperes. Main (upstream) device is a 3-pole, 225 ampere, EDS breaker. The branch (downstream) breakers are single- and 2-pole, 20, 30, and 60 amperes, 120 volt and 120/240 volt BAB breakers.

- 1. Go to the 120/240 volts table (Table 1).
- Look down under the 22 kA column. This rating is not shown.
- Look to the columns to the right. This combination rating is shown under the 42 kA column, and therefore is valid.

Example 2:

480Y/277 volt, 3-phase, 4-wire, AC system with available fault current of 62,097 amperes. Main (upstream) device is a 3-pole 250 ampere, HJD breaker. The branch (downstream) breakers are 2- and 3-pole, 60, 70, and 100 ampere FHD breakers.

- 1. Go to the 480Y/277 volts table (Table 4).
- Look down under the 65 kA column. This rating is not shown.
- Look to the columns to the right. This rating is not shown.
- Look at the table with the next higher system voltage. (480 volts, Table 5).
- This combination rating is shown under the 65 kA column, and therefore is valid.

Example 3:

480Y/277 volt, 3-phase, 4-wire, AC system with available fault current of 24,324 amperes. Main (upstream) device is a 3-pole, 225 ampere, FD breaker. The branch (downstream) breakers are single-pole, 20 ampere, GHQ; 2-pole, 30 ampere, GHB; and 3-pole, 50 ampere, GHB devices.

- 1. Go to the 480Y/277 volts table (**Table 4**).
- 2. Look under the 25 kA column. This rating is not shown. Look to the columns to the right. This rating is shown under the 35 kA column, and therefore is valid for combinations with the 2- and 3-pole GHB breakers.
- 3. Go to the 277 volts table (Table 3).
- 4. Look under the 25 kA column. This rating is not shown. Look to the columns to the right. This rating is shown under the 35 kA column, and therefore is valid for combinations with the single-pole GHQ breaker.

Other Applications of Series Ratings

Series ratings can also be applied under the following guidelines:

- Any FULLY RATED breaker can be applied upstream, downstream, or in the middle of any of the series ratings stated in the tables
- Any series rating stated in the tables may have additional series rated branch breakers of the EXACT SAME TYPE further downstream in that rating

COMBINING SERIES RATINGS are allowed under certain conditions. Main and branch ratings may be combined if:

Breakers A, B, and C are in series respectively from main to branch. Breakers A and B series rate together. Breakers A and C series rate at the same interrupting level (or higher). It is allowable to use A, B, and C together at the A-B series rating

It is improper to combine series ratings under the following condition:

Breakers A, B, and C are in series respectively from main to branch. Breakers A and B series rate together. Breakers B and C series rate at the Breaker B interrupting rating level. It is not allowable to use A, B, and C together at the A-B series rating. However, combining multiple overcurrent devices as in this example, can be accomplished if all devices in the series combination have been tested together and listed in triple rating Table 13

Note: The information contained in this manual also applies to specifying the upstream overcurrent protective device for use with through-feed and sub-feed panelboards without an integral main.

Panelboard and Switchboards Series Rating



Series Rating Tables

Table 1. 120/240 Volts AC—Breaker/Breaker Series Ratings

Main devices shown in shaded area, centered at top. Respective branch devices shown directly below.

Main	Series Eq	uipment F	Rating—kA Symr	metrical					
Breaker Maximum Amperes	18	22	42	65	100			200	
100	EHD BA, BAB BABRP BABRSP HQP QBGF QBAF QBAG	QBHW QPHW BA, BAB HQP QBGF QPGF QBAF QBAF		GB, GHB BA, BAB BABRP BABRSP HQP QBGF QPGF QBAF QBAG QBHW QPHW	FB-P BA, BAB BABRP BABRSP HQP QBGF QPGF QBAF QBAG QBHW QPHW EHD FD			FCL BA, BAB BABRP BABRSP HOP OBGF OPGF OBAG OBHW OPHW GB, GHB GHQ EHD FD HFD	
125					EGH GHQ, GHB				
150	FDB BA, BAB HQP QBGF QBAF QBAG								
200					LA-P BA, BAB HQP QBHW QPHW EHD FD				
225		EDB BA, BAB BABRP BABRSP HOP OBGF OPHGF OPHGF OPHGF OPHW OPHW OPHW OBAF OBAG	BA, BAB BABRP BABRSP HQP QBGF QPGF QBHGF QPHGF QBHW QPHW QPHW QBAF QBAG	ED, FD, FDE BA, BAB BABRP BABRSP HQP QBGF QPGF QBAF QBAG QBHW QBHGF	EDH, CHH BA, BAB BABRP BABRSP HQP QBGF QPGF QBAF QBAF	HFD, HFDE BA, BAB HQP QBGF QBAF QBAG QBHW QPHW QBHGF GB, GHB GHQ, GHQRSP EHD FD, EGS	FDC BA, BAB HQP QBHW QPHW		FDC GB, GHB GHQ GHQRSP EHD FD HFD EGS EGH

Table 1. 120/240 Volts AC—Breaker/Breaker Series Ratings (Continued)

Main devices shown in shaded area, centered at top. Respective branch devices shown directly below.

Main	Series E	quipment F	Rating—kA Sym	metrical						
Breaker Maximum Amperes	18	22	42	65			100		200	
250				JD, JDB	HJD	JDC	HJD	JDC	JDC	
				BA (15–70A) BAB (15–70A) HQP (15–70A) QBHW QPHW EHD	BA, BAB HQP QBHW QPHW	QBGF QPGF QBAF QBAG	GB, GHB EHD FD EGS	BA, BAB HQP QBHW QPHW	GB, GHB EHD FD HFD EGS EGH	
400		DK, KD	DK, KD	HKD, CHKD	DK, KD	KDC	HKD	KDC	KDC	LCL
		BA, BAB BABRP BABRSP HQP QBGF QPGF QBAF QBAG	KDB, CKD BA (15–70A) BAB (15–70A) BABRP BABRSP HQP (15–70A) QBHW QPHW	BA (15–70A) BAB (15–70A) BABRP BABRSP HQP (15–70A) QBHW QPHW	KDB CKD	BA (15–70A) BAB (15–70A) HQP (15–70A)	CHKD GB, GHB EHD FD EGS ①	QBHW QPHW	GB, GHB EHD FD HFD EGS EGH	BA, BAB HQP OBGF OPGF OBAF OBHW OPHW GB, GHB EHD FD HFD
600							CHLD, HLD EHD			
800							HMDL			
300							EHD			
1200							HND, CHND NGH, NGH-C			
							EHD ②			

¹ Not valid with CHKD.

 $[\]ensuremath{@}$ Valid for single-pole only.

Panelboard and Switchboards Series Rating



Table 2. 240 Volts AC—Breaker/Breaker—Series Ratings

For single- and 2-pole 120/240 volt rated breakers (BA, BAB, HQP, QBHW, QPHW), see **Table 1**. Main devices shown in shaded area, centered at top. Respective branch devices shown directly below.

Main	Series Equipment Rating—kA Symmetrical								
Breaker Maximum Amperes	18	22	42	65		100			200
100	EHD	QBHW_H		GB, GHB		FB-P			FCL
	BAB_H HQP_H	QPHW_H BAB_H HQP_H		BAB_H HQP_H QBHW_H QPHW_H		BAB_H HQP_H EHD FDB FD			BAB_H HQP_H QBHW_H QPHW_H GB, GHB EHD FD, FDE FDB HFD, HFDE
125						EGH GHB			
150	FDB BAB_H HQP_H								
200						BAB_H HOP_H QBHW_H QPHW_H EHD FDB FD JD, JDB			
225		EDB	EDS	ED	FD, FDE	EDH, EDC	HFD, HFDE	FDC	FDC
		HQP_H BAB_H QBHW QPHW	HQP_H BAB_H QBHW QPHW CHH ① BAB_H	BAB_H HQP_H QBHW_H	BAB_H HQP_H QBHW_H QPHW_H EHD (15–70A) FDB	BAB_H HQP_H	BAB_H HQP_H QBHW_H QPHW_H GB, GHB EHD FDB FD, FDE	BAB_H HQP_H QBHW_H QPHW_H	GB, GHB EHD FDB FD, FDE HFD, HFDE
250				JD, JDB	HJD	HJD	JDC		JDC
				BAB_H (15-70A) HQP_H (15-70A) QBHW_H QPHW_H EHD FDB	BAB_H (15–70A) HQP_H (15–70A) QBHW_H QPHW_H	GB, GHB EHD FD FDB ED JD, JDB EGS	BAB_H HQP_H QBHW_H QPHW_H		GB, GHB EHD FD, FDE FDB HFD, EDB, EDS ED, HFDE EDH JD, JDB HJD, EGS, EGH

① Valid with BAB_H only.

Table 2. 240 Volts AC—Breaker/Breaker—Series Ratings (Continued)

For single- and 2-pole 120/240 volt rated breakers (BA, BAB, HQP, QBHW, QPHW), see **Table 1**. Main devices shown in shaded area, centered at top. Respective branch devices shown directly below.

Main	Series Equipment Rating—kA Symmetrical						
Breaker Maximum Amperes	65	100	200				

Amperes					
400	DK, KD, KDB CKD	HKD, CHKD	KDC	KDC	LCL
	BAB_H HQP_H QBHW_H QPHW_H EHD FDB	QBHW_H ① QPHW_H ① GB, GHB EHD FDB FD, EDB, EDS, FDE ED JD, JDB DK, KD, KDB EGS ②	QBHW_H QPHW_H	GB, GHB EHD FDB FD, FDE HFD, EDB, EDS ED, HFDE EDH JD, JDB HJD DK, KD, KDB	BAB_H HOP_H OBHW_H GPHW_H GB, GHB EHD FDB FD, HFD, EDB, EDS ED, FDE, HFDE EDH JD, JDB HJD DK, KD, KDB
500		NB-P			
		JD, JDB KD, KDB, DK CKD			
600		HLD, HLDB, CHLD GB ①, GHB ① FD, EDB, EDS ED, EHD JD, JDB KD, KDB, DK, CKD LD, LDB		EDB, EDS, ED EDH	
800		NB-P	HMDL		
		KD, KDB, DK	EHD FD		
1200		HND, CHND			NDC, NGC
		EDB, EDS, ED EHD			EDB, EDS, ED EDH
2500		RD			RDC, RGC
		EDB, EDS, ED			EDB, EDS, ED EDH

① Valid on 2- and 3-pole breakers only. Not valid for single-pole.

② Not valid with CHKD.

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Table 3. 277 Volts AC—Breaker/Breaker Series Ratings

Main devices shown in shaded area, centered at top. Respective branch devices shown directly below. All ratings in this table apply to single-pole branch breakers only. For 2- and 3-pole branch breakers, see other tables.

Main	Series Equipmen	t Rating—kA Symm	etrical				
Breaker Maximum Amperes	22	25	35	65	100		150
100							FCL
							GHB GHQ, GHQRSP EHD FD HFD
125			EGS	EGH			
			GHQ GHB	GHQ GHB			
225			FD, FDE	HFD, HFDE	FDC		
			GHB GHQ GHQRSP GHBGFEP ①	GHB, GHQRSP GHQ EHD FD, GHBGFEP ②	GHB EHD FD HFD		
250	JD, JDB		JD, JDB	HJD	LCL	JDC	
	GHB		GHB (15–50A) GHBGFEP	GHB (15–50A) EHD FD GHBGFEP	GHBS	GHB EHD FD HFD	
400	KD, KDB	HKD	KD, KDB	HKD, CHKD	KDC		LCL
	GHB	GHB	CKD GHB (15–50A) EHD FD	GHB EHD FD	GHB EHD FD HFD		GHB EHD FD HFD

¹ Not valid with FDE.

Table 4. 480Y/277 Volts AC—Breaker/Breaker Series Ratings

Main devices shown in shaded area, centered at top. Respective branch devices shown directly below. All ratings in this table apply to 2- and 3-pole branch breakers only. For single-pole branch breakers, see **Table 3**.

Main	Series Equipment F	Rating—kA Symmetric	:al			
Breaker Maximum Amperes	22	25	35	65	100	150
100						FCL
						GHB, GHQRSP
125			EGS	EGH		
			GHB	GHB		
225			FD, FDE	HFD, HFDE	FDC	
			GHB, GHQRSP	GHB, GHQRSP	GHB	
250	JD, JDB		JD, JDB	HJD	JDC	
	GHB		GHB (15-50A)	GHB	GHB	
400	KD, KDB	HKD, CHKD	KD, KDB	HKD, CHKD	KDC	LCL
	CKD	GHB	CKD	GHB (15-50A)	GHB	GHB
	GHB		GHB (15-50A)			

② Not valid with HFDE.

Table 5. 480 Volts AC—Breaker/Breaker Series Ratings

Main devices shown in shaded area, centered at top. Respective branch devices shown directly below. All ratings in this table apply to 2- and 3-pole branch breakers only. Not valid for single-pole branch breakers.

Main	Series Equipment Ra	ating—kA Symmetrica	ı			
Breaker Maximum Amperes	25	35	65	100		150
100				FB-P EHD FDB FD HFD		FCL EHD FDB FD, FDE HFD, HFDE
200				EHD FDB FD HFD JD, JDB HJD		,
225		FD, FDE	HFD, HFDE	FDC		
		EHD FDB	FDB FD, FDE EGS ①	EHD, EGS, EGH FDB FD, FDE HFD, HFDE		
250	JD, JDB		HJD	JDC		LCL
	EHD FDB		EHD FDB FD, FDE JD, JDB EGS	EHD, EGS, EGH FDB FD, FDE HFD, HFDE JD, JDB HJD		FDE, HFDE
400		KD, KDB	HKD	KDC	LA-P	LCL
		EHD FDB	EHD FDB FD, FDE JD, JDB KD, KDB EGS	EHD, EGS, EGH FDB FD, FDE HFD, HFDE JD, JDB HJD KD, KDB HKD	JD, JDB HJD KD, KDB HKD	EHD FDB FD, FDE HFD, HFDE FDC JD, JDB HJD KD, KDB HKD
500				NB-P JD, JDB HJD KD, KDB HKD		
600		LD, LDB CLD	HLD, HLDB CHLD			
		JD, JDB	FD, FDE JD, JDB KD, KDB LD, LDB			

¹ Not valid with HFDE.

Table 6. 600 Volts AC—Breaker/Breaker Series Ratings

Main devices shown in shaded area, centered at top. Respective branch devices shown directly below. All ratings in this table apply to 2- and 3-pole branch breakers only. Not valid for single-pole branch breakers.

Main	Series Equipment	Rating—kA Symmetrica	ıl			
Breaker Maximum Amperes	18	25	35	42	50	100
225	FD	HFD	FDC			
	FDB	FDB FD	FDB FD, FDE HFD, HFDE			
250	JD, JDB	HJD	JDC			LCL
	FDB	FDB FD JD, JDB	FDB FD HFD JD, JDB HJD			FDE, HFDE
400		KD, KDB CKD	HKD, CHKD FDB	KDC FDB	JD, JDB	LCL FDB
		FDB FD JD, JDB	FD, FDE HFD, HFDE JD, JDB HJD	FD, FDE HFD, HFDE	HJD KD, KDB HKD	FD, FDE HFD, HFDE FDC JD, JDB HJD JDC KD, KDB HKD KDC
600		LD, LDB CLD	HLD, HLDB CHLD			
		FD JD, JDB	KD, KDB LD, LDB			

Table 7. 120/240 Volts AC—Fuse/Breaker Series Ratings

Main fuse class shown in shaded area, centered at top. Respective branch devices shown directly below.

Main	Series Equipment R	Series Equipment Rating—kA Symmetrical							
Fuse Maximum Amperes	100			200					
100						R			
						BA, BAB HQP QBHW QPHW GB GHB			
200			R	J	Т				
			GB GHB	BA, BAB HQP QBHW QPHW	BA, BAB HQP QBHW QPHW				
400	J	Т		J	Т				
	BA, BAB HQP QBHW QPHW	BA, BAB HQP QBHW QPHW		GB GHB	GB GHB				

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Table 8. 240 Volts AC—Fuse/Breaker Series Ratings

For single- and 2-pole 120/240 volt rated breakers (BA, BAB, HQP, QBHW, QPHW), see **Table 7**. Main fuse class shown in shaded area, centered at top. Respective branch devices shown directly below.

Main Fuse Maximum Amperes	Series Equipment Rating—kA Symmetrical								
	100			200					
100						R			
						BAB_H HQP_H QBHW_H QPHW_H GB GHB			
200			R	J	Т	R			
			GB GHB	BAB_H HQP_H QBHW_H QPHW_H	BAB_H HQP_H QBHW_H QPHW_H	GB GHB			
400	J	Т		J	Т				
	BAB_H HQP_H QBHW_H QPHW_H	BAB_H HQP_H QBHW_H QPHW_H		GB GHB	GB GHB				
4000			L						
			EHD FDB FD, FDE ED JD, JDB DK, KD, KDB						

Table 9. 277 Volts AC Fuse/Breaker Series Ratings

Main fuse class shown in shaded area, centered at top. Respective branch devices shown directly below. All ratings in this table apply to single-pole branch breakers only. For 2- and 3-pole branch breakers, consult other tables.

Main	Series Equipme	Series Equipment Rating—kA Symmetrical									
Fuse Maximum Amperes	65	65		100			200				
100			J	Т		R					
			GHBS GHQ GHQRSP	GHBS GHQ GHQRSP		GHB					
200	J	T	J	Т	R						
	GHBS GHQ GHQRSP	GHBS GHQ GHQRSP	EHD FD HFD	EHD FD HFD	GHB						
400						J	Т				
						GHB	GHB				

Table 10. 480Y/277 Volts AC—Fuse/Breaker Series Ratings

Main fuse class shown in shaded area, centered at top. Respective branch devices shown directly below. All ratings in this table apply to 2- and 3-pole branch breakers only. For single-pole branch breakers, see **Table 9**.

Main	Series Equipment Rating—kA Symmetrical							
Fuse Maximum Amperes	65		100	200				
100			J	T			R	
			GHBS	GHBS			GHB	
200	J	Т		R				
	GHBS	GHBS		GHB				
400					J	Т		
					GHB	GHB		
600			J	T				
			EHD FD, FDE HFD, HFDE FDC	GHB EHD FD, FDE HFD, HFDE FDC JD HJD JDC				

Table 11. 480 Volts AC—Fuse/Breaker Series Ratings

Main fuse class shown in shaded area, centered at top. Respective branch devices shown directly below. All ratings in this table apply to 2- and 3-pole branch breakers only. Not valid for single-pole branch breakers.

Main	Series Equipment Rating—kA Symmetrical					
Fuse Maximum Amperes	100			200		
100			R			
			EHD			
200	J	Т				
	EHD FD HFD FDC	EHD FD HFD FDC				

Table 12. 600 Volts AC—Fuse/Breaker Series Ratings

Main fuse class shown in shaded area, centered at top. Respective branch devices shown directly below. All ratings in this table apply to 2- and 3-pole branch breakers only. Not valid for single-pole branch breakers.

Main	Series Equipment Rating—kA Symmetrical							
Fuse Maximum Amperes	100		200					
100			R					
			FD, FDE HFD, HFDE FDC					
200	J	T	R					
	FD, FDE HFD, HFDE FDC	FD, FDE HFD, HFDE FDC	JD HJD JDC					
400	J	Т	R					
	JD HJD JDC	JD HJD JDC	KD HKD KDC					
600				J	Т			
				KD HKD KDC	KD HKD KDC			

Table 13. Triple Series Ratings

Main Fuse Class and Maximum Amperes	Tenant Main Type	Branch Type	System Voltage	Short- Circuit Series Rating (kA, Sym.)
L-6000	DK, KD, KDB	GB, GHB, EHD ①	240	100
L-6000	DK, KD, KDB	GB, GHB	120/240	100
L-6000	DK, KD, KDB	FD ①, FDB	240	100
L-6000	DK, KD, KDB	JD, JDB	240	100
L-6000	JD, JDB	GB, GHB	240	100
L-6000	JD, JDB	GB, GHB	120/240	100
L-6000	FD	GB, GHB	240	100
L-6000	FD	GB, GHB	120/240	100
L-6000	FD, FDB	BAB_H, HQP_H QBHW_H, QPHW_H	240	100
L-6000	FD, FDB	BA, BAB HQP (15–70A)	120/240	100
L-6000	EHD	BAB_H, HQP_H	240	100
L-6000	EHD	BA, BAB, HQP	120/240	100

① Valid on 2- and 3-pole breakers only. Not valid for single-pole.

