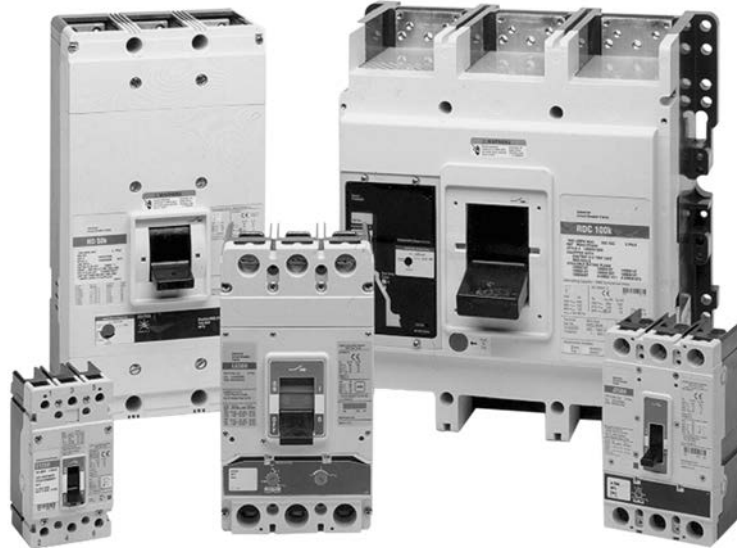


Selective coordination



Introduction

In order to apply circuit breakers to meet selective coordination requirements, Eaton provides the following guide to easily select breakers for various fault current values at the load side circuit breaker. Two sets of data for molded case line side to molded case load side breakers are included: manufacturer's tested values for total coordination and time current curve data for coordination at 0.1 to 1000 seconds. For low-voltage power circuit breakers to molded-case circuit breakers (MCCB), coordination values are derived from time current curves with instantaneous in OFF position for power circuit breaker. The required level of coordination will be determined by the prevailing electrical code and the local authority having jurisdiction.

Eaton's test method is both known and reasonable, and follows the test circuit guidelines described by UL® 489. More details can be found in selective coordination document IA01200001E. Also, a separate publication, IA01400001E, is available for the selection of circuit breakers for lighting and power panelboards in selective coordination applications.

This guide is broken down into the following steps in determining selective coordination between line and load side circuit breakers:

- Table 1—Miniature circuit breaker ratings
- Table 2—Molded-case circuit breaker ratings
- Table 3—Low-voltage power circuit breaker ratings
- Table 4—MCCB to MCCB selective coordination combinations—test data
- Table 5—MCCB to MCCB selective coordination combinations—time current curves 0.1 s to 1000 s
- Table 6—Low-voltage power circuit breakers to MCCB selective coordination combinations—time current curves

This guide is applicable to Eaton, Cutler-Hammer, Westinghouse, and Challenger breakers of the same nomenclature.

The following additional resources are available on www.eaton.com/selectivecoordination:

- Selective Coordination White Paper, Publication Number IA01200001E, May 2006
- Engineer's Guide to Selective Coordination, Publication Number IA08304002E, December 2008
- Optimum Safety, Reliability and Electrical System Performance Through Balanced Selective Coordination Page and Protection, Publication Number TP01200001E, June 2006
- Selective Coordination Calculator, Publication Number AP01200003E, updated September 2007

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Steps in determining selective coordination between line and load side circuit breakers

1. Determine the maximum available fault current from all sources, at both the line and load side breakers, by means of a short circuit study, appropriate charts and/or formulas. Where both line and load breakers are connected to the same bus, this will be the same value.
2. Select the load side Eaton model breaker that has adequate Interrupting Capacity (IC) at the applied voltage for the maximum available fault current and adequate continuous amperage frame size and trip size for the load application from **Table 6** through **Table 8**.
3. Determine if total selective coordination is desired or if selective coordination above 0.1 s is practicable. Refer to **Table 10** for 480 Vac and below and **Table 10a** for 600 Vac for manufacturer test data for total selective coordination or to **Table 11** for selective coordination greater than 0.1 s. Find the load side

breaker defined in **Step 2** in the appropriate **Table 10** or **Table 11**. If the required load trip rating is not shown in the table, use the row for the next larger rating shown.

4. Move horizontally from the selected load breaker trip rating to the first value of symmetrical rms fault current that meets or exceeds the value of rms fault current at the load side breaker as determined from **Step 1**.
5. Proceed upward to read the possible line side breaker frame and check the trip rating or trip range indicated to ensure it meets the required line side breaker trip rating. If the trip rating meets the requirements, this will be one of the possible line side breakers that will selectively coordinate with the load side breaker. If the indicated trip rating or trip range does not meet the requirements for the line side breaker, repeat **Step 4** and **Step 5**.

Check all load side breakers that may be in an assembly, such as a panelboard or switchboard, that is fed by the same line side breaker to ensure that they selectively coordinate.

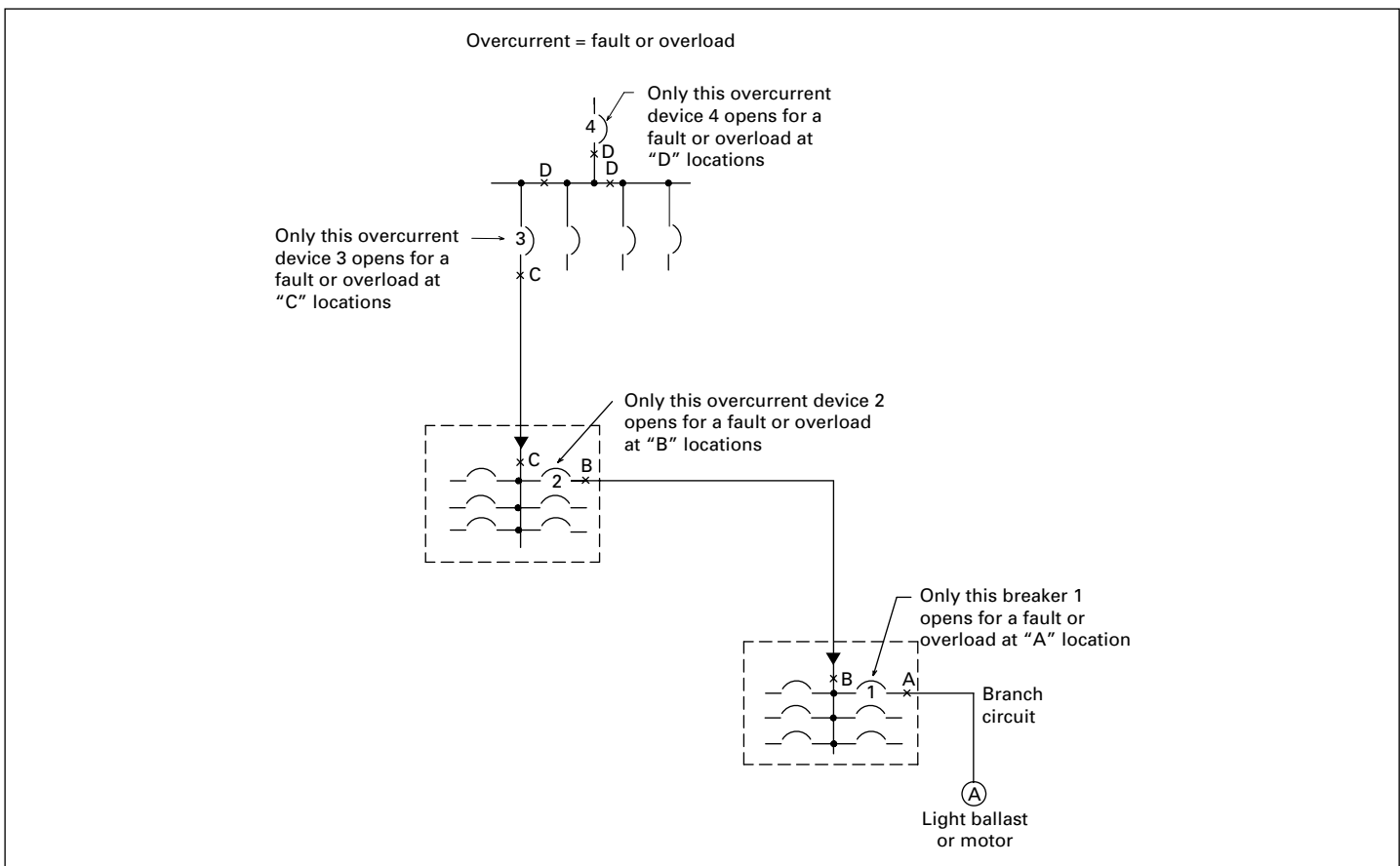


Figure 1. Selective coordination molded-case circuit breakers

Example 1:

Data: A 208Y/120 V branch panelboard consisting of main lugs only and 40–20 A / trip, single-pole breakers and 1 A to 35 A trip two-pole breaker is located 113 feet away from the 225 A / trip feeder breaker supplying the panelboard through 1–4/0 copper conductor in metallic conduit per phase and neutral. There is 67,000 A rms available at the 225 A / trip breaker.

Solution:

Step 1: Utilize Eaton website calculator or other means to determine the short circuit current at the branch panelboard. When utilizing the Eaton calculator, select system voltage of 208Y/120 V; enter 67,000 starting amperes into the RED box of the calculator. Select copper conductors in metallic raceway, conductor size of 4/0 and length of 113 feet and one conductor per phase. The calculator yields 10,968 A rms symmetrical of available fault current at the load side breakers in the branch panelboard.

Step 2: First determine the model of the load side breaker from **Table 6** through **Table 8**, which has an interrupting capacity greater than or equal to the available fault current of 10,968 A and of a bolt-on type because they are used in a panelboard. The first breaker model meeting this criteria is a “QBHW.”

Step 3: Utilizing **Table 10**, find the row for the QBHW breaker having a trip rating of 35 A. Since this is NOT shown in the table, go to the next larger trip of 40 A. Move horizontally to find the minimum value that exceeds 10,968 A. Proceeding horizontal across **page 20**, stop at the value of 14.4 kA (14,4000 A). Proceeding up the column, find the heading of LG family of breakers having ETU with an available trip unit range of 160 A to 400 A. Because the required trip unit of 225 falls within this range, the LG family of breakers is suitable to provide selective coordination with the QBHW breaker.

Table 1. Sample from Table 6 ①

Circuit breaker type	Circuit breaker type code	Continuous ampere rating at 40 °C	Number of poles	AC volts	Federal specification W-C-375b	UL listed interrupting ratings (rms symmetrical amperes)		
						AC ratings volts		
						120	120/240	240
QBHW	Bolt-on	15–70	1	120/240	—	—	22,000	—
QBHW	Bolt-on	15–125	2	120/240	—	—	22,000	—
QBHW	Bolt-on	15–100	2, 3	240	—	—	—	22,000

① Use **Table 6** on **page 13** for QBHW ratings.

Load side breaker—indicates the frame family and amperage range of the load side molded-case circuit breaker

Breaker family—indicates line side molded-case breaker frame family to selectively coordinate with the load side breaker

Type trip unit—indicates the type of the trip unit.
T/M = Thermal Magnetic Trip
ETU = Electronic Trip Unit

Minimum trip—indicates the minimum available amperage rating for a specific breaker family on the line side

Maximum trip—indicates the maximum available amperage rating for a specific breaker family on the line side

Table 2. Sample from Table 10 ①

Load side breaker	Breaker family type trip unit minimum trip maximum trip	Line Side Breaker													
		LG ETU 100 A 250 A	LG ETU 160 A 400 A	LG ETU 250 A 600 A	LG T/M 630 A	N ETU 150 A	N ETU 400 A 400 A	N ETU 400 A 600 A	N ETU 400 A 800 A	N ETU 600 A 1200 A	R ETU 800 A 800 A	R ETU 800 A 1000 A	R ETU 800 A 1200 A	R ETU 800 A 1600 A	R ETU 1000 A 2000 A
BRH, QPHW, QBHW, and QCHW (120 Vac for single-pole, 120/240 Vac for two-pole, and 240 Vac for delta rated two-pole and all three-pole breakers)															
15	10	14.4	22	22	22	22	22	22	22	22	22	22	22	22	22
20	9.0	14.4	22	22	22	22	22	22	22	22	22	22	22	22	22
30	9.0	14.4	22	22	22	22	22	22	22	22	22	22	22	22	22
40	7.5	14.4	22	22	22	22	22	22	22	22	22	22	22	22	22
50	7.5	14.4	22	22	22	22	22	22	22	22	22	22	22	22	22

① Use **Table 10** starting on **page 20** for MCCB to MCCB selective coordination.

Step 4: Utilizing **Table 6** and **Table 7**, go to the LG family and select a model number which has at least 67,000 A interrupting capacity at 208 V (240 V) or the LGS model.

Step 5: Check to ensure the other breakers, 20 A, single-pole breakers selectively coordinate with the selected LG family of breakers by repeating **Steps 3** and **4**.

Note: An alternate for **Step 3** is to utilize the Eaton calculator as follows:

- a. For load side breaker, select a type QBHW having the appropriate 40 A trip.
- b. Starting at a family of line side breakers equal to or greater than 225 A, verify if selective coordination is achieved. If not, continue to select larger family of breakers until the calculator indicates the resulting combination is selectively coordinated.

Contents

Table 3. MCCB to MCCB selective coordination combinations—test data

Ampere range of load side breaker	Load side breaker	Line side breaker	Ampere range of line side breaker	Page no.	Table no.
BR: 10–150 A BAB: 10–125 A HQP: 10–125 A QC: 10–100 A	BR/BAB/HQP/QC	EG	15–125 A	20	10
		F	15–225 A	20	10
		JD	70–250 A thermal magnetic	20	10
		JG	20–250 A electronic trip unit	20	10
		K	55–400 A	22	10
		LD	250–600 A	22	10
		LHH	125–400 A	22	10
			250–600 A thermal magnetic	22	10
		LG	100–600 A electronic trip unit	25	10
		N	600–1200 A	25	10
		R	800–2500 A	25	10
BRH: 15–125 A QPHW: 15–125 A QBHW: 15–125 A QCHW: 15–100 A	BRH/QPHW/QBHW/QCHW	EG	15–125 A	20	10
		F	15–225 A	20	10
		JD	70–250 A thermal magnetic	20	10
		JG	20–250 A electronic trip unit	20	10
		K	55–400 A	22	10
		LD	250–600 A	22	10
		LHH	125–400 A	22	10
			250–600 A thermal magnetic	22	10
		LG	100–600 A electronic trip unit	25	10
		N	600–1200 A	25	10
		R	800–2500 A	25	10
15–100 A	GHB/GHC	EG	15–125 A	20	10
		F	15–225 A	20	10
		JD	70–250 A thermal magnetic	20	10
		JG	20–250 A electronic trip unit	20	10
		K	55–400 A	22	10
		LD	250–600 A	22	10
		LHH	125–400 A	22	10
			250–600 A thermal magnetic	22	10
		LG	100–600 A electronic trip unit	25	10
		N	600–1200 A	25	10
		R	800–2500 A	25	10

Table 3. MCCB to MCCB selective coordination combinations—test data (continued)

Ampere range of load side breaker	Load side breaker	Line side breaker	Ampere range of line side breaker	Page no.	Table no.
15–100 A	GD	EG	15–125 A	20	10
		F	15–225 A	20	10
		JD	70–250 A thermal magnetic	20	10
		JG	20–250 A electronic trip unit	20	10
		K	55–400 A	23	10
		LD	250–600 A	23	10
		LHH	125–400 A	23	10
			250–600 A thermal magnetic	23	10
		LG	100–600 A electronic trip unit	26	10
		N	600–1200 A	26	10
R	800–2500 A	26	10		
15–100 A	FCL	EG	15–125 A	21	10
		F	15–225 A	21	10
		JD	70–250 A thermal magnetic	21	10
		JG	20–250 A electronic trip unit	21	10
		K	55–400 A	23	10
		LD	250–600 A	23	10
		LHH	125–400 A	23	10
			250–600 A thermal magnetic	23	10
		LG	100–600 A electronic trip unit	26	10
		N	600–1200 A	26	10
R	800–2500 A	26	10		
15–125 A	EG	EG	15–125 A	21	10
		F	15–225 A	21	10
		JD	70–250 A thermal magnetic	21	10
		JG	20–250 A electronic trip unit	21	10
		K	55–400 A	23	10
		LD	250–600 A	23	10
		LHH	125–400 A	23	10
			250–600 A thermal magnetic	23	10
		LG	100–600 A electronic trip unit	26	10
		N	600–1200 A	26	10
R	800–2500 A	26	10		

Table 3. MCCB to MCCB selective coordination combinations—test data (continued)

Ampere range of load side breaker	Load side breaker	Line side breaker	Ampere range of line side breaker	Page no.	Table no.
15–125 A	EG current limiting	EG	15–125 A	21	10
		F	15–125 A	21	10
		JD	70–250 A	21	10
			70–250 A thermal magnetic	21	10
		JG	20–250 A electronic trip unit	21	10
		K	55–400 A	23	10
		LD	250–600 A	23	10
		LHH	125–400 A	23	10
			250–600 A thermal magnetic	23	10
		LG	100–600 A electronic trip unit	26	10
		N	600–1200 A	26	10
R	800–2500 A	26	10		
15–225 A	F family	F	15–225 A	21	10
		JD	70–250 A	21	10
			70–250 A thermal magnetic	21	10
		JG	20–250 A electronic trip unit	21	10
		K	55–400 A	23	10
		LD	250–600 A	23	10
		LHH	125–400 A	23	10
			250–600 A thermal magnetic	23	10
		LG	100–600 A electronic trip unit	26	10
		N	600–1200 A	26	10
		R	800–2500 A	26	10
70–250 A thermal magnetic 20–250 A electronic trip unit	JG family	JD	70–250 A	21	10
			70–250 A thermal magnetic	21	10
		JG	20–250 A electronic trip unit	21	10
		K	55–400 A	23	10
		LD	250–600 A	23	10
		LHH	125–400 A	23	10
			250–600 A thermal magnetic	23	10
		LG	100–600 A electronic trip unit	26	10
		N	600–1200 A	26	10
		R	800–2500 A	26	10
		70–250 A thermal magnetic 20–250 A electronic trip unit	JG current limiting	JD	70–250 A
70–250 A thermal magnetic	21				10
JG	20–250 A electronic trip unit			21	10
K	55–400 A			24	10
LD	250–600 A			24	10
LHH	125–400 A			24	10
	250–600 A thermal magnetic			24	10
LG	100–600 A electronic trip unit			27	10
N	600–1200 A			27	10
R	800–2500 A			27	10

Table 3. MCCB to MCCB selective coordination combinations—test data (continued)

Ampere range of load side breaker	Load side breaker	Line side breaker	Ampere range of line side breaker	Page no.	Table no.
70–250 A	JD family	K	55–400 A	24	10
		LD	250–600 A	24	10
		LHH	125–400 A	24	10
			250–600 A thermal magnetic	24	10
		LG	100–600 A electronic trip unit	27	10
		N	600–1200 A	27	10
		R	800–2500 A	27	10
125–400 A	LCL family	K	55–400 A	24	10
		LD	250–600 A	24	10
		LHH	125–400 A	24	10
			250–600 A thermal magnetic	24	10
		LG	100–600 A electronic trip unit	27	10
		N	600–1200 A	27	10
		R	800–2500 A	27	10
100–400 A	K family	K	55–400 A	24	10
		LD	250–600 A	24	10
		LHH	125–400 A	24	10
			250–600 A thermal magnetic	24	10
		LG	100–600 A electronic trip unit	27	10
		N	600–1200 A	27	10
		R	800–2500 A	27	10
300–600 A	LD family	LD	250–600 A	24	10
			250–600 A thermal magnetic	24	10
		LG	100–600 A electronic trip unit	27	10
		N	600–1200 A	27	10
		R	800–2500 A	27	10
250–600 A thermal magnetic 100–600 A electronic trip unit	LG family	LD	250–600 A	24	10
			250–600 A thermal magnetic	24	10
		LG	100–600 A electronic trip unit	27	10
		N	600–1200 A	27	10
		R	800–2500 A	27	10
250–600 A thermal magnetic 100–600 A electronic trip unit	LG current limiting family	LD	250–600 A	24	10
			250–600 A thermal magnetic	24	10
		LG	100–600 A electronic trip unit	27	10
		N	600–1200 A	27	10
		R	800–2500 A	27	10
600–1200 A	N family	N	600–1200 A	27	10
		R	800–2500 A	27	10

Table 4. MCCB to MCCB selective coordination combinations—time current curves 0.1 s to 1000 s

Ampere range of load side breaker	Load side breaker	Line side breaker	Ampere range of line side breaker	Page no.	Table no.
BR: 10–150 A BAB: 10–125 A HQP: 10–125 A QC: 10–100 A	BR/BAB/HQP/QC	EG	15–125 A	35	11
		F	15–225 A	35	11
		JD	70–250 A thermal magnetic	35	11
		JG	70–250 A electronic trip unit	35/37	11
		K	55–400 A	37/40	11
		LD	250–600 A	40	11
		LG	100–600 A electronic trip unit	40	11
		N	600–1200 A	40	11
		R	800–2500 A	43	11
BRH: 15–125 A QPHW: 15–125 A QBHW: 15–125 A QCHW: 15–100 A	BRH/QPHW/QBHW/QCHW	EG	15–125 A	35	11
		F	15–225 A	35	11
		JD	70–250 A thermal magnetic	35	11
		JG	20–250 A electronic trip unit	35/37	11
		K	55–400 A	37/40	11
		LD	250–600 A	40	11
		LG	100–600 A electronic trip unit	40	11
		N	600–1200 A	40	11
		R	800–2500 A	43	11
15–100 A	GHB/GHC	EG	15–125 A	35	11
		F	15–225 A	35	11
		JD	70–250 A thermal magnetic	35	11
		JG	20–250 A electronic trip unit	35/37	11
		K	55–400 A	37/40	11
		LD	250–600 A	40	11
		LG	100–600 A electronic trip unit	40	11
		N	600–1200 A	40	11
		R	800–2500 A	44	11
15–100 A	GD	EG	15–125 A	35	11
		F	15–225 A	35	11
		JD	70–250 A thermal magnetic	35	11
		JG	20–250 A electronic trip unit	35/38	11
		K	55–400 A	38/40	11
		LD	250–600 A	40	11
		LG	100–600 A electronic trip unit	40	11
		N	600–1200 A	40	11
		R	800–2500 A	43	11

Table 4. MCCB to MCCB selective coordination combinations—time current curves 0.1 s to 1000 s (continued)

Ampere range of load side breaker	Load side breaker	Line side breaker	Ampere range of line side breaker	Page no.	Table no.
15–100 A	FCL	F	15–225 A	35	11
		JD	70–250 A thermal magnetic	35	11
		JG	20–250 A electronic trip unit	35/37	11
		K	100–400 A	38/40	11
		LD	250–600 A	40	11
		LG	100–600 A electronic trip unit	40	11
		N	600–1200 A	40	11
		R	800–2500 A	44	11
15–125 A	EG	EG	15–125 A	36	11
		F	15–225 A	36	11
		JD	70–250 A thermal magnetic	36	11
		JG	20–250 A electronic trip unit	36/37	11
		K	100–400 A	38/41	11
		LD	250–600 A	41	11
		LG	100–600 A electronic trip unit	41	11
		N	600–1200 A	41	11
15–125 A	EG current limiting	EG	15–125 A	36	11
		F	15–225 A	36	11
		JD	70–250 A thermal magnetic	36	11
		JG	20–250 A electronic trip unit	36/38	11
		K	100–400 A	38/41	11
		LD	250–600 A	41	11
		LG	100–600 A electronic trip unit	41	11
		N	600–1200 A	41	11
15–225 A	F family	F	15–225 A	36	11
		JD	70–250 A thermal magnetic	36	11
		JG	20–250 A electronic trip unit	36/38	11
		K	100–400 A	38/41	11
		LD	250–600 A	41	11
		LG	100–600 A electronic trip unit	41	11
		N	600–1200 A	41	11
		R	800–2500 A	44	11

Table 4. MCCB to MCCB selective coordination combinations—time current curves 0.1 s to 1000 s (continued)

Ampere range of load side breaker	Load side breaker	Line side breaker	Ampere range of line side breaker	Page no.	Table no.
70–250 A thermal magnetic 20–250 A electronic trip unit	JG family	JD	70–250 A thermal magnetic	36	11
		JG	20–250 A electronic trip unit	36/38	11
		K	100–400 A	38/41	11
		LD	250–600 A	41	11
		LG	100–600 A electronic trip unit	41	11
		N	600–1200 A	41	11
		R	800–2500 A	44	11
70–250 A thermal magnetic 20–250 A electronic trip unit	JG current limiting	JD	70–250 A thermal magnetic	36	11
		JG	20–250 A electronic trip unit	36/39	11
		K	100–400 A	39/41	11
		LD	250–600 A	41	11
		LG	100–600 A electronic trip unit	41	11
		N	600–1200 A	41	11
		R	800–2500 A	44	11
70–250 A	JD family	K	250–600 A	39/42	11
		LD	250–600 A	42	11
		LG	100–600 A electronic trip unit	42	11
		N	600–1200 A	42	11
		R	800–2500 A	45	11
125–400 A	LCL family	K	100–400 A	39/42	11
		LD	250–600 A	42	11
		LG	100–600 A electronic trip unit	42	11
		N	600–1200 A	42	11
		R	800–2500 A	45	11
100–400 A	K family	K	100–400 A	39/42	11
		LD	250–600 A	42	11
		LG	100–600 A electronic trip unit	42	11
		N	600–1200 A	42	11
		R	800–2500 A	45	11
300–600 A	LD family	LD	250–600 A	42	11
		N	600–1200 A	42	11
		R	800–2500 A	45	11
250–600 A thermal magnetic 100–600 A electronic trip unit	LG family	LD	250–600 A	42	11
		N	600–1200 A	42	11
		R	800–2500 A	45	11
250–600 A thermal magnetic 100–600 A electronic trip unit	LG current limiting family	LD	250–600 A	42	11
		N	600–1200 A	42	11
		R	800–2500 A	45	11
600–1200 A	N family	N	600–1200 A	42	11
		R	800–2500 A	45	11

Table 5. LV power circuit breakers to MCCB selective coordination combinations—time current curves 0.1 to 1000 s

Ampere range of load side breaker	Load side breaker	Line side breaker	Ampere range of line side breaker	Page no.	Table no.			
15–125 A	EG family	MDN-4XX	See Table 8 for ampere ratings	49	13			
		MDS-408		49	13			
		MDN-5XX		49	13			
		MDN-6XX		49	13			
		MDS-6XX		49	13			
		MDS-X20		51	13			
		MDS-X40		51	13			
		NRX NF		52	13			
		NRX RF		52	13			
15–225 A	F family	MDN-4XX	See Table 8 for ampere ratings	49	13			
		MDS-408		49	13			
		MDN-5XX		49	13			
		MDN-6XX		49	13			
		MDS-6XX		50	13			
		MDS-8XX		50	13			
		MDN-C20		50	13			
		MDS-CXX		50	13			
		MDS-X20		51	13			
		MDS-X40		51	13			
		NRX NF		52	13			
		NRX RF		52	13			
		70–250 A thermal magnetic 20–250 A electronic trip unit		JG family	MDN-4XX	See Table 8 for ampere ratings	49	13
MDS-408	49		13					
MDN-5XX	49		13					
MDN-6XX	49		13					
MDS-6XX	49		13					
MDN-C20	50		13					
MDS-X40	51		13					
NRX NF	52		13					
NRX RF	52		13					
70–250 A	JD family	MDN-4XX	See Table 8 for ampere ratings	49	13			
		MDS-408		49	13			
		MDN-5XX		49	13			
		MDN-6XX		49	13			
		MDS-6XX		49	13			
		MDS-8XX		50	13			
		MDN-C20		50	13			
		MDS-CXX		50	13			
		MDS-X40		51	13			
		NRX NF		52	13			
		NRX RF		52	13			
		100–400 A		K family	MDN-4XX	See Table 8 for ampere ratings	49	13
					MDS-408		49	13
MDN-5XX	49		13					
MDN-6XX	49		13					
MDS-6XX	49		13					
MDS-8XX	50		13					
MDN-C20	50		13					
MDS-CXX	50		13					
MDS-X40	51		13					
NRX NF	52		13					
NRX RF	52		13					

Table 5. LV power circuit breakers to MCCB selective coordination combinations—time current curves 0.1 to 1000 s (continued)

Ampere range of load side breaker	Load side breaker	Line side breaker	Ampere range of line side breaker	Page no.	Table no.
300–600 A	LD family	MDN-4XX	See Table 8 for ampere ratings	49	13
		MDS-408		49	13
		MDN-5XX		49	13
		MDN-6XX		49	13
		MDS-6XX		49	13
		MDS-8XX		50	13
		MDN-C20		50	13
		MDS-CXX		50	13
		MDS-X40		51	13
		NRX NF		52	13
		NRX RF		52	13
250–600 A thermal magnetic 100–600 A electronic trip unit	LG family	MDN-4XX	See Table 8 for ampere ratings	49	13
		MDS-408		49	13
		MDN-5XX		49	13
		MDN-6XX		49	13
		MDS-6XX		49	13
		MDN-C20		50	13
		MDS-X40		51	13
		NRX NF		52	13
		NRX RF		52	13
600–1200 A	N family	MDN-4XX	See Table 8 for ampere ratings	49	13
		MDS-408		49	13
		MDN-5XX		49	13
		MDN-6XX		49	13
		MDS-6XX		49	13
		MDS-8XX		50	13
		MDS-CXX		50	13
		NRX NF		52	13
		NRX RF		52	13

Table 6. Miniature circuit breaker rating ①

Circuit breaker type	Circuit breaker type code	Continuous ampere rating at 40 °C	Number of poles	AC volts	Federal specification W-C-375b	UL listed interrupting ratings (rms symmetrical amperes)		
						AC ratings volts		
						120	120/240	240
HQP	Plug-in	10–70	1	120/240	10a, 11a, 12a	—	10,000	—
HQP	Plug-in	10–125	2	120/240	10a, 12a	—	10,000	—
HQP	Plug-in	10–100	2, 3	240	10b, 11b, 12b	—	—	10,000
QPHW	Plug-in	15–70	1	120/240	14a	—	22,000	—
QPHW	Plug-in	15–125	2	120/240	14a	—	22,000	—
QPHW	Plug-in	15–100	2,3	240	14b	—	—	22,000
BR ②	Plug-in	10–70	1	120/240	—	—	10,000	—
BR ②	Plug-in	10–150	2	120/240	—	—	10,000	—
BR ②	Plug-in	10–100	3	240	—	—	—	10,000
BRH ②	Plug-in	15–70	1	120/240	—	—	22,000	—
BRH ②	Plug-in	15–125	2	120/240	—	—	22,000	—
BRH ②	Plug-in	15–100	3	240	—	—	—	22,000
QC ③	Cable-in/cable-out	10–70	1	120/240	10a, 11a, 12a	—	10,000	—
QC ③	Cable-in/cable-out	10–100	2	120/240	10a, 12a	—	10,000	—
QC ③	Cable-in/cable-out	10–100	2, 3, 4	240	10b, 11b, 12b	—	—	10,000
QCHW ③	Cable-in/cable-out	15–70	1	120/240	14a	—	22,000	—
QCHW ③	Cable-in/cable-out	15–100	2	120/240	14a	—	22,000	—
QCHW ③	Cable-in/cable-out	15–100	2, 3	240	14b	—	—	22,000
BAB	Bolt-on	10–70	1	120/240	10a, 11a, 12a	—	10,000	—
BAB	Bolt-on	10–125	2	120/240	10a, 12a	—	10,000	—
BAB	Bolt-on	10–100	2, 3	240	10b, 11b, 12b	—	—	10,000
QBHW	Bolt-on	15–70	1	120/240	—	—	22,000	—
QBHW	Bolt-on	15–125	2	120/240	—	—	22,000	—
QBHW	Bolt-on	15–100	2, 3	240	—	—	—	22,000

① QUICKLAG® circuit breakers are suitable for application in relative humidity 0–95% noncondensing.

② The BR and the BRH as loadcenter breakers.

③ The QC and QCHW as cable-in/cable-out breaker (non panelboard mounted breakers).

Table 7. Molded-case circuit breaker ratings

Circuit breaker type	Continuous ampere rating at 40 °C	Number of poles	AC volts	Type of trip ①	Federal specification W-C-375b	UL listed interrupting ratings (rms symmetrical amperes)					
						AC ratings volts					
						120	120/240	240	277	480	600
G-Frame											
GHB	15-100	1	120	N.I.T.	11a	65,000	—	—	—	—	—
GHB	15-100	2, 3	240	—	10b, 11b	—	—	65,000	—	—	—
GHB	15-100	1	277	—	12b, 14b	—	—	—	14,000	—	—
GHB	15-100	2, 3	277/480	—	15b	—	—	—	14,000	14,000	—
HGHB	15-30	1	277	—	12c, 13s, 13b	65,000	—	—	25,000	—	—
GHQ	15-20	1	277	—	—	65,000	—	—	14,000	—	—
GHBS	15-30	1, 2	277/480	—	—	65,000	65,000	—	14,000	—	—
GBHS	15-20	1, 2	347/600	N.I.T.	—	—	—	—	—	—	10,000
GD ②	15-50	2	480	N.I.T.	13b	—	—	65,000	—	14,000	—
GD ②	15-100	3	480	N.I.T.	13b	—	—	65,000	—	22,000	—
GHC	15-100	1	120	N.I.T.	12c, 13a	65,000	—	—	—	—	—
GHC	15-100	2, 3	240	—	13b	—	—	65,000	—	—	—
GHC	15-100	1	277	—	12c, 13a	—	—	—	14,000	—	—
GHC	15-100	2, 3	277/480	—	13b	—	—	—	14,000	14,000	—
HGHC	15-30	1	277	—	—	65,000	—	—	25,000	—	—
EG-Frame ②											
EGB	15-125	1	277	N.I.T.	—	35,000	—	25,000	18,000	—	—
		2, 3, 4	480	—	—	—	—	25,000	—	18,000	—
EGE	15-125	2, 3, 4	600Y/347	N.I.T.	—	—	—	35,000	—	25,000	18,000
EGS	15-125	1	347	N.I.T.	—	100,000	—	85,000	35,000	—	—
		2, 3, 4	600Y/347	N.I.T.	—	—	—	85,000	—	35,000	22,000
EGH	15-125	1	347	N.I.T.	—	200,000	—	100,000	65,000	—	—
		2, 3, 4	600Y/347	—	—	—	—	100,000	—	65,000	25,000
EG-Frame current limiting ②③											
EGC	15-125	3	600Y/347	N.I.T.	—	200,000	—	200,000	—	100,000	35,000
F-Frame											
EDB	100-225	2, 3	240	N.I.T.	12b	—	—	22,000	—	—	—
EDS	100-225	2, 3	240	N.I.T.	12b	—	—	42,000	—	—	—
ED	100-225	2, 3	240	N.I.T.	12b	—	—	65,000	—	—	—
EDH	100-225	2, 3	240	—	14b	—	—	100,000	—	—	—
EDC ③	100-225	2, 3	240	—	1	—	—	200,000	—	—	—
EHD	15-100	1	277	N.I.T.	13a	—	—	—	14,000	—	—
EHD	15-100	2, 3	480	—	13b	—	—	18,000	—	14,000	—

① N.I.T. is non-interchangeable trip unit and I.T. is interchangeable trip unit.

② Not presently available for panelboard or switchboard mounting in Eaton assemblies.

③ Current limiting.

Table 7. Molded-case circuit breaker ratings (continued)

Circuit breaker type	Continuous ampere rating at 40 °C	Number of poles	AC volts	Type of trip ①	Federal specification W-C-375b	UL listed interrupting ratings (rms symmetrical amperes)					
						AC ratings volts					
						120	120/240	240	277	480	600
F-Frame (continued)											
FDB	15–150	2, 3	600	N.I.T.	18a	—	—	18,000	—	14,000	14,000
FDB	15–150	4	600	—	④	—	—	18,000	—	14,000	14,000
FD	15–225	1	277	N.I.T.	13a	—	—	—	35,000	—	—
FD	15–225	2, 3	600	—	22a	—	—	65,000	—	35,000	18,000
FD	15–225	4	600	—	④	—	—	65,000	—	35,000	18,000
FDE	15–225	3	600	N.I.T.	—	—	—	65,000	—	35,000	18,000
HFD	15–225	1	277	N.I.T.	13a	—	—	—	65,000	—	—
HFD	15–225	2, 3	600	—	22a	—	—	100,000	—	65,000	25,000
HFD	15–225	4	600	—	④	—	—	100,000	—	65,000	25,000
HFDE	15–225	3	600	N.I.T.	—	—	—	100,000	—	65,000	25,000
FDC ②	15–225	2, 3	600	N.I.T.	24a	—	—	200,000	—	100,000	35,000
FDC ②	15–225	4	600	—	④	—	—	200,000	—	100,000	35,000
FDCE	15–225	3	600	N.I.T.	—	—	—	200,000	—	100,000	25,000
JG-Frame ③											
JGE	63–250	2, 3, 4	600	I.T.	—	—	—	65,000	—	25,000	18,000
JGS	63–250	2, 3, 4	600	I.T.	—	—	—	85,000	—	35,000	18,000
JGH	63–250	2, 3, 4	600	I.T.	—	—	—	100,000	—	65,000	25,000
JG-Frame current limiting ②③											
JGC	63–250	2, 3, 4	600	I.T.	—	—	—	200,000	—	100,000	50,000
JGU	63–250	3, 4	600	I.T.	—	—	—	150,000	—	150,000	50,000
JGX	63–250	3, 4	600	I.T.	—	—	—	200,000	—	200,000	50,000
JD-Frame											
JDB	70–250	2, 3	600	N.I.T.	22a	—	—	65,000	—	35,000	18,000
JD	70–250	2, 3, 4	600	I.T.	22a	—	—	65,000	—	35,000	18,000
HJD	70–250	2, 3, 4	600	I.T.	22a	—	—	100,000	—	65,000	25,000
JDC ②	70–250	2, 3, 4	600	I.T.	22a	—	—	200,000	—	100,000	35,000
K-Frame											
DK	250–400	2, 3	240	N.I.T.	14b	—	—	65,000	—	—	—
KDB	100–400	2, 3	600	N.I.T.	23a	—	—	65,000	—	35,000	25,000
KD	100–400	2, 3, 4	600	I.T.	23a	—	—	65,000	—	35,000	25,000
CKD ⑤	100–400	2, 3, 4	600	I.T.	23a	—	—	65,000	—	35,000	25,000
HKD	100–400	2, 3, 4	600	I.T.	23a	—	—	100,000	—	65,000	35,000
CHKD ⑥	100–400	2, 3, 4	600	I.T.	23a	—	—	100,000	—	65,000	35,000
KDC ②	100–400	2, 3, 4	600	I.T.	23a	—	—	200,000	—	100,000	65,000
LG-Frame											
LGE	100–600	3, 4	600	I.T.	23a	—	—	65,000	—	35,000	18,000
LGS	100–600	3, 4	600	I.T.	23a	—	—	85,000	—	50,000	25,000
LGH	100–600	3, 4	600	I.T.	23a	—	—	100,000	—	65,000	35,000
LHH ⑥	125–400	3	600	N.I.T.	—	—	—	100,000	—	65,000	35,000

① N.I.T. is non-interchangeable trip unit and I.T. is interchangeable trip unit.

② Current limiting.

③ Not presently available for panelboard or switchboard mounting in Eaton assemblies.

④ Not defined in W-C-375b.

⑤ 100% rated.

⑥ High withstand breaker.

Table 7. Molded-case circuit breaker ratings (continued)

Circuit breaker type	Continuous ampere rating at 40 °C	Number of poles	AC volts	Type of trip ①	Federal specification W-C-375b	UL listed interrupting ratings (rms symmetrical amperes)					
						AC ratings volts					
						120	120/240	240	277	480	600
LG-Frame current limiting ②											
LGC	100–600	3, 4	600	I.T.	23a	—	—	200,000	—	10_0,000	50,000
LGU	100–600	3, 4	600	I.T.	—	—	—	150,000	—	150,000	50,000
LGX	100–600	3, 4	600	I.T.	—	—	—	200,000	—	200,000	50,000
LD-Frame											
LDB	300–600	2, 3	600	N.I.T.	23a	—	—	65,000	—	35,000	25,000
LD	300–600	2, 3, 4	600	I.T.	23a	—	—	65,000	—	35,000	25,000
CLD ③	300–600	2, 3, 4	600	I.T.	23a	—	—	65,000	—	35,000	25,000
HLD	300–600	2, 3, 4	600	I.T.	23a	—	—	100,000	—	65,000	35,000
CHLD ③	300–600	2, 3, 4	600	I.T.	23a	—	—	100,000	—	65,000	35,000
LDC ②	300–600	2, 3, 4	600	I.T.	23a	—	—	—	—	100,000	50,000
CLDC ②③	300–600	2, 3, 4	600	I.T.	23a	—	—	200,000	—	100,000	50,000
M-Frame											
MDL	300–800	2, 3	600	I.T.	23a	—	—	65,000	—	50,000	25,000
CMDL ③	300–800	2, 3	600	I.T.	23a	—	—	65,000	—	50,000	25,000
HMDL	300–800	2, 3	600	I.T.	23a	—	—	100,000	—	65,000	35,000
CHMDL ③	300–800	2, 3	600	I.T.	23a	—	—	100,000	—	65,000	35,000
N-Frame											
NGS ④ 800, 1200	600–1200	2, 3, 4	600	N.I.T.	—	—	—	65,000	—	50,000	25,000
NGH 800, 1200	600–1200	2, 3, 4	600	N.I.T.	—	—	—	100,000	—	65,000	35,000
NGC 800, 1200	600–1200	2, 3, 4	600	N.I.T.	—	—	—	200,000	—	100,000	50,000
NGU 800	600–1200	3	600	N.I.T.	—	—	—	300,000	—	150,000	75,000
NGS ④⑤	1600	3	600	N.I.T.	—	—	—	—	—	—	—
ND	600–1200	3, 4	600	N.I.T.	23a	—	—	65,000	—	50,000	25,000
CND ③	600–1200	3, 4	600	N.I.T.	23a	—	—	65,000	—	50,000	25,000
HND	600–1200	3, 4	600	N.I.T.	23a	—	—	100,000	—	65,000	35,000
CHND ③	600–1200	3, 4	600	N.I.T.	23a	—	—	100,000	—	65,000	35,000
NDC	600–1200	3, 4	600	N.I.T.	23a	—	—	200,000	—	100,000	65,000
HNDC ③	600–1200	3, 4	600	N.I.T.	23a	—	—	200,000	—	100,000	65,000
NDU	600–1200	3	600	N.I.T.	—	—	—	300,000	—	150,000	75,000

① N.I.T. is non-interchangeable trip unit and I.T. is interchangeable trip unit.

② Current limiting.

③ 100% rated.

④ Not presently available for panelboard or switchboard mounting in Eaton assemblies.

⑤ Not UL or CSA® listed.

Table 7. Molded-Case Circuit Breaker Ratings (continued)

Circuit breaker type	Continuous ampere rating at 40 °C	Number of poles	AC volts	Type of trip ①	Federal specification W-C-375b	UL listed interrupting ratings (rms symmetrical amperes)					
						AC ratings volts					
						120	120/240	240	277	480	600
R-Frame											
RGH ②	800–1600	3, 4	600	N.I.T.	—	—	—	125,000	—	65,000	50,000
RGC ②	800–1600	3, 4	600	N.I.T.	—	—	—	200,000	—	100,000	65,000
RD 1600	800–1600	3, 4	600	N.I.T.	24a	—	—	125,000	—	65,000	50,000
CRD 1600 ③	800–1600	3, 4	600	N.I.T.	24a	—	—	125,000	—	65,000	50,000
RD 2000	1000–2000	3, 4	600	N.I.T.	24a	—	—	125,000	—	65,000	50,000
RD 2500	1000–2500	3, 4	600	N.I.T.	24a	—	—	200,000	—	65,000	50,000
CRD 2000 ③	1000–2000	3, 4	600	N.I.T.	24a	—	—	125,000	—	65,000	50,000
RDC 1600	800–1600	3, 4	600	N.I.T.	25a	—	—	200,000	—	100,000	65,000
CRDC 1600 ③	800–1600	3, 4	600	N.I.T.	25a	—	—	200,000	—	100,000	65,000
RDC 2000	1000–2000	3, 4	600	N.I.T.	25a	—	—	200,000	—	100,000	65,000
RDC 2500	1000–2000	3, 4	600	N.I.T.	25a	—	—	200,000	—	100,000	65,000
CRDC 2000 ③	1000–2000	3, 4	600	N.I.T.	25a	—	—	200,000	—	100,000	65,000
Current Limit-R current limiting circuit breakers—non-fused type											
FCL	15–100	2, 3	480	N.I.T.	—	—	—	200,000	—	150,000	—
LCL	125–400	2, 3	600	N.I.T.	—	—	—	200,000	—	200,000	100,000

① N.I.T. is non-interchangeable trip unit and I.T. is interchangeable trip unit.

② Not presently available for panelboard or switchboard mounting in Eaton assemblies.

③ 100% rated.

Table 8. Magnum DS® switchgear class UL 1066 low-voltage power circuit breakers

Frame amperes	Breaker type	Frame type	rms symmetrical current ratings kA 50/60 Hz ①			Short time withstand rating	Fixed internal instantaneous trip	Available current sensor and rating plugs for Digitrip RMS trip unit (establishes breaker I _n rating)
			Interrupting at 254 Vac	Interrupting at 508 Vac	Interrupting at 635 Vac			
800	MDN-408	Narrow	42	42	42	42	—	200, 250, 300, 400, 600, 800
	MDN-508	Narrow	50	50	50	50	—	
	MDN-608	Narrow	65	65	65	65	—	
	MDN-C08	Narrow	100	100	65	20	18 x I _n	
	MDS-408	Standard	42	42	42	42	—	
	MDS-608	Standard	65	65	65	65	—	
	MDS-808	Standard	85	85	85	85	—	
	MDS-C08	Standard	100	100	100	85	85	
	MDS-L08 ②	Standard	200	200	200	—	—	
	MDS-X08 ③	Standard	200	200	④	30	30	
1600	MDN-416	Narrow	42	42	42	42	—	200, 250, 300, 400, 600, 800, 1000, 1200, 1600
	MDN-516	Narrow	50	50	50	50	—	
	MDN-616	Narrow	65	65	65	65	—	
	MDN-C16	Narrow	100	100	65	30	18 x I _n	
	MDS-616	Standard	65	65	65	65	—	
	MDS-816	Standard	85	85	85	85	—	
	MDS-C16	Standard	100	100	100	85	85	
	MDS-L16 ②	Standard	200	200	200	—	—	
	MDS-X16 ③	Standard	200	200	④	30	30	
	2000	MDN-620	Narrow	65	65	65	65	
MDN-C20		Narrow	100	100	65	35	18 x I _n	
MDS-620		Standard	65	65	65	65	—	
MDS-820		Standard	85	85	85	85	—	
MDS-C20		Standard	100	100	100	85	85	
MDS-L20 ②		Standard	200	200	200	—	—	
MDS-X20 ③		Standard	200	200	④	30	30	
3200	MDS-632	Standard	65	65	65	65	—	200, 250, 300, 400, 600, 800, 1000, 1200, 1600, 2000, 2500, 3000, 3200
	MDS-832	Standard	85	85	85	85	—	
	MDS-C32	Standard	100	100	100	85	85	
	MDS-X32 ③	Double	200	200	④	50	50	
4000	MDS-840	Double	85	85	85	85	—	2000, 2500, 3200, 4000
	MDS-C40	Double	100	100	100	100	—	
	MDS-X40 ③	Double	200	200	④	50	50	
5000	MDS-850	Double	85	85	85	85	—	2500, 3200, 4000, 5000
	MDS-C50	Double	100	100	100	100	—	
	MDS-X50 ③⑤	Double	200	200	④	50	50	
6000	MDS-C60 ⑤	Double	100	100	100	100	—	3200, 4000, 5000, 6000

① Interrupting ratings shown based on breaker equipped with integral Digitrip RMS trip unit. Interruption ratings for non-automatic breakers are equal to the published short time withstand rating. These interruption ratings are based on the standard duty cycle consisting of an open operation, a 15-second interval and a close-open operation, in succession, with delayed tripping in case of short-delay devices. The standard duty cycle for short time ratings consists of maintaining the rated current for two periods of 1/2 seconds each, with a 15-second interval of zero current between the two periods.

② Magnum MDSL current limiting power circuit breaker with integral current limiters. Current limiter selected determines short time and fixed instantaneous trip rating. Maximum voltage rating is 600 Vac.

③ Magnum MDSX current limiting power circuit breaker with fast opening contacts.

④ Product to be tested. Contact Eaton for product rating.

⑤ Breaker applied in a tested fan-cooled enclosure.

Table 9. Series NRX low-voltage power circuit breaker ratings ①②

Continuous current rating (amperes)	Trip unit	Frame type	Short-circuit ratings (kA)			Short-time withstand rating (kA)			
			Interrupting at 254 Vac	Interrupting at 508 Vac	Interrupting at 635 Vac				
UL 1066 ratings									
800	Digitrip	NF	85	65	35	42 ③			
			Interrupting at 240 Vac	Interrupting at 480 Vac	Interrupting at 600 Vac				
UL 489 ratings ④									
800	Digitrip	NF	50, 65, 85	42, 50, 65	42, 42, 42	42			
	PXR	NF	50, 65, 85	42, 50, 65	42, 42, 42	42 ⑤			
	PXR	RF	65, 85, 100	65, 85, 100	—	65 ⑤			
1200	Digitrip	NF	50, 65, 85	42, 50, 65	42, 42, 42	42			
	PXR	NF	50, 65, 85	42, 50, 65	42, 42, 42	42 ⑤			
	PXR	RF	65, 85, 100	65, 85, 100	—	65 ⑤			
1600	PXR	RF	65, 85, 100	65, 85, 100	—	65 ⑤			
2000	PXR	RF	65, 85, 100	65, 85, 100	—	65 ⑤			
2500	PXR	RF	65, 85, 100	65, 85, 100	—	65 ⑤			
3000	PXR	RF	65, 85, 100	65, 85, 100	—	65 ⑤			
			Interrupting at 240/254 Vac	Interrupting at 415/440 Vac	Interrupting at 690/725 Vac	1 s / 3 s rated short-time withstand current (I_{cs})			
			I _{cu}	I _{cs}	I _{cu}	I _{cs}			
IEC 60947-2 ratings ④									
630	Digitrip	NF	50, 65, 85	50, 65, 85	42, 50, 65	42, 50, 65	42, 42, 42	42, 42, 42	42/-, 42/-, 42/-
	PXR	NF	42, 85, 85	42, 50, 65	42, 50, 66	42, 50, 50	42, 42, 42	42, 42, 42	42/-, 42/-, 42/-
800	Digitrip	NF	50, 65, 85	50, 65, 85	42, 50, 65	42, 50, 65	42, 42, 42	42, 42, 42	42/-, 42/-, 42/-
	PXR	NF	42, 85, 85	42, 50, 65	42, 50, 66	42, 50, 50	42, 42, 42	42, 42, 42	42/-, 42/-, 42/-
	PXR	RF	66, 85, 105	66, 85, 105	66, 85, 105	66, 85, 105	66, 75, 75	66, 75, 75	66/53, 85/66, 85/66
1000	Digitrip	NF	50, 65, 85	50, 65, 85	42, 50, 65	42, 50, 65	42, 42, 42	42, 42, 42	42/-, 42/-, 42/-
	PXR	NF	42, 85, 85	42, 50, 65	42, 50, 66	42, 50, 50	42, 42, 42	42, 42, 42	42/-, 42/-, 42/-
	PXR	RF	66, 85, 105	66, 85, 105	66, 85, 105	66, 85, 105	66, 75, 75	66, 75, 75	66/53, 85/66, 85/66
1250	Digitrip	NF	50, 65, 85	50, 65, 85	42, 50, 65	42, 50, 65	42, 42, 42	42, 42, 42	42/-, 42/-, 42/-
	PXR	NF	42, 85, 85	42, 50, 65	42, 50, 66	42, 50, 50	42, 42, 42	42, 42, 42	42/-, 42/-, 42/-
	PXR	RF	66, 85, 105	66, 85, 105	66, 85, 105	66, 85, 105	66, 75, 75	66, 75, 75	66/53, 85/66, 85/66
1600	Digitrip	NF	50, 65, 85	50, 65, 85	42, 50, 65	42, 50, 65	42, 42, 42	42, 42, 42	42/-, 42/-, 42/-
	PXR	NF	42, 85, 85	42, 50, 65	42, 50, 66	42, 50, 50	42, 42, 42	42, 42, 42	42/-, 42/-, 42/-
	PXR	RF	66, 85, 105	66, 85, 105	66, 85, 105	66, 85, 105	66, 75, 75	66, 75, 75	66/53, 85/66, 85/66
2000	PXR	RF	66, 85, 105	66, 85, 105	66, 85, 105	66, 85, 105	66, 75, 75	66, 75, 75	66/53, 85/66, 85/66
2500	PXR	RF	66, 85, 105	66, 85, 105	66, 85, 105	66, 85, 105	66, 75, 75	66, 75, 75	66/53, 85/66, 85/66
3200	PXR	RF	66, 85, 105	66, 85, 105	66, 85, 105	66, 85, 105	66, 75, 75	66, 75, 75	66/53, 85/66, 85/66
4000	PXR	RF	66, 85, 105	66, 85, 105	66, 85, 105	66, 85, 105	66, 75, 75	66, 75, 75	66/53, 85/66, 85/66

① Interrupting ratings shown based on breaker equipped with integral Digitrip RMS or Power Xpert® Release (PXR) trip unit. Interruption ratings for non-automatic breakers are equal to the published short time withstand rating. These interruption ratings are based on the standard duty cycle consisting of an open operation, a 15-second interval and a close-open operation, in succession, with delayed tripping in case of short-delay devices. The standard duty cycle for short time ratings consists of maintaining the rated current for two periods of 1/2 seconds each, with a 15-second interval of zero current between the two periods.

② Contact Eaton for current Series NRX rating offering.

③ 35 kAIC short-time withstand at 635 V level only. All other voltages 42 kAIC short-time withstand.

④ For circuit breakers with PXR trip units, there are three types of circuit breakers, each with their own ratings (B, N, H).

⑤ 30 cycle withstand shown, 3 cycle option also available.

Table 10. MCCB to MCCB selective coordination combinations—test data (all values in kAIC rms current levels at 480 Vac or less)

Load side breaker	Breaker family type trip unit minimum trip maximum trip	Line side breaker (standard and current limiting frames)									
		EG ① T/M 125 A 125 A	F T/M 100 A 100 A	F T/M 150 A 200 A	F T/M 225 A 225 A	F 210+ 15 A 80 A	F 210+ 60 A 160 A	F 210+ 100 A 225 A	F 310+ 15 A 80 A	F 310+ 60 A 160 A	F 310+ 100 A 225 A
BR, BAB, HQP, and QC (120 Vac for single-pole, 120/240 Vac for two-pole, and 240 Vac for delta rated two-pole and all three-pole breakers)											
15		1.2	1.0	1.5	2.2	0.6	1.2	2.3	0.6	1.2	2.3
20		1.2	1.0	1.5	2.2	0.6	1.2	2.3	0.6	1.2	2.3
30		1.2	1.0	1.5	2.2	0.6	1.2	2.3	0.6	1.2	2.3
40		0.8	1.0	1.5	2.2	0.6	1.2	2.3	0.6	1.2	2.3
50		0.8	—	1.5	2.2	—	1.2	2.3	—	1.2	2.3
60		0.8	—	1.5	2.2	—	1.2	2.3	—	1.2	2.3
70		—	—	1.5	2.2	—	1.2	2.3	—	1.2	2.3
80		—	—	—	2.2	—	—	2.3	—	—	2.3
90		—	—	—	2.2	—	—	2.3	—	—	2.3
100		—	—	—	1.8	—	—	2.3	—	—	2.3
125		—	—	—	—	—	—	—	—	—	—
150		—	—	—	—	—	—	—	—	—	—
BRH, QPHW, QBHW, and QCHW (120 Vac for single-pole, 120/240 Vac for two-pole, and 240 Vac for delta rated two-pole and all three-pole breakers)											
15		1.2	1.0	1.5	2.2	0.6	1.2	2.3	0.6	1.2	2.3
20		1.2	1.0	1.5	2.2	0.6	1.2	2.3	0.6	1.2	2.3
30		1.2	1.0	1.5	2.2	0.6	1.2	2.3	0.6	1.2	2.3
40		0.8	1.0	1.5	2.2	0.6	1.2	2.3	0.6	1.2	2.3
50		0.8	—	1.5	2.2	—	1.2	2.3	—	1.2	2.3
60		0.8	—	1.5	2.2	—	1.2	2.3	—	1.2	2.3
70		—	—	1.5	2.2	—	1.2	2.3	—	1.2	2.3
80		—	—	—	2.2	—	—	2.3	—	—	2.3
90		—	—	—	2.2	—	—	2.3	—	—	2.3
100		—	—	—	1.8	—	—	2.3	—	—	2.3
125		—	—	—	—	—	—	—	—	—	—
150		—	—	—	—	—	—	—	—	—	—
GHB/GHC family (65 kA at 240 Vac, 14 kA at 480Y/277 Vac)											
20		1.2	1.0	1.5	2.2	0.8	1.6	2.3	0.8	1.6	2.8
30		1.2	1.0	1.5	2.2	0.8	1.6	2.3	0.8	1.6	2.8
50		1.2	1.0	1.5	2.2	—	1.6	2.3	—	1.6	2.3
70		—	—	—	2.2	—	—	2.3	—	—	2.3
100		—	—	—	1.8	—	—	1.8	—	—	1.8
GD family (65 kA at 240 Vac, 22 kA at 480 Vac)											
20		1.2	1.0	1.5	2.2	0.8	1.6	2.3	0.8	1.6	2.8
30		1.2	1.0	1.5	2.2	0.8	1.6	2.3	0.8	1.6	2.8
50		1.2	1.0	1.5	2.2	—	1.6	2.3	—	1.6	2.3
70		—	—	—	2.2	—	—	2.3	—	—	2.3
100		—	—	—	1.8	—	—	1.8	—	—	1.8

Note: — = Not applicable.

The table indicates the maximum fault current value expressed in kA for which coordination is ensured. Downstream (branch) breakers' AIC ratings must be sized for the appropriate fault level at the installation point (for standalone or series combination ratings). Short time delay settings or magnetic trip settings must be set to properly coordinate for low level faults.

① Not presently available for panelboard or switchboard mounting in Eaton assemblies. For all combinations available, refer to IA01400001E.

Table 10. MCCB to MCCB selective coordination combinations—test data (all values in kAIC rms current levels at 480 Vac or less) (continued)

Load side breaker	Breaker family type trip unit minimum trip maximum trip	Line side breaker (standard and current limiting frames)						
		JD T/M 70 A 125 A	JD T/M 150 A 225 A	JD T/M 250 A 250 A	JG ① ETU 20 A 50 A	JG ① ETU 40 A 100 A	JG ① ETU 63 A 160 A	JG ① ETU 100 A 250 A
BR, BAB, HQP, and QC (120 Vac for single-pole, 120/240 Vac for two-pole, and 240 Vac for delta rated two-pole and all three-pole breakers)								
15		1.0	2.1	4.0	1.0	2.5	4.0	6.0
20		1.0	2.1	3.4	1.0	2.0	3.0	5.0
30		0.7	2.1	3.4	0.7	2.0	3.0	5.0
40		—	1.5	3.4	—	1.2	2.5	4.0
50		—	1.5	2.5	—	1.2	2.5	4.0
60		—	1.5	2.5	—	—	2.5	4.0
70		—	1.5	2.5	—	—	2.5	3.0
80		—	—	2.5	—	—	2.5	3.0
90		—	—	2.3	—	—	—	3.0
100		—	—	2.3	—	—	—	3.0
125		—	—	2.3	—	—	—	3.0
150		—	—	—	—	—	—	—
BRH, QPHW, QBHW, and QCHW (120 Vac for single-pole, 120/240 Vac for two-pole, and 240 Vac for delta rated two-pole and all three-pole breakers)								
15		1.0	2.1	4.0	1.0	2.5	4.0	6.0
20		1.0	2.1	3.4	1.0	2.0	3.0	5.0
30		0.7	2.1	3.4	0.7	2.0	3.0	5.0
40		—	1.5	3.4	—	1.2	2.5	4.0
50		—	1.5	2.5	—	1.2	2.5	4.0
60		—	1.5	2.5	—	—	2.5	4.0
70		—	1.5	2.5	—	—	2.5	3.0
80		—	—	2.5	—	—	2.5	3.0
90		—	—	2.3	—	—	—	3.0
100		—	—	2.3	—	—	—	3.0
125		—	—	2.3	—	—	—	3.0
150		—	—	—	—	—	—	—
GHB/GHC family (65 kA at 240 Vac, 14 kA at 480Y/277 Vac)								
20		0.7	1.5	2.5	0.7	2.0	3.0	4.0
30		0.7	1.5	2.5	0.7	2.0	3.0	4.0
50		—	1.5	2.3	—	1.6	2.2	3.6
70		—	—	2.3	—	—	2.5	3.6
100		—	—	2.3	—	—	—	3.6
GD family (65 kA at 240 Vac, 22 kA at 480 Vac)								
20		0.7	1.5	2.5	0.7	2.0	3.0	4.0
30		0.7	1.5	2.5	0.7	2.0	3.0	4.0
50		—	1.5	2.3	—	1.6	2.2	3.6
70		—	—	2.3	—	—	2.5	3.6
100		—	—	2.3	—	—	—	3.6

Note: — = Not applicable.

The table indicates the maximum fault current value expressed in kA for which coordination is ensured. Downstream (branch) breakers' AIC ratings must be sized for the appropriate fault level at the installation point (for standalone or series combination ratings). Short time delay settings or magnetic trip settings must be set to properly coordinate for low level faults.

① Not presently available for panelboard or switchboard mounting in Eaton assemblies. For all combinations available, refer to IA01400001E.

Table 10. MCCB to MCCB selective coordination combinations—test data (all values in kAIC rms current levels at 480 Vac or less) (continued)

Load side breaker	Breaker family type trip unit minimum trip maximum trip	Line side breaker (standard and current limiting frames)									
		EG ① T/M 125 A	F T/M 100 A	F T/M 150 A	F T/M 225 A	F 210+ 15 A 80 A	F 210+ 60 A 160 A	F 210+ 100 A 225 A	F 310+ 15 A 80 A	F 310+ 60 A 160 A	F 310+ 100 A 225 A
FCL current limiting family (200 kA at 240 Vac, 150 kA at 480 Vac)											
15		1.3	1.0	1.5	2.2	0.8	1.6	2.3	0.8	1.6	2.8
30		1.3	1.0	1.5	2.2	0.8	1.6	2.3	0.8	1.6	2.8
50		1.3	1.0	1.5	2.2	0.8	1.6	2.3	0.8	1.6	2.3
100		—	—	—	1.8	—	1.6	1.8	—	1.6	1.8
EG family ①											
15		1.3	1.0	1.5	2.2	0.8	1.6	2.3	0.8	1.6	2.8
30		1.3	1.0	1.5	2.2	0.8	1.6	2.3	0.8	1.6	2.8
50		1.3	1.0	1.5	1.8	0.8	1.6	2.3	0.8	1.6	2.3
60		1.3	—	1.5	1.8	—	1.6	2.3	—	1.6	2.3
100		—	—	—	1.8	—	1.2	1.8	—	1.2	1.8
125		—	—	—	1.8	—	1.2	1.8	—	1.2	1.8
EG current limiting family ①											
15		1.3	1.0	1.5	2.2	0.8	1.6	2.3	0.8	1.6	2.8
30		1.3	1.0	1.5	2.2	0.8	1.6	2.3	0.8	1.6	2.8
50		1.3	1.0	1.5	1.8	0.8	1.6	2.3	0.8	1.6	2.3
60		1.3	—	1.5	1.8	—	1.6	2.3	—	1.6	2.3
100		—	—	—	1.8	—	1.2	1.8	—	1.2	1.8
125		—	—	—	1.8	—	1.2	1.8	—	1.2	1.8
F family											
15		—	1.0	1.5	1.8	0.8	1.2	2.3	0.8	1.2	2.8
40		—	1.0	1.5	1.8	0.8	1.2	2.3	0.8	1.2	2.3
100		—	—	—	1.8	—	1.2	1.8	—	1.2	1.8
225		—	—	—	—	—	—	—	—	—	—
JG family ①											
50		—	—	—	—	—	—	—	—	—	—
100		—	—	—	—	—	—	—	—	—	—
160		—	—	—	—	—	—	—	—	—	—
250		—	—	—	—	—	—	—	—	—	—
JG current limiting family ①											
50		—	—	—	—	—	—	—	—	—	—
100		—	—	—	—	—	—	—	—	—	—
160		—	—	—	—	—	—	—	—	—	—
250		—	—	—	—	—	—	—	—	—	—

Note: — = Not applicable.

The table indicates the maximum fault current value expressed in kA for which coordination is ensured. Downstream (branch) breakers' AIC ratings must be sized for the appropriate fault level at the installation point (for standalone or series combination ratings). Short time delay settings or magnetic trip settings must be set to properly coordinate for low level faults.

① Not presently available for panelboard or switchboard mounting in Eaton assemblies. For all combinations available, refer to IA01400001E.

Table 10. MCCB to MCCB selective coordination combinations—test data (all values in kAIC rms current levels at 480 Vac or less) (continued)

Load side breaker	Breaker family type trip unit minimum trip maximum trip	Line side breaker (standard and current limiting frames)						
		JD T/M 70 A 125 A	JD T/M 150 A 225 A	JD T/M 250 A 250 A	JG ① ETU 20 A 50 A	JG ① ETU 40 A 100 A	JG ① ETU 63 A 160 A	JG ① ETU 100 A 250 A
FCL current limiting family (200 kA at 240 Vac, 150 kA at 480 Vac)								
15		1.0	1.5	2.5	1.0	2.0	3.0	6.0
30		0.7	1.5	2.5	0.7	2.0	3.0	6.0
50		—	1.5	2.3	—	1.6	2.5	4.0
100		—	—	2.3	—	—	—	4.0
EG family ①								
15		1.0	1.5	2.5	1.0	2.0	3.0	4.6
30		0.7	1.5	2.5	0.7	2.0	3.0	4.6
50		—	1.5	2.3	—	1.6	2.5	4.6
60		—	1.5	2.3	—	—	2.2	4.0
100		—	—	2.3	—	—	—	4.0
125		—	—	2.3	—	—	—	4.0
EG current limiting family ①								
15		1.0	1.5	2.5	1.0	2.0	3.0	4.6
30		0.7	1.5	2.5	0.7	2.0	3.0	4.6
50		—	1.5	2.3	—	1.6	2.5	4.6
60		—	1.5	2.3	—	—	2.2	4.0
100		—	—	2.3	—	—	—	4.0
125		—	—	2.3	—	—	—	4.0
F family								
15		1.0	1.5	2.5	1.0	2.0	2.0	2.5
40		0.7	1.5	2.5	—	1.6	1.8	2.5
100		—	—	2.3	—	—	—	2.3
225		—	—	—	—	—	—	—
JG family ①								
50		—	1.2	2.3	—	1.2	1.2	2.3
100		—	—	2.3	—	—	—	2.3
160		—	—	—	—	—	—	—
250		—	—	—	—	—	—	—
JG current limiting family ①								
50		—	—	2.3	—	1.2	1.2	2.3
100		—	—	2.3	—	—	—	2.3
160		—	—	—	—	—	—	—
250		—	—	—	—	—	—	—

Note: — = Not applicable.

The table indicates the maximum fault current value expressed in kA for which coordination is ensured. Downstream (branch) breakers' AIC ratings must be sized for the appropriate fault level at the installation point (for standalone or series combination ratings). Short time delay settings or magnetic trip settings must be set to properly coordinate for low level faults.

① Not presently available for panelboard or switchboard mounting in Eaton assemblies. For all combinations available, refer to IA01400001E.

Table 10. MCCB to MCCB selective coordination combinations—test data (all values in kAIC rms current levels at 480 Vac or less) (continued)

Load side breaker	Breaker family type trip unit minimum trip maximum trip	Line side breaker (standard and current limiting frames)												
		K T/M 100 A 175 A	K T/M 200 A 350 A	K T/M 400 A 400 A	K ETU 55 A 125 A	K ETU 100 A 250 A	K ETU 160 A 400 A	LD T/M 300 A 350 A	LD T/M 400 A 500 A	LD T/M 600 A 600 A	LD ETU 250 A 600 A	LHH T/M 125 A 150 A	LHH T/M 175 A 200 A	LHH T/M 225 A 400 A
BR, BAB, HQP, and QC (120 Vac for single-pole, 120/240 Vac for two-pole, and 240 Vac for delta rated two-pole and all three-pole breakers)														
15		2.5	5.0	10	3.0	6.0	10	10	10	10	10	10	10	10
20		2.0	4.0	8.0	2.5	5.0	8.0	9.0	10	10	10	7.5	10	10
30		2.0	4.0	8.0	2.5	5.0	8.0	9.0	10	10	10	7.5	10	10
40		1.2	3.0	6.0	1.5	4.0	6.0	7.5	10	10	10	5.3	10	10
50		1.2	3.0	6.0	1.5	4.0	6.0	7.5	10	10	10	5.3	10	10
60		—	3.0	6.0	1.5	4.0	6.0	7.5	10	10	10	5.3	10	10
70		—	2.5	5.0	—	3.0	5.0	7.5	10	10	10	4.3	10	10
80		—	2.5	5.0	—	3.0	5.0	7.5	10	10	10	—	10	10
90		—	2.5	5.0	—	3.0	5.0	7.5	10	10	10	—	10	10
100		—	2.5	5.0	—	3.0	5.0	7.5	10	10	10	—	10	10
125		—	—	4.2	—	3.0	4.2	7.5	10	10	10	—	—	10
150		—	—	4.2	—	—	4.2	7.5	10	10	10	—	—	10
BRH, QPHW, QBHW, and QCHW (120 Vac for single-pole, 120/240 Vac for two-pole, and 240 Vac for delta rated two-pole and all three-pole breakers)														
15		2.5	5.0	10	3.0	6.0	10	10	10	22	22	10	22	22
20		2.0	4.0	8.0	2.5	5.0	8.0	9.0	10	22	22	7.5	22	22
30		2.0	4.0	8.0	2.5	5.0	8.0	9.0	10	22	22	7.5	22	22
40		1.2	3.0	6.0	1.5	4.0	6.0	7.5	10	22	22	5.3	22	22
50		1.2	3.0	6.0	1.5	4.0	6.0	7.5	10	22	22	5.3	22	22
60		—	3.0	6.0	1.5	4.0	6.0	7.5	10	22	22	5.3	22	22
70		—	2.5	5.0	—	3.0	5.0	7.5	10	22	22	4.3	22	22
80		—	2.5	5.0	—	3.0	5.0	7.5	10	22	22	—	22	22
90		—	2.5	5.0	—	3.0	5.0	7.5	10	22	22	—	22	22
100		—	2.5	5.0	—	3.0	5.0	7.5	10	22	22	—	22	22
125		—	—	4.2	—	3.0	4.2	7.5	10	18	18	—	—	18
150		—	—	4.2	—	—	4.2	7.5	10	18	18	—	—	18
GHB/GHC family (65 kA at 240 Vac, 14 kA at 480Y/277 Vac)														
20		2.0	2.7	4.5	2.7	4.0	4.5	10	10	15	10	3.2	7.6	14
30		2.0	2.7	4.5	2.7	4.0	4.5	10	10	15	10	3.2	7.6	14
50		1.6	2.7	4.2	2.7	3.6	4.2	10	10	12	10	3.2	7.6	14
70		—	2.5	4.2	—	3.6	4.2	7.4	7.4	12	7.4	3.2	7.6	12.7
100		—	2.5	4.2	—	3.6	4.2	10	7.4	12	7.4	—	7.6	12.7

Note: — = Not applicable.

The table indicates the maximum fault current value expressed in kA for which coordination is ensured. Downstream (branch) breakers' AIC ratings must be sized for the appropriate fault level at the installation point (for standalone or series combination ratings). Short time delay settings or magnetic trip settings must be set to properly coordinate for low level faults.

Table 10. MCCB to MCCB selective coordination combinations—test data (all values in kAIC rms current levels at 480 Vac or less) (continued)

Load side breaker	Breaker family type trip unit minimum trip maximum trip	Line side breaker (standard and current limiting frames)												
		K T/M 100 A 175 A	K T/M 200 A 350 A	K T/M 400 A 400 A	K ETU 55 A 125 A	K ETU 100 A 250 A	K ETU 160 A 400 A	LD T/M 300 A 350 A	LD T/M 400 A 500 A	LD T/M 600 A 600 A	LD ETU 250 A 600 A	LHH T/M 125 A 150 A	LHH T/M 175 A 200 A	LHH T/M 225 A 400 A
GD family (65 kA at 240 Vac, 22 kA at 480 Vac)														
20		2.0	2.7	4.5	2.7	4.0	4.5	7.4	7.4	15	7.4	3.2	7.6	18
30		2.0	2.7	4.5	2.7	4.0	4.5	7.4	7.4	15	7.4	3.2	7.6	16
50		1.6	2.7	4.2	2.7	3.6	4.2	7.4	7.4	12	7.4	3.2	7.6	14
70		—	2.5	4.2	—	3.6	4.2	7.4	7.4	12	7.4	3.2	7.6	12.7
100		—	2.5	4.2	—	3.6	4.2	7.4	7.4	12	7.4	—	7.6	12.7
FCL current limiting family (200 kA at 240 Vac, 150 kA at 480 Vac)														
15		2.0	3.2	6.0	3.2	6.5	7.0	30	30	30	30	10	30	65
30		2.0	2.8	6.0	2.8	6.5	7.0	20	20	20	20	7.5	20	40
50		1.6	2.8	5.0	2.8	6.0	6.5	10	10	10	10	3.2	14	36
100		—	2.8	5.0	—	6.0	6.5	10	10	10	10	—	10	30
EG family ①														
15		2.0	2.5	5.6	2.5	4.6	5.6	20	20	35	35	10	27	65
30		2.0	2.5	5.6	2.5	4.6	5.6	15	15	35	35	7.5	14	35
50		1.6	2.5	5.2	2.5	4.0	5.2	10	10	18	18	3.2	10	18
60		—	2.5	5.2	2.5	4.0	5.2	10	10	18	18	3.2	10	18
100		—	2.5	5.2	—	4.0	5.2	10	10	18	18	—	10	18
125		—	—	5.2	—	4.0	5.2	10	10	18	18	—	10	18
EG current limiting family ①														
15		2.0	2.5	5.6	2.5	4.6	5.6	22	22	35	35	10	40	65
30		2.0	2.5	5.6	2.5	4.6	5.6	18	18	35	35	7.5	30	40
50		1.6	2.5	5.2	2.5	4.0	5.2	10	10	22	22	3.2	10	22
60		—	2.5	5.2	2.5	4.0	5.2	10	10	22	22	3.2	10	22
100		—	2.5	5.2	—	4.0	5.2	10	10	22	22	—	10	22
125		—	—	5.2	—	4.0	5.2	10	10	22	22	—	10	22
F family														
15		2.0	2.5	5.0	2.5	4.0	5.0	10	10	12	12	7.5	14	22
40		1.6	2.5	5.0	2.5	3.2	4.2	8.3	8.3	12	12	3.2	10	16
100		—	2.3	3.2	—	3.2	4.0	7.0	7.0	12	12	—	10	14
225		—	—	3.2	—	—	4.0	—	7.0	12	12	—	—	12
JG family ①														
50		1.2	2.0	3.2	2.0	2.5	4.2	5.6	8.0	12	12	3.2	7.6	12.7
100		—	2.0	3.2	2.0	2.5	4.0	5.6	8.0	12	12	—	7.6	10
160		—	—	3.2	—	—	3.5	—	7.0	12	12	—	—	10
250		—	—	3.2	—	—	3.5	—	7.0	10	10	—	—	10

Note: — = Not applicable.

The table indicates the maximum fault current value expressed in kA for which coordination is ensured. Downstream (branch) breakers' AIC ratings must be sized for the appropriate fault level at the installation point (for standalone or series combination ratings). Short time delay settings or magnetic trip settings must be set to properly coordinate for low level faults.

① Not presently available for panelboard or switchboard mounting in Eaton assemblies. For all combinations available, refer to IA01400001E.

Table 10. MCCB to MCCB selective coordination combinations—test data (all values in kAIC rms current levels at 480 Vac or less) (continued)

Load side breaker	Breaker family type trip unit minimum trip maximum trip	Line side breaker (standard and current limiting frames)												
		K T/M 100 A 175 A	K T/M 200 A 350 A	K T/M 400 A 400 A	K ETU 55 A 125 A	K ETU 100 A 250 A	K ETU 160 A 400 A	LD T/M 300 A 350 A	LD T/M 400 A 500 A	LD T/M 600 A 600 A	LD ETU 250 A 600 A	LHH T/M 125 A 150 A	LHH T/M 175 A 200 A	LHH T/M 225 A 400 A
JG current limiting family ①														
50		0.4	2.0	3.2	2.0	2.5	3.2	5.6	8.0	12	12	3.2	7.6	12.7
100		—	2.0	3.2	2.0	2.5	3.2	5.6	8.0	12	12	—	7.6	10
160		—	—	3.2	—	—	3.2	—	7.0	12	12	—	—	10
250		—	—	3.2	—	—	3.2	—	7.0	10	10	—	—	10
JD family														
70		—	2.0	3.2	—	2.5	4.0	6.0	8.0	12	12	3.2	7.6	12.7
125		—	—	3.2	—	2.5	3.7	6.0	7.0	12	12	—	7.6	10
250		—	—	3.2	—	—	3.5	—	7.0	10	10	—	—	10
LCL 250 current limiting family														
125		—	—	3.7	—	2.5	4.2	4.2	4.2	17	17	—	—	12.7
200		—	—	3.2	—	—	3.7	—	3.2	17	17	—	—	10
250		—	—	—	—	—	—	—	—	17	17	—	—	—
LCL 400 current limiting family														
200		—	—	3.2	—	—	3.2	—	3.2	17	17	—	—	10
300		—	—	—	—	—	—	—	—	17	17	—	—	—
400		—	—	—	—	—	—	—	—	17	17	—	—	—
K family														
100		—	2.0	3.5	—	2.5	4.2	4.2	4.2	10	10	—	5	10
200		—	—	3.2	—	—	3.7	—	3.7	10	10	—	—	10
400		—	—	—	—	—	—	—	—	10	10	—	—	—
LD family														
300		—	—	—	—	—	—	—	—	6.0	6.0	—	—	—
400		—	—	—	—	—	—	—	—	6.0	6.0	—	—	—
600		—	—	—	—	—	—	—	—	—	—	—	—	—
LG family														
250		—	—	—	—	—	—	—	—	6.0	6.0	—	—	—
400		—	—	—	—	—	—	—	—	6.0	6.0	—	—	—
600		—	—	—	—	—	—	—	—	—	—	—	—	—
LG current limiting family														
250		—	—	—	—	—	—	—	—	6	6	—	—	—
400		—	—	—	—	—	—	—	—	6	6	—	—	—
600		—	—	—	—	—	—	—	—	—	—	—	—	—

Note: — = Not applicable.

The table indicates the maximum fault current value expressed in kA for which coordination is ensured. Downstream (branch) breakers' AIC ratings must be sized for the appropriate fault level at the installation point (for standalone or series combination ratings). Short time delay settings or magnetic trip settings must be set to properly coordinate for low level faults.

① Not presently available for panelboard or switchboard mounting in Eaton assemblies. For all combinations available, refer to IA01400001E.

Table 10. MCCB to MCCB selective coordination combinations—test data (all values in kAIC rms current levels at 480 Vac or less) (continued)

Load side breaker	Breaker family type trip unit minimum trip maximum trip	Line side breaker (standard and current limiting frames)													
		LG ETU 100 A 250 A	LG ETU 160 A 400 A	LG ETU 250 A 600 A	LG T/M 600 A 600 A	NHH ETU 150 A 350 A	N ETU 400 A 400 A	N ETU 600 A 600 A	N ETU 320 A 800 A	N ETU 500 A 1200 A	R ETU 800 A 800 A	R ETU 1000 A 1000 A	R ETU 1200 A 1600 A	R ETU 800 A 1600 A	R ETU 1000 A 2000 A
BR, BAB, HQP, and QC (120 Vac for single-pole, 120/240 Vac for two-pole, and 240 Vac for delta rated two-pole and all three-pole breakers)															
15		10	10	10	10	10	10	10	10	10	10	10	10	10	10
20		9.0	10	10	10	10	10	10	10	10	10	10	10	10	10
30		9.0	10	10	10	10	10	10	10	10	10	10	10	10	10
40		7.5	10	10	10	10	10	10	10	10	10	10	10	10	10
50		7.5	10	10	10	10	10	10	10	10	10	10	10	10	10
60		7.5	10	10	10	10	10	10	10	10	10	10	10	10	10
70		7.5	10	10	10	10	10	10	10	10	10	10	10	10	10
80		7.5	10	10	10	—	10	10	10	10	10	10	10	10	10
90		7.5	10	10	10	—	10	10	10	10	10	10	10	10	10
100		7.5	10	10	10	—	10	10	10	10	10	10	10	10	10
125		7.5	10	10	10	—	10	10	10	10	10	10	10	10	10
150		7.5	10	10	10	—	10	10	10	10	10	10	10	10	10
BRH, QPHW, QBHW, and QCHW (120 Vac for single-pole, 120/240 Vac for two-pole, and 240 Vac for delta rated two-pole and all three-pole breakers)															
15		10	14.4	22	22	22	22	22	22	22	22	22	22	22	22
20		9.0	14.4	22	22	22	22	22	22	22	22	22	22	22	22
30		9.0	14.4	22	22	22	22	22	22	22	22	22	22	22	22
40		7.5	14.4	22	22	22	22	22	22	22	22	22	22	22	22
50		7.5	14.4	22	22	22	22	22	22	22	22	22	22	22	22
60		7.5	12	18	22	22	22	22	22	22	22	22	22	22	22
70		7.5	12	18	22	22	22	22	22	22	22	22	22	22	22
80		7.5	12	18	22	—	22	22	22	22	22	22	22	22	22
90		7.5	12	18	22	—	22	22	22	22	22	22	22	22	22
100		7.5	12	18	22	—	22	22	22	22	22	22	22	22	22
125		7.5	12	18	18	—	22	22	22	22	22	22	22	22	22
150		7.5	12	18	18	—	22	22	22	22	22	22	22	22	22
GHB/GHC family (65 kA at 240 Vac, 14 kA at 480Y/277 Vac)															
20		4.0	7.4	10	12.7	14	65/14	65/14	65/14	65/14	65/14	65/14	65/14	65/14	65/14
30		4.0	7.4	10	12.7	14	65/14	65/14	65/14	65/14	65/14	65/14	65/14	65/14	65/14
50		3.6	7.4	10	10	14	65/14	65/14	65/14	65/14	65/14	65/14	65/14	65/14	65/14
70		3.6	7.4	10	10	—	65/14	65/14	65/14	65/14	65/14	65/14	65/14	65/14	65/14
100		3.6	7.4	10	10	—	65/14	65/14	65/14	65/14	65/14	65/14	65/14	65/14	65/14

Note: — = Not applicable.

The table indicates the maximum fault current value expressed in kA for which coordination is ensured. Downstream (branch) breakers' AIC ratings must be sized for the appropriate fault level at the installation point (for standalone or series combination ratings). Short time delay settings or magnetic trip settings must be set to properly coordinate for low level faults.

Table 10. MCCB to MCCB selective coordination combinations—test data (all values in kAIC rms current levels at 480 Vac or less) (continued)

Load side breaker	Breaker family type trip unit minimum trip maximum trip	Line side breaker (standard and current limiting frames)														
		LG ETU 100 A 250 A	LG ETU 160 A 400 A	LG ETU 250 A 600 A	LG T/M 600 A 600 A	NHH ETU 150 A 350 A	N ETU 400 A 400 A	N ETU 600 A 600 A	N ETU 320 A 800 A	N ETU 500 A 1200 A	R ETU 800 A 800 A	R ETU 1000 A 1000 A	R ETU 1200 A 1600 A	R ETU 800 A 1600 A	R ETU 1000 A 2000 A	R ETU 1600 A 2500 A
GD family (65 kA at 240 Vac, 22 kA at 480 Vac)																
20		4.0	7.4	10	12.7	22	65/22	65/22	65/22	65/22	65/22	65/22	65/22	65/22	65/22	65/22
30		4.0	7.4	10	12.7	22	65/22	65/22	65/22	65/22	65/22	65/22	65/22	65/22	65/22	65/22
50		3.6	7.4	10	12.7	22	65/22	65/22	65/22	65/22	65/22	65/22	65/22	65/22	65/22	65/22
70		3.6	7.4	10	10	—	65/22	65/22	65/22	65/22	65/22	65/22	65/22	65/22	65/22	65/22
100		3.6	7.4	10	10	—	65/22	65/22	65/22	65/22	65/22	65/22	65/22	65/22	65/22	65/22
FCL current limiting family (200 kA at 240 Vac, 150 kA at 480 Vac)																
15		6.5	30	30	—	200/65	200/65	200/65	200/65	200/65	200/65	200/65	200/65	200/65	200/65	200/65
30		6.5	20	20	—	200/65	200/65	200/65	200/65	200/65	200/65	200/65	200/65	200/65	200/65	200/65
50		6.0	10	10	—	200/65	200/65	200/65	200/65	200/65	200/65	200/65	200/65	200/65	200/65	200/65
100		6.0	10	10	—	—	200/65	200/65	200/65	200/65	200/65	200/65	200/65	200/65	200/65	200/65
EG family ①																
15		4.6	20	35	—	65	65	65	65	65	65	65	65	65	65	65
30		4.6	15	35	—	65	65	65	65	65	65	65	65	65	65	65
50		4.0	10	18	—	65	42	42	42	42	65	65	65	65	65	65
60		4.0	10	18	—	65	42	42	42	42	65	65	65	65	65	65
100		4.0	10	18	—	—	35	35	35	35	65	65	65	65	65	65
125		4.0	10	18	10	—	35	35	35	35	65	65	65	65	65	65
EG current limiting family ①																
15		22	22	35	—	65	65	65	65	65	65	65	65	65	65	65
30		18	18	35	—	65	65	65	65	65	65	65	65	65	65	65
50		10	10	22	—	65	65	65	65	65	65	65	65	65	65	65
60		10	10	22	—	65	65	65	65	65	65	65	65	65	65	65
100		10	10	22	16.5	—	65	65	65	65	65	65	65	65	65	65
125		10	10	22	16.5	—	65	65	65	65	65	65	65	65	65	65
F family																
15		4.0	10	12	—	65	50	50	50	50	65	65	65	65	65	65
40		3.2	8.3	12	—	65	42	42	42	42	65	65	65	65	65	65
100		3.2	7.0	12	—	—	35	35	35	35	65	65	65	65	65	65
225		—	7.0	12	10	—	30	30	30	30	65	65	65	65	65	65
JG family ①																
50		2.8	8.0	12	10	—	35	35	35	35	35	35	65	65	65	65
100		2.8	8.0	12	—	—	35	35	35	35	35	35	65	65	65	65
160		2.8	7.0	12	—	—	30	30	30	30	30	30	50	65	65	65
250		—	7.0	10	—	—	30	30	30	30	30	30	50	65	65	65

Note: — = Not applicable.

The table indicates the maximum fault current value expressed in kA for which coordination is ensured. Downstream (branch) breakers' AIC ratings must be sized for the appropriate fault level at the installation point (for standalone or series combination ratings). Short time delay settings or magnetic trip settings must be set to properly coordinate for low level faults.

① Not presently available for panelboard or switchboard mounting in Eaton assemblies. For all combinations available, refer to IA01400001E.

Table 10. MCCB to MCCB selective coordination combinations—test data (all values in kAIC rms current levels at 480 Vac or less) (continued)

Load side breaker	Breaker family type trip unit minimum trip maximum trip	Line side breaker (standard and current limiting frames)													
		LG ETU 100 A 250 A	LG ETU 160 A 400 A	LG ETU 250 A 600 A	LG T/M 600 A 600 A	NHH ETU 150 A 350 A	N ETU 400 A 400 A	N ETU 600 A 600 A	N ETU 320 A 800 A	N ETU 500 A 1200 A	R ETU 800 A 800 A	R ETU 1000 A 1000 A	R ETU 1200 A 1600 A	R ETU 800 A 1600 A	R ETU 1000 A 2000 A
JG current limiting family ①															
50		2.8	12	14	10	—	42	42	42	42	65	65	65	65	65
100		2.8	12	14	—	—	42	42	42	42	65	65	65	65	65
160		2.8	10	14	—	—	35	35	35	42	65	65	65	65	65
250		—	10	12	—	—	35	35	35	42	65	65	65	65	65
JD family															
70		2.8	8.0	12	10	—	35	35	35	35	35	35	65	65	65
125		2.8	7.0	12	—	—	30	30	30	30	30	30	65	65	65
250		—	7.0	10	—	—	30	30	30	30	30	30	50	65	65
LCL 250 current limiting family															
125		2.8	4.2	17	—	—	65	65	65	65	65	65	65	65	65
200		—	3.2	17	—	—	65	65	65	65	65	65	65	65	65
250		—	—	17	—	—	65	65	65	65	65	65	65	65	65
LCL 400 current limiting family															
200		—	3.2	15	—	—	30	30	30	30	65	65	65	65	65
300		—	—	15	—	—	30	30	30	30	65	65	65	65	65
400		—	—	15	—	—	—	30	30	30	65	65	65	65	65
K family															
100		3.5	4.2	10	—	—	22	22	22	22	42	42	42	42	65
200		—	3.7	10	—	—	18	18	18	18	40	40	40	40	65
400		—	—	10	—	—	—	—	18	18	35	35	35	35	50
LD family															
300		—	—	6.0	—	—	—	18	18	18	25	25	25	25	42
400		—	—	6.0	—	—	—	—	18	18	22	22	22	22	35
600		—	—	—	—	—	—	—	—	18	20	20	20	20	30
LG family															
250		—	—	6.0	—	—	10	18	18	18	25	25	25	25	50
400		—	—	6.0	—	—	—	—	18	18	22	22	22	22	35
600		—	—	—	—	—	—	—	—	18	20	20	20	20	30
LG current limiting family															
250		—	—	6	—	—	15	22	25	25	42	42	42	50	50
400		—	—	6	—	—	—	—	25	25	35	35	35	50	50
600		—	—	—	—	—	—	—	—	25	30	30	30	42	42
N family															
400		—	—	—	—	—	—	—	—	12	16	16	16	16	22
600		—	—	—	—	—	—	—	—	12	—	—	16	16	22
800		—	—	—	—	—	—	—	—	—	—	—	—	16	22
1200		—	—	—	—	—	—	—	—	—	—	—	—	—	18

Note: — = Not applicable.

The table indicates the maximum fault current value expressed in kA for which coordination is ensured. Downstream (branch) breakers' AIC ratings must be sized for the appropriate fault level at the installation point (for standalone or series combination ratings). Short time delay settings or magnetic trip settings must be set to properly coordinate for low level faults.

① Not presently available for panelboard or switchboard mounting in Eaton assemblies. For all combinations available, refer to IA01400001E.

Table 10a. MCCB to MCCB selective coordination combinations—test data (all values in kAIC rms current levels at 600 Vac)

Load side breaker	Breaker family type trip unit minimum trip maximum trip	Line side breaker (standard and current limiting frames)													
		EG T/M 125 A	F T/M 100 A	F T/M 150 A	F T/M 225 A	F ETU 15 A	F ETU 60 A	F ETU 100 A	F ETU 225 A	JD T/M 70 A	JD T/M 150 A	JD T/M 250 A	JG ETU 20 A	JG ETU 40 A	JG ETU 63 A
GHB/GHC family (10 kA at 600Y/347 Vac)															
20		—	—	—	2.2	0.8	1.6	2.8	—	1.5	2.5	—	2.0	3.0	3.2
30		—	—	—	2.2	—	1.6	2.8	—	1.5	2.5	—	2.0	3.0	3.2
50		—	—	—	2.2	—	1.6	2.3	—	1.5	2.3	—	—	2.5	3.2
70		—	—	—	2.2	—	—	2.3	—	—	2.3	—	—	2.2	3.2
100		—	—	—	1.8	—	—	1.8	—	—	2.3	—	—	—	3.2
EG family (25 kA at 600Y/347 Vac)															
15		—	—	1.5	2.2	0.8	1.6	2.8	—	1.5	2.5	—	2.0	3.0	3.2
30		—	—	1.5	2.2	0.8	1.6	2.8	—	1.5	2.5	—	2.0	3.0	3.2
50		—	—	1.5	1.8	0.8	1.6	2.3	—	1.5	2.3	—	1.6	2.5	3.2
60		—	—	—	2.2	—	1.6	2.3	—	1.5	2.3	—	—	2.2	3.2
100		—	—	—	—	—	1.2	1.8	—	—	2.3	—	—	—	3.2
125		—	—	—	—	—	—	1.8	—	—	2.3	—	—	—	—
EG current limiting family (35 kA at 600Y/347 Vac)															
15		—	—	1.5	2.2	0.8	1.6	2.8	—	1.5	2.5	—	2.0	3.0	3.2
30		—	—	1.5	2.2	0.8	1.6	2.8	—	1.5	2.5	—	2.0	3.0	3.2
50		—	—	1.5	1.8	0.8	1.6	2.3	—	1.5	2.3	—	1.6	2.5	3.2
60		—	—	—	1.8	—	1.6	2.3	—	1.5	2.3	—	—	2.2	3.2
100		—	—	—	—	—	1.2	1.8	—	—	2.3	—	—	—	3.2
125		—	—	—	—	—	—	1.8	—	—	2.3	—	—	—	—
F family															
15		—	—	—	1.8	—	1.2	2.8	—	1.5	2.5	—	2.0	2.0	2.5
40		—	—	—	1.8	—	1.2	2.3	—	1.5	2.5	—	—	1.8	2.5
100		—	—	—	1.8	—	1.2	1.8	—	—	2.3	—	—	—	2.3
225		—	—	—	—	—	—	—	—	—	—	—	—	—	—
JG family															
50		—	—	—	—	—	—	—	—	1.2	2.3	—	1.2	1.2	2.3
100		—	—	—	—	—	—	—	—	—	2.3	—	—	—	2.3
160		—	—	—	—	—	—	—	—	—	—	—	—	—	—
250		—	—	—	—	—	—	—	—	—	—	—	—	—	—
JG current limiting family															
50		—	—	—	—	—	—	—	—	—	2.3	—	1.2	1.2	2.3
100		—	—	—	—	—	—	—	—	—	2.3	—	—	—	2.3
160		—	—	—	—	—	—	—	—	—	—	—	—	—	—
250		—	—	—	—	—	—	—	—	—	—	—	—	—	—

Note: — = Not applicable.

The table indicates the maximum fault current value expressed in kA for which coordination is ensured. Downstream (branch) breakers' AIC ratings must be sized for the appropriate fault level at the installation point (for standalone or series combination ratings). Short time delay settings or magnetic trip settings must be set to properly coordinate for low level faults.

Table 10a. MCCB to MCCB selective coordination combinations—test data (all values in kAIC rms current levels at 600 Vac) (continued)

Load side breaker	Breaker family type trip unit minimum trip maximum trip	Line side breaker (standard and current limiting frames)									
		K T/M 100 A 175 A	K T/M 200 A 350 A	K T/M 200 A 400 A	K ETU 55 A 125 A	K ETU 100 A 250 A	K ETU 160 A 400 A	LD T/M 600 A 600 A	LHH T/M 125 A 150 A	LHH T/M 175 A 200 A	LHH T/M 225 A 400 A
GHB/GHC family (10 kA at 600Y/347 Vac)											
20		—	2.7	3.2	2.7	3.2	4.5	—	—	—	—
30		—	2.7	3.2	—	3.2	4.5	—	—	—	—
50		—	2.7	3.2	—	3.2	4.2	—	—	—	—
70		—	2.5	3.2	—	3.2	4.2	—	—	—	—
100		—	2.5	3.2	—	3.2	4.2	—	—	—	—
EG family (25 kA at 600Y/347 Vac)											
15		2.0	2.5	3.2	2.5	3.2	5.6	25	10.0	25	25
30		2.0	2.5	3.2	2.5	3.2	5.6	21	7.5	14	25
50		1.6	2.5	3.2	2.5	3.2	5.2	18	3.2	10	18
60		—	2.5	2.5	2.5	3.2	5.2	18	3.2	10	18
100		—	2.5	2.5	—	3.2	5.2	18	—	10	18
125		—	—	2.3	—	3.2	5.2	18	—	10	18
EG current limiting family (35 kA at 600Y/347 Vac)											
15		2.0	2.5	3.2	2.5	3.2	5.6	35	10.0	35	35
30		2.0	2.5	3.2	2.5	3.2	5.6	22	7.5	30	35
50		1.6	2.5	3.2	2.5	3.2	5.2	22	3.2	10	22
60		—	2.5	2.5	2.5	3.2	5.2	22	3.2	10	22
100		—	2.5	2.5	—	3.2	5.2	20	—	10	22
125		—	—	2.3	—	3.2	5.2	20	—	10	22
F family											
15		2.0	2.5	3.2	2.5	3.2	5.0	12	7.5	7.5	22
40		—	2.5	3.2	2.5	3.2	4.2	12	3.2	3.2	16
100		—	2.3	2.3	—	3.2	4.0	12	—	—	12
225		—	—	2.3	—	—	4.0	12	—	—	12
JG family											
50		1.2	2.0	2.0	2.0	2.5	—	—	—	—	—
100		—	2.0	2.0	2.0	2.5	—	—	—	—	—
160		—	—	2.0	—	—	—	—	—	—	—
250		—	—	2.0	—	—	—	—	—	—	—
JG current limiting family											
50		0.4	2.0	2.0	2.0	2.5	—	—	—	—	—
100		—	2.0	2.0	2.0	2.5	—	—	—	—	—
160		—	—	2.0	—	—	—	—	—	—	—
250		—	—	2.0	—	—	—	—	—	—	—

Note: — = Not applicable.

The table indicates the maximum fault current value expressed in kA for which coordination is ensured. Downstream (branch) breakers' AIC ratings must be sized for the appropriate fault level at the installation point (for standalone or series combination ratings). Short time delay settings or magnetic trip settings must be set to properly coordinate for low level faults.

Table 10a. MCCB to MCCB selective coordination combinations—test data (all values in kAIC rms current levels at 600 Vac) (continued)

Load side breaker	Breaker family type trip unit minimum trip maximum trip	Line side breaker (standard and current limiting frames)									
		K T/M 100 A 175 A	K T/M 200 A 350 A	K T/M 200 A 400 A	K ETU 55 A 125 A	K ETU 100 A 250 A	K ETU 160 A 400 A	LD T/M 600 A 600 A	LHH T/M 125 A 150 A	LHH T/M 175 A 200 A	LHH T/M 225 A 400 A
JD family											
70		—	2.0	2.0	—	2.5	—	—	—	—	—
125		—	—	2.0	—	2.5	—	—	—	—	—
250		—	—	2.0	—	—	—	—	—	—	—
LCL 250 current limiting family											
125		—	—	2.0	—	2.5	—	—	—	—	—
200		—	—	2.0	—	—	—	—	—	—	—
250		—	—	—	—	—	—	—	—	—	—
LCL 400 current limiting family											
200		—	—	2.0	—	—	—	—	—	—	—
300		—	—	—	—	—	—	—	—	—	—
400		—	—	—	—	—	—	—	—	—	—
K family											
100		—	2.0	2.0	—	2.5	—	—	—	—	—
200		—	—	2.0	—	—	—	—	—	—	—
400		—	—	—	—	—	—	—	—	—	—
LD family											
300		—	—	—	—	—	—	—	—	—	—
400		—	—	—	—	—	—	—	—	—	—
600		—	—	—	—	—	—	—	—	—	—
LG family											
250		—	—	—	—	—	—	—	—	—	—
400		—	—	—	—	—	—	—	—	—	—
600		—	—	—	—	—	—	—	—	—	—
LG current limiting family											
250		—	—	—	—	—	—	—	—	—	—
400		—	—	—	—	—	—	—	—	—	—
600		—	—	—	—	—	—	—	—	—	—

Note: — = Not applicable.

The table indicates the maximum fault current value expressed in kA for which coordination is ensured. Downstream (branch) breakers' AIC ratings must be sized for the appropriate fault level at the installation point (for standalone or series combination ratings). Short time delay settings or magnetic trip settings must be set to properly coordinate for low level faults.

Table 10a. MCCB to MCCB selective coordination combinations—test data (all values in kAIC rms current levels at 600 Vac) (continued)

Load side breaker	Breaker family type trip unit minimum trip maximum trip	Line side breaker (standard and current limiting frames)						
		LG ETU 100 A 250 A	LG ETU 160 A 400 A	LG ETU 250 A 600 A	LG T/M 600 A 600 A	NHH ETU 150 A 150 A	NHH ETU 200 A 300 A	NHH ETU 350 A 350 A
GHB/GHC family (10 kA at 600Y/347 Vac)								
20		—	—	—	—	—	—	—
30		—	—	—	—	—	—	—
50		—	—	—	—	—	—	—
70		—	—	—	—	—	—	—
100		—	—	—	—	—	—	—
EG family (25 kA at 600Y/347 Vac)								
15		14	14	14	25	—	—	—
30		10	10	10	25	—	—	—
50		10	10	10	12	—	—	—
60		10	10	10	10	—	—	—
100		10	10	10	10	—	—	—
125		10	10	10	10	—	—	—
EG current limiting family (35 kA at 600Y/347 Vac)								
15		16	16	16	35	—	—	—
30		10	10	10	30	—	—	—
50		10	10	10	14	—	—	—
60		10	10	10	14	—	—	—
100		10	10	10	14	—	—	—
125		10	10	10	14	—	—	—
F family								
15		10	10	10	25	25	25	25
40		10	10	10	10	25	25	25
100		10	10	10	10	—	25	25
225		—	—	—	10	—	—	25
JG family								
50		—	—	—	—	—	—	—
100		—	—	—	—	—	—	—
160		—	—	—	—	—	—	—
250		—	—	—	—	—	—	—
JG current limiting family								
50		—	—	—	—	—	—	—
100		—	—	—	—	—	—	—
160		—	—	—	—	—	—	—
250		—	—	—	—	—	—	—

Note: — = Not applicable.

The table indicates the maximum fault current value expressed in kA for which coordination is ensured. Downstream (branch) breakers' AIC ratings must be sized for the appropriate fault level at the installation point (for standalone or series combination ratings). Short time delay settings or magnetic trip settings must be set to properly coordinate for low level faults.

Table 10a. MCCB to MCCB selective coordination combinations—test data (all values in kAIC rms current levels at 600 Vac) (continued)

Load side breaker	Breaker family type trip unit minimum trip maximum trip	Line side breaker (standard and current limiting frames)						
		LG ETU 100 A 250 A	LG ETU 160 A 400 A	LG ETU 250 A 600 A	LG T/M 600 A 600 A	NHH ETU 150 A 150 A	NHH ETU 200 A 300 A	NHH ETU 350 A 350 A
JD family								
70		—	—	—	—	—	—	—
125		—	—	—	—	—	—	—
250		—	—	—	—	—	—	—
LCL 250 current limiting family								
125		—	—	—	—	—	—	—
200		—	—	—	—	—	—	—
250		—	—	—	—	—	—	—
LCL 400 current limiting family								
200		—	—	—	—	—	—	—
300		—	—	—	—	—	—	—
400		—	—	—	—	—	—	—
K family								
100		—	—	—	—	—	—	—
200		—	—	—	—	—	—	—
400		—	—	—	—	—	—	—
LD family								
300		—	—	—	—	—	—	—
400		—	—	—	—	—	—	—
600		—	—	—	—	—	—	—
LG family								
250		—	—	—	—	—	—	—
400		—	—	—	—	—	—	—
600		—	—	—	—	—	—	—
LG current limiting family								
250		—	—	—	—	—	—	—
400		—	—	—	—	—	—	—
600		—	—	—	—	—	—	—
N family								
400		—	—	—	—	—	—	—
600		—	—	—	—	—	—	—
800		—	—	—	—	—	—	—
1200		—	—	—	—	—	—	—

Note: — = Not applicable.

The table indicates the maximum fault current value expressed in kA for which coordination is ensured. Downstream (branch) breakers' AIC ratings must be sized for the appropriate fault level at the installation point (for standalone or series combination ratings). Short time delay settings or magnetic trip settings must be set to properly coordinate for low level faults.

Table 10a. MCCB to MCCB selective coordination combinations—test data (all values in kAIC rms current levels at 600 Vac) (continued)

Load side breaker	Breaker family type trip unit minimum trip maximum trip	Line side breaker (standard and current limiting frames)									
		N ETU 400 A 400 A	N ETU 600 A 600 A	N ETU 320 A 800 A	N ETU 500 A 1200 A	R ETU 800 A 800 A	R ETU 1000 A 1000 A	R ETU 1200 A 1200 A	R ETU 800 A 1600 A	R ETU 1000 A 2000 A	R ETU 1600 A 2500 A
GHB/GHC family (10 kA at 600Y/347 Vac)											
20		10	10	10	10	10	10	10	10	10	10
30		10	10	10	10	10	10	10	10	10	10
50		10	10	10	10	10	10	10	10	10	10
70		10	10	10	10	10	10	10	10	10	10
100		10	10	10	10	10	10	10	10	10	10
EG family (25 kA at 600Y/347 Vac)											
15		25	25	25	25	25	25	25	25	25	25
30		25	25	25	25	25	25	25	25	25	25
50		25	25	25	25	25	25	25	25	25	25
60		25	25	25	25	25	25	25	25	25	25
100		25	25	25	25	25	25	25	25	25	25
125		25	25	25	25	25	25	25	25	25	25
EG current limiting family (35 kA at 600Y/347 Vac)											
15		35	35	35	35	35	35	35	35	35	35
30		35	35	35	35	35	35	35	35	35	35
50		35	35	35	35	35	35	35	35	35	35
60		35	35	35	35	35	35	35	35	35	35
100		35	35	35	35	35	35	35	35	35	35
125		35	35	35	35	35	35	35	35	35	35
F family											
15		25	25	25	25	25	25	25	25	25	25
40		25	25	25	25	25	25	25	25	25	25
100		25	25	25	25	25	25	25	25	25	25
225		25	25	25	25	25	25	25	25	25	25
JG family											
50		25	25	25	25	25	25	25	25	25	25
100		25	25	25	25	25	25	25	25	25	25
160		25	25	25	25	25	25	25	25	25	25
250		25	25	25	25	25	25	25	25	25	25
JG current limiting family											
50		35	35	35	35	35	35	35	35	35	35
100		35	35	35	35	35	35	35	35	35	35
160		35	35	35	35	35	35	35	35	35	35
250		30	30	30	30	35	35	35	35	35	35

Note: — = Not applicable.

The table indicates the maximum fault current value expressed in kA for which coordination is ensured. Downstream (branch) breakers' AIC ratings must be sized for the appropriate fault level at the installation point (for standalone or series combination ratings). Short time delay settings or magnetic trip settings must be set to properly coordinate for low level faults.

Table 10a. MCCB to MCCB selective coordination combinations—test data (all values in kAIC rms current levels at 600 Vac) (continued)

Load side breaker	Breaker family type trip unit minimum trip maximum trip	Line side breaker (standard and current limiting frames)									
		N ETU 400 A 400 A	N ETU 600 A 600 A	N ETU 320 A 800 A	N ETU 500 A 1200 A	R ETU 800 A 800 A	R ETU 1000 A 1000 A	R ETU 1200 A 1200 A	R ETU 800 A 1600 A	R ETU 1000 A 2000 A	R ETU 1600 A 2500 A
JD family											
70		25	25	25	25	25	25	25	25	25	25
125		25	25	25	25	25	25	25	25	25	25
250		25	25	25	25	25	25	25	25	25	25
LCL 250 current limiting family											
125		35	35	35	35	50	50	50	50	50	50
200		35	35	35	35	50	50	50	50	50	50
250		26	26	26	26	50	50	50	50	50	50
LCL 400 current limiting family											
200		30	30	30	30	50	50	50	50	50	50
300		30	30	30	30	50	50	50	50	50	50
400		—	30	30	30	50	50	50	50	50	50
K family											
100		22	22	22	22	35	35	35	35	35	35
200		18	18	18	18	35	35	35	35	35	35
400		—	—	18	18	35	35	35	35	35	35
LD family											
300		—	—	18	18	25	25	25	25	35	35
400		—	—	—	18	—	22	22	22	35	35
600		—	—	—	18	—	20	20	20	30	30
LG family											
250		—	18	18	18	25	25	25	25	35	35
400		—	—	18	18	22	22	22	22	35	35
600		—	—	—	18	—	—	20	20	30	35
LG current limiting family											
250		—	18	18	18	25	42	42	50	50	50
400		—	—	18	18	22	35	35	50	50	50
600		—	—	—	18	—	—	30	42	42	42
N family											
400		—	—	—	12	16	16	16	16	22	25
600		—	—	—	12	—	—	16	16	22	25
800		—	—	—	—	—	—	—	16	22	25
1200		—	—	—	—	—	—	—	—	18	18

Note: — = Not applicable.

The table indicates the maximum fault current value expressed in kA for which coordination is ensured. Downstream (branch) breakers' AIC ratings must be sized for the appropriate fault level at the installation point (for standalone or series combination ratings). Short time delay settings or magnetic trip settings must be set to properly coordinate for low level faults.

Table 11. 0.1 s to 1000 s MCCB to MCCB coordination combinations

Load side breaker	Breaker family Type trip unit minimum trip maximum trip	Line side breaker (standard and current limiting frames)														
		EG T/M 125 A	F T/M 100 A	F T/M 150 A	F T/M 225 A	F 310+ 50 A	F 310+ 80 A	F 310+ 100 A	F 310+ 150 A 160 A	F 310+ 200 A	F 310+ 225 A	JD T/M 70 A	JD T/M 150 A	JD T/M 250 A	JG ETU 50 A	JG ETU 70 A
BR, BAB, HQP, and QC (240 Vac, 10 kA) single-, two-, and three-pole																
15		C	C	C	C	C	C	C	C	C	C	C	C	C	C	
20		C	C	C	C	C	C	C	C	C	C	C	C	C	C	
30		C	C	C	C	C	C	C	C	C	C	C	C	C	C	
40		C	C	C	C	—	C	C	C	C	C	C	C	—	C	
50		C	—	C	C	—	—	C	C	C	C	—	C	C	—	C
60		C	—	C	C	—	—	C	C	C	C	—	C	C	—	C
70		—	—	—	C	—	—	—	—	C	C	—	—	C	—	—
80		—	—	—	C	—	—	—	—	C	C	—	—	C	—	—
90		—	—	—	C	—	—	—	—	C	C	—	—	C	—	—
100		—	—	—	C	—	—	—	—	C	C	—	—	C	—	—
125		—	—	—	—	—	—	—	—	C	—	—	—	C	—	—
150		—	—	—	—	—	—	—	—	C	—	—	—	C	—	—
BRH, QPHW, QBHW, and QCHW (240 Vac, 22 kA) single-, two-, and three-pole																
15		C	C	C	C	C	C	C	C	C	C	C	C	C	C	C
20		C	C	C	C	C	C	C	C	C	C	C	C	C	C	C
30		C	C	C	C	C	C	C	C	C	C	C	C	C	C	C
40		C	C	C	C	—	C	C	C	C	C	C	C	C	—	C
50		C	—	C	C	—	—	C	C	C	C	—	C	C	—	C
60		C	—	C	C	—	—	C	C	C	C	—	C	C	—	C
70		—	—	—	C	—	—	C	—	C	C	—	—	C	—	—
80		—	—	—	C	—	—	—	—	C	C	—	—	C	—	—
90		—	—	—	C	—	—	—	—	C	C	—	—	C	—	—
100		—	—	—	C	—	—	—	—	C	C	—	—	C	—	—
125		—	—	—	—	—	—	—	—	—	—	—	—	C	—	—
150		—	—	—	—	—	—	—	—	—	—	—	—	C	—	—
GHB/GHC family (65 kA at 240 Vac, 14 kA at 480Y/277 Vac)																
20		C	C	C	C	C	C	C	C	C	C	C	C	C	—	C
30		C	C	C	C	C	C	C	C	C	C	C	—	C	—	C
50		—	—	C	C	—	—	C	C	C	C	C	—	C	—	C
70		—	—	—	C	—	—	C	—	C	C	—	—	C	—	C
100		—	—	—	C	—	—	—	—	C	C	—	—	C	—	—
GD family (65 kA at 240 Vac, 22 kA at 480 Vac)																
15		C	C	C	C	C	C	C	C	C	C	C	C	C	—	C
40		C	C	C	C	C	C	C	C	C	C	C	—	C	—	C
50		—	—	C	C	—	—	C	C	C	C	C	—	C	—	C
60		—	—	—	C	—	—	C	—	C	C	—	—	C	—	C
70		—	—	—	C	—	—	C	—	C	C	—	—	C	—	C
100		—	—	—	C	—	—	—	—	C	C	—	—	C	—	—
FCL family current limiting (200 kA at 240 Vac, 150 kA at 480 Vac)																
15		—	—	—	C	—	—	—	C	C	C	—	C	C	—	C
40		—	—	—	C	—	—	—	C	C	C	—	C	C	—	C
50		—	—	—	C	—	—	—	C	C	C	—	C	C	—	—
100		—	—	—	C	—	—	—	C	C	C	—	C	C	—	—

Note: — = Not applicable.

C = Coordinated for the period of time that a fault's duration extends beyond 0.1 seconds.

The table indicates the maximum currents the breaker curves indicates, at 0.1 second and above, the load side breaker will trip first. Load side breakers' AIC ratings must be sized for the appropriate fault level at the installation point (for standalone or series combination ratings). Short time delay settings or magnetic trip settings must be set to properly coordinate for low level faults. The line side breaker is assumed to be set at maximum settings. Refer to Eaton time current curves for combinations not listed in the table.

Table 11. 0.1 s to 1000 s MCCB to MCCB coordination combinations (continued)

Load side breaker	Breaker family type trip unit minimum trip maximum trip	Line side breaker (standard and current limiting frames)														
		EG T/M 125 A	F T/M 100 A	F T/M 150 A	F T/M 225 A	F 310+ 50 A	F 310+ 80 A	F 310+ 100 A	F 310+ 150 A 160 A	F 310+ 200 A	F 310+ 225 A	JD T/M 70 A	JD T/M 150 A	JD T/M 250 A	JG ETU 50 A	JG ETU 70 A
EG family																
15		C	—	C	C	—	C	—	C	C	C	—	C	C	—	C
20		C	—	C	C	—	C	—	C	C	C	—	C	C	—	C
50		—	—	C	C	—	C	—	C	C	C	—	C	C	—	C
60		—	—	—	C	—	—	—	C	C	C	—	C	C	—	—
90		—	—	—	C	—	—	—	C	C	C	—	C	C	—	—
100		—	—	—	—	—	—	—	C	C	C	—	—	C	—	—
125		—	—	—	—	—	—	—	—	—	—	—	—	C	—	—
EG current limiting family																
15		C	—	C	C	—	C	—	C	C	C	—	C	C	—	C
20		C	—	C	C	—	C	—	C	C	C	—	C	C	—	C
50		—	—	C	C	—	C	—	C	C	C	—	C	C	—	C
60		—	—	—	C	—	—	—	C	C	C	—	C	C	—	—
90		—	—	—	C	—	—	—	C	C	C	—	C	C	—	—
100		—	—	—	—	—	—	—	C	C	C	—	—	C	—	—
125		—	—	—	—	—	—	—	—	—	—	—	—	C	—	—
F family (FD, HFD, FDC)																
15		—	—	—	C	—	—	C	C	C	C	—	C	C	—	C
40		—	—	—	C	—	—	C	C	C	C	—	C	C	—	—
70		—	—	—	C	—	—	C	C	C	C	—	C	C	—	—
100		—	—	—	C	—	—	—	C	C	C	—	—	C	—	—
125		—	—	—	—	—	—	—	—	—	—	—	—	C	—	—
150		—	—	—	—	—	—	—	—	—	—	—	—	C	—	—
225		—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
JG family																
50		—	—	—	—	—	—	—	—	—	—	—	—	C	—	C
100		—	—	—	—	—	—	—	—	—	—	—	—	C	—	—
150		—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
175		—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
200		—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
225		—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
250		—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
JG current limiting family																
50		—	—	—	—	—	—	—	—	—	—	—	—	C	—	C
100		—	—	—	—	—	—	—	—	—	—	—	—	C	—	—
150		—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
175		—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
200		—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
225		—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
250		—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Note: — = Not applicable.

C = Coordinated for the period of time that a fault's duration extends beyond 0.1 seconds.

The table indicates the maximum currents the breaker curves indicates, at 0.1 second and above, the load side breaker will trip first. Load side breakers' AIC ratings must be sized for the appropriate fault level at the installation point (for standalone or series combination ratings). Short time delay settings or magnetic trip settings must be set to properly coordinate for low level faults. The line side breaker is assumed to be set at maximum settings. Refer to Eaton time current curves for combinations not listed in the table.

Table 11. 0.1 s to 1000 s MCCB to MCCB coordination combinations (continued)

Load side breaker	Breaker family type trip unit minimum trip maximum trip	Line side breaker (standard and current limiting frames)													
		JG ETU 100 A	JG ETU 150 A 160 A	JG ETU 200 A	JG ETU 250 A	K T/M 100 A	K T/M 200 A	K T/M 400 A	K ETU 70 A	K ETU 100 A	K ETU 125 A	K ETU 150 A	K ETU 200 A	K ETU 225 A	K ETU 250 A
BR, BAB, HQP, and QC (240 Vac, 10 kA) single-, two-, and three-pole															
15		C	C	C	C	C	C	C	C	C	C	C	C	C	C
20		C	C	C	C	C	C	C	C	C	C	C	C	C	C
30		C	C	C	C	C	C	C	C	C	C	C	C	C	C
40		C	C	C	C	C	C	C	C	C	C	C	C	C	C
50		C	C	C	C	C	C	C	—	—	C	C	C	C	C
60		C	C	C	C	C	C	C	—	—	C	C	C	C	C
70		C	C	C	C	C	C	C	—	—	—	—	—	C	C
80		—	C	C	C	—	C	C	—	—	—	—	—	C	C
90		—	C	C	C	—	C	C	—	—	—	—	—	C	C
100		—	C	C	C	—	C	C	—	—	—	—	—	C	C
125		—	—	—	C	—	—	C	—	—	—	—	—	—	—
150		—	—	—	C	—	—	C	—	—	—	—	—	—	—
BRH, QPHW, QBHW, and QCHW (240 Vac, 22 kA) single-, two-, and three-pole															
15		C	C	C	C	C	C	C	C	C	C	C	C	C	C
20		C	C	C	C	C	C	C	C	C	C	C	C	C	C
30		C	C	C	C	C	C	C	C	C	C	C	C	C	C
40		C	C	C	C	C	C	C	C	C	C	C	C	C	C
50		C	C	C	C	C	C	C	—	—	C	C	C	C	C
60		C	C	C	C	C	C	C	—	—	C	C	C	C	C
70		C	C	C	C	C	C	C	—	—	—	—	—	C	C
80		—	C	C	C	—	C	C	—	—	—	—	—	C	C
90		—	C	C	C	—	C	C	—	—	—	—	—	C	C
100		—	C	C	C	—	C	C	—	—	—	—	—	C	C
125		—	—	—	C	—	—	C	—	—	—	—	—	—	—
150		—	—	—	C	—	—	C	—	—	—	—	—	—	—
GHB/GHC family (65 kA at 240 Vac, 14 kA at 480Y/277 Vac)															
20		C	C	C	C	C	C	C	—	C	C	C	C	C	C
30		C	C	C	C	C	C	C	—	C	C	C	C	C	C
50		C	C	C	C	C	C	C	—	C	C	C	C	C	C
70		C	C	C	C	C	C	C	—	C	C	C	C	C	C
100		—	C	C	C	—	C	C	—	—	—	C	C	C	C

Note: — = Not applicable.

C = Coordinated for the period of time that a fault's duration extends beyond 0.1 seconds.

The table indicates the maximum currents the breaker curves indicates, at 0.1 second and above, the load side breaker will trip first. Load side breakers' AIC ratings must be sized for the appropriate fault level at the installation point (for standalone or series combination ratings). Short time delay settings or magnetic trip settings must be set to properly coordinate for low level faults. The line side breaker is assumed to be set at maximum settings. Refer to Eaton time current curves for combinations not listed in the table.

Table 11. 0.1 s to 1000 s MCCB to MCCB coordination combinations (continued)

Load side breaker	Breaker family type trip unit minimum trip maximum trip	Line side breaker (standard and current limiting frames)														
		JG ETU 100 A	JG ETU 150 A 160 A	JG ETU 200 A	JG ETU 250 A	K T/M 100 A	K T/M 200 A	K T/M 400 A	K ETU 70 A	K ETU 100 A	K ETU 125 A	K ETU 150 A	K ETU 200 A	K ETU 225 A	K ETU 250 A	K ETU 300 A
GD family (65 kA at 240 Vac, 22 kA at 480 Vac)																
15		C	C	C	C	C	C	C	—	C	C	C	C	C	C	C
40		C	C	C	C	C	C	C	—	C	C	C	C	C	C	C
50		C	C	C	C	C	C	C	—	C	C	C	C	C	C	C
60		C	C	C	C	C	C	C	—	C	C	C	C	C	C	C
70		C	C	C	C	—	C	C	—	—	—	C	C	C	C	C
100		—	C	C	C	—	C	C	—	—	—	C	C	C	C	C
FCL family current limiting (200 kA at 240 Vac, 150 kA at 480 Vac)																
15		C	C	C	C	—	C	C	—	—	C	C	C	C	C	C
40		C	C	C	C	—	C	C	—	—	—	C	C	C	C	C
50		—	C	C	C	—	C	C	—	—	—	—	C	C	C	C
100		—	C	C	C	—	C	C	—	—	—	—	C	C	C	C
EG family																
15		C	C	C	C	C	C	C	—	—	C	C	C	C	C	C
20		C	C	C	C	C	C	C	—	—	C	C	C	C	C	C
50		C	C	C	C	C	C	C	—	—	C	C	C	C	C	C
60		C	C	C	C	—	C	C	—	—	C	C	C	C	C	C
90		—	C	C	C	—	C	C	—	—	—	—	C	C	C	C
100		—	—	C	C	—	C	C	—	—	—	—	C	C	C	C
125		—	—	—	C	—	—	C	—	—	—	—	—	—	C	C
EG current limiting family																
15		C	C	C	C	C	C	C	—	—	C	C	C	C	C	C
20		C	C	C	C	C	C	C	—	—	C	C	C	C	C	C
50		C	C	C	C	C	C	C	—	—	C	C	C	C	C	C
60		C	C	C	C	—	C	C	—	—	C	C	C	C	C	C
90		—	C	C	C	—	C	C	—	—	—	—	C	C	C	C
100		—	—	C	C	—	C	C	—	—	—	—	C	C	C	C
125		—	—	—	C	—	—	C	—	—	—	—	—	—	C	C
F family (FD, HFD, FDC)																
15		C	C	C	C	C	C	C	—	—	C	C	C	C	C	C
40		C	C	C	C	C	C	C	—	—	—	C	C	C	C	C
70		—	C	C	C	—	C	C	—	—	—	—	C	C	C	C
100		—	C	C	C	—	C	C	—	—	—	—	C	C	C	C
125		—	—	C	C	—	C	C	—	—	—	—	—	C	C	C
150		—	—	—	C	—	C	C	—	—	—	—	—	—	—	C
225		—	—	—	—	—	—	C	—	—	—	—	—	—	—	—
JG family																
50		C	C	C	C	C	C	C	C	C	C	C	C	C	C	C
100		—	—	C	C	—	C	C	—	—	C	C	C	C	C	C
150		—	—	—	—	—	—	C	—	—	—	—	—	—	—	—
175		—	—	—	—	—	—	C	—	—	—	—	—	—	—	—
200		—	—	—	—	—	—	C	—	—	—	—	—	—	—	—
225		—	—	—	—	—	—	C	—	—	—	—	—	—	—	—
250		—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Note: — = Not applicable.

C = Coordinated for the period of time that a fault's duration extends beyond 0.1 seconds.

The table indicates the maximum currents the breaker curves indicates, at 0.1 second and above, the load side breaker will trip first. Load side breakers' AIC ratings must be sized for the appropriate fault level at the installation point (for standalone or series combination ratings). Short time delay settings or magnetic trip settings must be set to properly coordinate for low level faults. The line side breaker is assumed to be set at maximum settings. Refer to Eaton time current curves for combinations not listed in the table.

Table 11. 0.1 s to 1000 s MCCB to MCCB coordination combinations (continued)

Load side breaker	Breaker family type trip unit minimum trip maximum trip	Line side breaker (standard and current limiting frames)														
		JG ETU 100 A	JG ETU 150 A 160 A	JG ETU 200 A	JG ETU 250 A	K T/M 100 A	K T/M 200 A	K T/M 400 A	K ETU 70 A	K ETU 100 A	K ETU 125 A	K ETU 150 A	K ETU 200 A	K ETU 225 A	K ETU 250 A	K ETU 300 A
JG current limiting family																
50		C	C	C	C	C	C	C	C	C	C	C	C	C	C	C
100		—	—	C	C	—	C	C	—	—	C	C	C	C	C	C
150		—	—	—	—	—	—	C	—	—	—	—	—	—	—	—
175		—	—	—	—	—	—	C	—	—	—	—	—	—	—	—
200		—	—	—	—	—	—	C	—	—	—	—	—	—	—	—
225		—	—	—	—	—	—	C	—	—	—	—	—	—	—	—
250		—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
JD family																
70		—	—	—	—	—	C	C	—	—	—	—	C	C	C	C
100		—	—	—	—	—	—	C	—	—	—	—	—	C	C	C
125		—	—	—	—	—	—	C	—	—	—	—	—	—	—	C
175		—	—	—	—	—	—	C	—	—	—	—	—	—	—	—
225		—	—	—	—	—	—	C	—	—	—	—	—	—	—	—
250		—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
LCL 250 current limiting family																
150		—	—	—	—	—	—	C	—	—	—	—	C	C	C	C
200		—	—	—	—	—	—	C	—	—	—	—	—	—	—	C
225		—	—	—	—	—	—	C	—	—	—	—	—	—	—	—
250		—	—	—	—	—	—	C	—	—	—	—	—	—	—	—
LCL 400 current limiting family																
225		—	—	—	—	—	—	C	—	—	—	—	—	—	—	—
275		—	—	—	—	—	—	C	—	—	—	—	—	—	—	—
300		—	—	—	—	—	—	C	—	—	—	—	—	—	—	—
400		—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
K family																
100		—	—	—	—	—	C	C	—	—	—	—	—	—	C	C
150		—	—	—	—	—	—	C	—	—	—	—	—	—	—	—
200		—	—	—	—	—	—	C	—	—	—	—	—	—	—	—
250		—	—	—	—	—	—	C	—	—	—	—	—	—	—	—
300		—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
400		—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Note: — = Not applicable.

C = Coordinated for the period of time that a fault's duration extends beyond 0.1 seconds.

The table indicates the maximum currents the breaker curves indicates, at 0.1 second and above, the load side breaker will trip first. Load side breakers' AIC ratings must be sized for the appropriate fault level at the installation point (for standalone or series combination ratings). Short time delay settings or magnetic trip settings must be set to properly coordinate for low level faults. The line side breaker is assumed to be set at maximum settings. Refer to Eaton time current curves for combinations not listed in the table.

Table 11. 0.1 s to 1000 s MCCB to MCCB coordination combinations (continued)

Load side breaker	Breaker family type trip unit minimum trip maximum trip	Line side breaker (standard and current limiting frames)													
		K ETU 400 A	LD T/M 300 A	LD T/M 400 A	LD T/M 600 A	LD ETU 300 A	LD ETU 400 A	LD ETU 600 A	LG ETU 250 A	LG ETU 300 A	LG ETU 400 A	LG ETU 500 A 600 A	N ETU 400 A	N ETU 600 A	N ETU 800 A
BR, BAB, HQP, and QC (240 Vac, 10 kA) single-, two-, and three-pole															
15		C	C	C	C	C	C	C	C	C	C	C	C	C	C
20		C	C	C	C	C	C	C	C	C	C	C	C	C	C
30		C	C	C	C	C	C	C	C	C	C	C	C	C	C
40		C	C	C	C	C	C	C	C	C	C	C	C	C	C
50		C	C	C	C	C	C	C	C	C	C	C	C	C	C
60		C	C	C	C	C	C	C	C	C	C	C	C	C	C
70		C	C	C	C	C	C	C	C	C	C	C	C	C	C
80		C	C	C	C	C	C	C	C	C	C	C	C	C	C
90		C	C	C	C	C	C	C	C	C	C	C	C	C	C
100		C	C	C	C	C	C	C	C	C	C	C	C	C	C
125		C	C	C	C	—	C	C	C	C	C	C	C	C	C
150		C	C	C	C	—	C	C	C	C	C	C	C	C	C
BRH, QPHW, QBHW, and QCHW (240 Vac, 22 kA) single-, two-, and three-pole															
15		C	C	C	C	C	C	C	C	C	C	C	C	C	C
20		C	C	C	C	C	C	C	C	C	C	C	C	C	C
30		C	C	C	C	C	C	C	C	C	C	C	C	C	C
40		C	C	C	C	C	C	C	C	C	C	C	C	C	C
50		C	C	C	C	C	C	C	C	C	C	C	C	C	C
60		C	C	C	C	C	C	C	C	C	C	C	C	C	C
70		C	C	C	C	C	C	C	C	C	C	C	C	C	C
80		C	C	C	C	C	C	C	C	C	C	C	C	C	C
90		C	C	C	C	C	C	C	C	C	C	C	C	C	C
100		C	C	C	C	C	C	C	C	C	C	C	C	C	C
125		C	C	C	C	—	C	C	C	C	C	C	C	C	C
150		C	C	C	C	—	C	C	C	C	C	C	C	C	C
GHB/GHC family (65 kA at 240 Vac, 14 kA at 480Y/277 Vac)															
20		C	C	C	C	C	C	C	C	C	C	C	C	C	C
30		C	C	C	C	C	C	C	C	C	C	C	C	C	C
50		C	C	C	C	C	C	C	C	C	C	C	C	C	C
70		C	C	C	C	C	C	C	C	C	C	C	C	C	C
100		C	C	C	C	C	C	C	C	C	C	C	C	C	C
GD family (65 kA at 240 Vac, 22 kA at 480 Vac)															
15		C	C	C	C	C	C	C	C	C	C	C	C	C	C
40		C	C	C	C	C	C	C	C	C	C	C	C	C	C
50		C	C	C	C	C	C	C	C	C	C	C	C	C	C
60		C	C	C	C	C	C	C	C	C	C	C	C	C	C
70		C	C	C	C	C	C	C	C	C	C	C	C	C	C
100		C	C	C	C	C	C	C	C	C	C	C	C	C	C
FCL family current limiting (200 kA at 240 Vac, 150 kA at 480 Vac)															
15		C	C	C	C	C	C	C	C	C	C	C	C	C	C
40		C	C	C	C	C	C	C	C	C	C	C	C	C	C
50		C	C	C	C	C	C	C	C	C	C	C	C	C	C
100		C	C	C	C	C	C	C	C	C	C	C	C	C	C

Note: — = Not applicable.

C = Coordinated for the period of time that a fault's duration extends beyond 0.1 seconds.

The table indicates the maximum currents the breaker curves indicates, at 0.1 second and above, the load side breaker will trip first. Load side breakers' AIC ratings must be sized for the appropriate fault level at the installation point (for standalone or series combination ratings). Short time delay settings or magnetic trip settings must be set to properly coordinate for low level faults. The line side breaker is assumed to be set at maximum settings. Refer to Eaton time current curves for combinations not listed in the table.

Table 11. 0.1 s to 1000 s MCCB to MCCB coordination combinations (continued)

Load side breaker	Breaker family type trip unit minimum trip maximum trip	Line side breaker (standard and current limiting frames)													
		K ETU 400 A	LD T/M 300 A	LD T/M 400 A	LD T/M 600 A	LD ETU 300 A	LD ETU 400 A	LD ETU 600 A	LG ETU 250 A	LG ETU 300 A	LG ETU 400 A	LG ETU 500 A 600 A	N ETU 400 A	N ETU 600 A	N ETU 800 A
EG family															
15		C	C	C	C	C	C	C	C	C	C	C	C	C	C
20		C	C	C	C	C	C	C	C	C	C	C	C	C	C
50		C	C	C	C	C	C	C	C	C	C	C	C	C	C
60		C	C	C	C	C	C	C	C	C	C	C	C	C	C
90		C	C	C	C	C	C	C	C	C	C	C	C	C	C
100		C	C	C	C	C	C	C	C	C	C	C	C	C	C
125		C	C	C	C	C	C	C	C	C	C	C	C	C	C
EG current limiting family															
15		C	C	C	C	C	C	C	C	C	C	C	C	C	C
20		C	C	C	C	C	C	C	C	C	C	C	C	C	C
50		C	C	C	C	C	C	C	C	C	C	C	C	C	C
60		C	C	C	C	C	C	C	C	C	C	C	C	C	C
90		C	C	C	C	C	C	C	C	C	C	C	C	C	C
100		C	C	C	C	C	C	C	C	C	C	C	C	C	C
125		C	C	C	C	C	C	C	C	C	C	C	C	C	C
F family (FD, HFD, FDC)															
15		C	C	C	C	C	C	C	C	C	C	C	C	C	C
40		C	C	C	C	C	C	C	C	C	C	C	C	C	C
70		C	C	C	C	C	C	C	C	C	C	C	C	C	C
100		C	C	C	C	C	C	C	C	C	C	C	C	C	C
125		C	C	C	C	C	C	C	C	C	C	C	C	C	C
150		C	C	C	C	C	C	C	C	C	C	C	C	C	C
225		—	—	C	C	—	—	C	—	—	C	C	—	C	C
JG family															
50		C	C	C	C	C	C	C	C	C	C	C	C	C	C
100		C	C	C	C	C	C	C	C	C	C	C	C	C	C
150		C	C	C	C	—	—	C	C	—	C	C	C	C	C
175		C	C	C	C	—	—	C	C	—	C	C	—	C	C
200		—	C	C	C	—	—	C	C	—	C	C	—	C	C
225		—	—	C	C	—	—	—	C	—	C	C	—	—	C
250		—	—	C	C	—	—	—	—	—	—	—	—	—	C
JG current limiting family															
50		C	C	C	C	C	C	C	C	C	C	C	C	C	C
100		C	C	C	C	C	C	C	C	C	C	C	C	C	C
150		C	C	C	C	—	—	C	C	—	C	C	C	C	C
175		C	C	C	C	—	—	C	C	—	C	C	—	C	C
200		—	C	C	C	—	—	C	C	—	C	C	—	C	C
225		—	—	C	C	—	—	—	C	—	C	C	—	—	C
250		—	—	C	C	—	—	—	—	—	—	—	—	—	C

Note: — = Not applicable.

C = Coordinated for the period of time that a fault's duration extends beyond 0.1 seconds.

The table indicates the maximum currents the breaker curves indicates, at 0.1 second and above, the load side breaker will trip first. Load side breakers' AIC ratings must be sized for the appropriate fault level at the installation point (for standalone or series combination ratings). Short time delay settings or magnetic trip settings must be set to properly coordinate for low level faults. The line side breaker is assumed to be set at maximum settings. Refer to Eaton time current curves for combinations not listed in the table.

Table 11. 0.1 s to 1000 s MCCB to MCCB coordination combinations (continued)

Load side breaker	Breaker family type trip unit minimum trip maximum trip	Line side breaker (standard and current limiting frames)														
		K ETU 400 A	LD T/M 300 A	LD T/M 400 A	LD T/M 600 A	LD ETU 300 A	LD ETU 400 A	LD ETU 600 A	LG ETU 250 A	LG ETU 300 A	LG ETU 400 A	LG ETU 500 A 600 A	N ETU 400 A	N ETU 600 A	N ETU 800 A	N ETU 1000 A 1200 A
JD family																
70		C	C	C	C	C	C	C	C	C	C	C	C	C	C	C
100		C	C	C	C	C	C	C	C	C	C	C	C	C	C	C
125		C	C	C	C	C	C	C	C	C	C	C	C	C	C	C
175		C	C	C	C	C	C	C	C	—	C	C	C	C	C	C
225		—	—	C	C	—	—	C	—	—	C	C	—	C	C	C
250		—	—	C	C	—	—	C	—	—	—	—	—	C	C	C
LCL 250 current limiting family																
150		C	C	C	C	C	C	C	C	C	C	C	C	C	C	C
200		C	C	C	C	C	C	C	C	C	C	C	C	C	C	C
225		C	C	C	C	—	C	C	C	C	C	C	C	C	C	C
250		C	C	C	C	—	C	C	—	C	C	C	C	C	C	C
LCL 400 current limiting family																
225		C	—	C	C	—	C	C	C	C	C	C	C	C	C	C
275		C	—	C	C	—	—	C	—	—	C	C	C	C	C	C
300		—	—	C	C	—	—	C	—	—	C	C	—	C	C	C
400		—	—	—	C	—	—	C	—	—	—	—	—	C	C	C
K family																
100		C	C	C	C	C	C	C	—	C	C	C	C	C	C	C
150		C	C	C	C	—	C	C	—	C	C	C	C	C	C	C
200		—	—	C	C	—	—	C	—	—	C	C	—	C	C	C
250		—	—	—	C	—	—	C	—	—	—	C	—	C	C	C
300		—	—	—	C	—	—	—	—	—	—	—	—	—	C	C
400		—	—	—	—	—	—	—	—	—	—	—	—	—	—	C
LD family																
300		—	—	—	C	—	—	—	—	—	—	—	—	—	C	C
350		—	—	—	C	—	—	—	—	—	—	—	—	—	—	C
400		—	—	—	—	—	—	—	—	—	—	—	—	—	—	C
500		—	—	—	—	—	—	—	—	—	—	—	—	—	—	C
600		—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
LG family																
300		—	—	—	C	—	—	C	—	—	—	—	—	C	C	C
350		—	—	—	C	—	—	—	—	—	—	—	—	—	C	C
400		—	—	—	C	—	—	—	—	—	—	—	—	—	C	C
500		—	—	—	—	—	—	—	—	—	—	—	—	—	—	C
600		—	—	—	—	—	—	—	—	—	—	—	—	—	—	C
LG current limiting family																
300		—	—	—	C	—	—	C	—	—	—	—	—	C	C	C
350		—	—	—	C	—	—	—	—	—	—	—	—	—	C	C
400		—	—	—	C	—	—	—	—	—	—	—	—	—	C	C
500		—	—	—	—	—	—	—	—	—	—	—	—	—	—	C
600		—	—	—	—	—	—	—	—	—	—	—	—	—	—	C
N family																
400		—	—	—	—	—	—	—	—	—	—	—	—	—	—	C
600		—	—	—	—	—	—	—	—	—	—	—	—	—	—	C
800		—	—	—	—	—	—	—	—	—	—	—	—	—	—	C
1200		—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Note: — = Not applicable.

C = Coordinated for the period of time that a fault's duration extends beyond 0.1 seconds.

The table indicates the maximum currents the breaker curves indicates, at 0.1 second and above, the load side breaker will trip first. Load side breakers' AIC ratings must be sized for the appropriate fault level at the installation point (for standalone or series combination ratings). Short time delay settings or magnetic trip settings must be set to properly coordinate for low level faults. The line side breaker is assumed to be set at maximum settings. Refer to Eaton time current curves for combinations not listed in the table.

Table 11. 0.1 s to 1000 s MCCB to MCCB coordination combinations (continued)

Load side breaker	Breaker family type trip unit minimum trip maximum trip	Line side breaker (standard and current limiting frames)					
		R ETU 800 A	R ETU 1000 A	R ETU 1200 A	R ETU 1600 A	R ETU 2000 A	R ETU 2500 A
BR, BAB, HQP, and QC (240 Vac, 10 kA) single-, two-, and three-pole							
15		C	C	C	C	C	C
20		C	C	C	C	C	C
30		C	C	C	C	C	C
40		C	C	C	C	C	C
50		C	C	C	C	C	C
60		C	C	C	C	C	C
70		C	C	C	C	C	C
80		C	C	C	C	C	C
90		C	C	C	C	C	C
100		C	C	C	C	C	C
125		C	C	C	C	C	C
150		C	C	C	C	C	C
BRH, QPHW, QBHW, and QCHW (240 Vac, 22 kA) single-, two-, and three-pole							
15		C	C	C	C	C	C
20		C	C	C	C	C	C
30		C	C	C	C	C	C
40		C	C	C	C	C	C
50		C	C	C	C	C	C
60		C	C	C	C	C	C
70		C	C	C	C	C	C
80		C	C	C	C	C	C
90		C	C	C	C	C	C
100		C	C	C	C	C	C
125		C	C	C	C	C	C
150		C	C	C	C	C	C
GHB/GHC family (65 kA at 240 Vac, 14 kA at 480Y/277 Vac)							
20		C	C	C	C	C	C
30		C	C	C	C	C	C
50		C	C	C	C	C	C
70		C	C	C	C	C	C
100		C	C	C	C	C	C
GD family (65 kA at 240 Vac, 22 kA at 480 Vac)							
15		C	C	C	C	C	C
40		C	C	C	C	C	C
50		C	C	C	C	C	C
60		C	C	C	C	C	C
70		C	C	C	C	C	C
100		C	C	C	C	C	C

Note: — = Not applicable.

C = Coordinated for the period of time that a fault's duration extends beyond 0.1 seconds.

The table indicates the maximum currents the breaker curves indicates, at 0.1 second and above, the load side breaker will trip first. Load side breakers' AIC ratings must be sized for the appropriate fault level at the installation point (for standalone or series combination ratings). Short time delay settings or magnetic trip settings must be set to properly coordinate for low level faults. The line side breaker is assumed to be set at maximum settings. Refer to Eaton time current curves for combinations not listed in the table.

Table 11. 0.1 s to 1000 s MCCB to MCCB coordination combinations (continued)

Load side breaker	Breaker family type trip unit minimum trip maximum trip	Line side breaker (standard and current limiting frames)					
		R ETU 800 A	R ETU 1000 A	R ETU 1200 A	R ETU 1600 A	R ETU 2000 A	R ETU 2500 A
FCL family current limiting (200 kA at 240 Vac, 150 kA at 480 Vac)							
15		C	C	C	C	C	C
40		C	C	C	C	C	C
50		C	C	C	C	C	C
100		C	C	C	C	C	C
EG family							
15		C	C	C	C	C	C
20		C	C	C	C	C	C
50		C	C	C	C	C	C
60		C	C	C	C	C	C
90		C	C	C	C	C	C
100		C	C	C	C	C	C
125		C	C	C	C	C	C
EG current limiting family							
15		C	C	C	C	C	C
20		C	C	C	C	C	C
50		C	C	C	C	C	C
60		C	C	C	C	C	C
90		C	C	C	C	C	C
100		C	C	C	C	C	C
125		C	C	C	C	C	C
F family (FD, HFD, FDC)							
15		C	C	C	C	C	C
40		C	C	C	C	C	C
70		C	C	C	C	C	C
100		C	C	C	C	C	C
125		C	C	C	C	C	C
150		C	C	C	C	C	C
225		C	C	C	C	C	C
JG family							
50		C	C	C	C	C	C
100		C	C	C	C	C	C
150		C	C	C	C	C	C
175		C	C	C	C	C	C
200		C	C	C	C	C	C
225		C	C	C	C	C	C
250		C	C	C	C	C	C
JG current limiting family							
50		C	C	C	C	C	C
100		C	C	C	C	C	C
150		C	C	C	C	C	C
175		C	C	C	C	C	C
200		C	C	C	C	C	C
225		C	C	C	C	C	C
250		C	C	C	C	C	C

Note: — = Not applicable.

C = Coordinated for the period of time that a fault's duration extends beyond 0.1 seconds.

The table indicates the maximum currents the breaker curves indicates, at 0.1 second and above, the load side breaker will trip first. Load side breakers' AIC ratings must be sized for the appropriate fault level at the installation point (for standalone or series combination ratings). Short time delay settings or magnetic trip settings must be set to properly coordinate for low level faults. The line side breaker is assumed to be set at maximum settings. Refer to Eaton time current curves for combinations not listed in the table.

Table 11. 0.1 s to 1000 s MCCB to MCCB coordination combinations (continued)

Load side breaker	Breaker family type trip unit minimum trip maximum trip	Line side breaker (standard and current limiting frames)					
		R ETU 800 A	R ETU 1000 A	R ETU 1200 A	R ETU 1600 A	R ETU 2000 A	R ETU 2500 A
JD family							
70		C	C	C	C	C	C
100		C	C	C	C	C	C
125		C	C	C	C	C	C
175		C	C	C	C	C	C
225		C	C	C	C	C	C
250		C	C	C	C	C	C
LCL 250 current limiting family							
150		C	C	C	C	C	C
200		C	C	C	C	C	C
225		C	C	C	C	C	C
250		C	C	C	C	C	C
LCL 400 current limiting family							
225		C	C	C	C	C	C
275		C	C	C	C	C	C
300		C	C	C	C	C	C
400		C	C	C	C	C	C
K family							
100		C	C	C	C	C	C
150		C	C	C	C	C	C
200		C	C	C	C	C	C
250		C	C	C	C	C	C
300		C	C	C	C	C	C
400		—	C	C	C	C	C
LD family							
300		C	C	C	C	C	C
350		—	C	C	C	C	C
400		—	C	C	C	C	C
500		—	—	C	C	C	C
600		—	—	—	C	C	C
LG family							
300		C	C	C	C	C	C
350		C	C	C	C	C	C
400		—	C	C	C	C	C
500		—	C	C	C	C	C
600		—	—	—	C	C	C
LG current limiting family							
300		C	C	C	C	C	C
350		C	C	C	C	C	C
400		—	C	C	C	C	C
500		—	C	C	C	C	C
600		—	—	—	C	C	C
N family							
400		C	C	C	C	C	C
600		C	C	C	C	C	C
800		—	C	C	C	C	C
1200		—	—	—	C	C	C

Note: — = Not applicable.

C = Coordinated for the period of time that a fault's duration extends beyond 0.1 seconds.

The table indicates the maximum currents the breaker curves indicates, at 0.1 second and above, the load side breaker will trip first. Load side breakers' AIC ratings must be sized for the appropriate fault level at the installation point (for standalone or series combination ratings). Short time delay settings or magnetic trip settings must be set to properly coordinate for low level faults. The line side breaker is assumed to be set at maximum settings. Refer to Eaton time current curves for combinations not listed in the table.

Table 12. 0.1 s selective coordination chart

Largest downstream (load) device		Upstream (line) device																	
Thermal magnetic or electronic trip unit (310+ LSI)		100 A			125 A			150 A			175 A			200 A			225 A		
		T/M	T/M	310+	T/M	T/M	310+	T/M	T/M	310+	T/M	T/M	310+	T/M	T/M	310+	T/M	T/M	310+
35 kAIC at 480 V / 65 kAIC at 240 V		FD	JD	FDE	FD	JD	FDE	FD	JD	FDE	FD	JD	FDE	FD	JD	FDE	FD	JD	FDE
50 kAIC at 480 V / 85 kAIC at 240 V																			
65 kAIC at 480 V / 100 kAIC at 240 V		HFD	HJD	HFDE	HFD	HJD	HFDE	HFD	HJD	HFDE	HFD	HJD	HFDE	HFD	HJD	HFDE	HFD	HJD	HFDE
100 kAIC at 480 V / 200 kAIC at 240 V		FDC	JDC	FDCE	FDC	JDC	FDCE	FDC	JDC	FDCE	FDC	JDC	FDCE	FDC	JDC	FDCE	FDC	JDC	FDCE
Trip unit	Breaker type	Largest downstream amperage																	
T/M	GHQ	X	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20
T/M	GHC / GHB	X	15	60	X	60	90	X	100	100	100	100	100	100	100	100	100	100	100
T/M	FD / HFD / FDC	X	X	45	X	45	80	X	70	110	110	125	125	125	150	125	125	150	150
310+	FDE / HFDE / FDCE	80	80	80	80	100	100	100	125	100	150	150	150	160	175	150	175	200	175
T/M	JD / HJD / JDC	X	70	X	X	90	70	X	100	90	70	100	100	70	125	100	70	150	125
T/M	KD / HKD / KDC	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
310+	KDE / HKDE / KDCE	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
T/M	LD / HLD / LDC	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
310+	LD / HLD / LDC	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
T/M	LGE / LGH / LGC	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
310+	LGE / LGH / LGC	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
T/M	MDL / HMDL	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
310+	MDL / HMDL	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
310+	NGS / NGH / NGC	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X

Table 12. 0.1 s selective coordination chart (continued)

Largest downstream (load) device		Upstream (line) device														
Thermal magnetic or electronic trip unit (310+ LSI)		250 A			400 A			600 A			800 A			1000 A		1200 A
		T/M	T/M	310+	T/M	T/M	310+	T/M	T/M	310+	T/M	T/M	310+	310+	310+	310+
35 kAIC at 480 V / 65 kAIC at 240 V		JD	KD	KDE	LD	LD	LGE	LGC								
50 kAIC at 480 V / 85 kAIC at 240 V									MDL	MDL	NGS	NGS	NGS	NGS		
65 kAIC at 480 V / 100 kAIC at 240 V		HJD	HKD	HKDE	HLD	HLD	LGH	LGH	HMDL	HMDL	NGH	NGH	NGH	NGH		
100 kAIC at 480 V / 200 kAIC at 240 V		JDC	KDC	KDCE	LDC	LDC	LGC	LGC			NGC	NGC	NGC	NGC		
Trip unit	Breaker type	Largest downstream amperage														
T/M	GHQ	20	20	20	20	20	20	20	20	20	20	20	20	20	20	
T/M	GHC / GHB	100	100	100	100	100	100	100	100	100	100	100	100	100	100	
T/M	FD / HFD / FDC	150	225	225	225	225	225	225	225	225	225	225	225	225	225	
310+	FDE / HFDE / FDCE	150	225	225	225	225	225	225	225	225	225	225	225	225	225	
T/M	JD / HJD / JDC	175	200	200	250	250	250	250	250	250	250	250	250	250	250	
T/M	KD / HKD / KDC	X	250	200	300	300	300	300	300	300	300	300	300	300	300	
310+	KDE / HKDE / KDCE	X	350	350	400	400	400	400	400	400	400	400	400	400	400	
T/M	LD / HLD / LDC	X	X	X	350	300	300	300	350	400	350	450	450	500		
310+	LD / HLD / LDC	X	X	X	500	500	500	500	600	600	600	600	600	600		
T/M	LGE / LGH / LGC	X	X	X	400	300	400	300	500	400	400	400	400	600		
310+	LGE / LGH / LGC	X	X	X	400	500	500	500	600	600	600	600	600	600		
T/M	MDL / HMDL	X	X	X	X	X	X	X	400	400	350	400	500			
310+	MDL / HMDL	X	X	X	X	X	X	X	700	700	600	800	800			
310+	NGS / NGH / NGC	X	X	X	X	X	X	X	X	X	700	800	1000			

Table 13. LVPCB (power circuit breaker)—MCCB selective coordination combinations (all values in kAIC rms current levels at 600 Vac or less)

Load side breaker	Line side LVPCB																	
	MDN-4XX 42 kA			MDS-408 42 kA	MDN-5XX 50 kA			MDN-6XX 65 kA				MDS-6XX 65 kA						
	800	1200	1600	800	800	1200	1600	800	1200	1600	2000	800	1200	1600	2000	2500	3000	3200
EG family																		
15	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T
40	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T
125	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T
F family																		
15	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T
40	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T
100	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T
125	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T
JG family																		
50	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T
100	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T
160	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T
250	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T
JD family																		
70	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T
125	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T
250	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T
K family																		
100	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T
225	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T
250	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T
400	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T
LD family																		
250	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T
400	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T
600	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T
LG family																		
250	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T
400	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T
600	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T
N family																		
800	—	T	T	—	—	T	T	—	T	T	T	—	T	T	T	T	T	T
1200	—	—	T	—	—	—	T	—	—	—	T	—	—	T	T	T	T	T
1600	—	—	—	—	—	—	—	—	—	—	—	—	—	—	T	T	T	T

Note: — = Not applicable.

T = Total coordination up to the interrupting rating of the line side breaker.

The table indicates the maximum fault current value expressed in kA for which coordination is ensured. Load side breakers' AIC ratings must be sized for the appropriate fault level at the installation point (for standalone or series combination ratings). Short time delay settings or magnetic trip settings must be set to properly coordinate for low level faults. Refer to Eaton time current curves for combinations not listed in the table.

Table 13. LVPCB (power circuit breaker)—MCCB selective coordination combinations (all values in kAIC rms current levels at 600 Vac or less) (continued)

Load side breaker	Line side LVPCB																			
	MDS-8XX 85 kA										MDN-C20 100 kA	MDS-CXX 100 kA								
	800	1200	1600	2000	2500	3000	3200	4000	5000	800	800	1200	1600	2000	2500	3000	3200	4000	5000	6000
EG family																				
15	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
40	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
125	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
F family																				
15	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T
40	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T
100	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T
125	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T
JG family																				
50	—	—	—	—	—	—	—	—	—	T	—	—	—	—	—	—	—	—	—	—
100	—	—	—	—	—	—	—	—	—	T	—	—	—	—	—	—	—	—	—	—
160	—	—	—	—	—	—	—	—	—	T	—	—	—	—	—	—	—	—	—	—
250	—	—	—	—	—	—	—	—	—	T	—	—	—	—	—	—	—	—	—	—
JD family																				
70	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T
125	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T
250	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T
K family																				
100	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T
225	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T
50	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T
400	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T
LD family																				
250	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T
400	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T
600	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T
LG family																				
250	—	—	—	—	—	—	—	—	—	T	—	—	—	—	—	—	—	—	—	—
400	—	—	—	—	—	—	—	—	—	T	—	—	—	—	—	—	—	—	—	—
600	—	—	—	—	—	—	—	—	—	T	—	—	—	—	—	—	—	—	—	—
N family																				
800	—	T	T	T	T	T	T	T	T	—	—	T	T	T	T	T	T	T	T	T
1200	—	—	T	T	T	T	T	T	T	—	—	—	T	T	T	T	T	T	T	T
1600	—	—	—	T	T	T	T	T	T	—	—	—	—	T	T	T	T	T	T	T

Note: — = Not applicable.

T = Total coordination up to the interrupting rating of the line side breaker.

The table indicates the maximum fault current value expressed in kA for which coordination is ensured. Load side breakers' AIC ratings must be sized for the appropriate fault level at the installation point (for standalone or series combination ratings). Short time delay settings or magnetic trip settings must be set to properly coordinate for low level faults. Refer to Eaton time current curves for combinations not listed in the table.

Table 13. LVPCB (power circuit breaker)—MCCB selective coordination combinations (all values in kAIC rms current levels at 600 Vac or less) (continued)

Load side breaker	Line side LVPCB								
	MDS-X20 200 kA				MDS-X40 200 kA				
	800	1200	1600	2000	2000	2500	3000	3200	4000
EG family									
15	T	T	T	T	T	T	T	T	T
40	T	T	T	T	T	T	T	T	T
125	T	T	T	T	T	T	T	T	T
F family									
15	T	T	T	T	T	T	T	T	T
40	T	T	T	T	T	T	T	T	T
100	T	T	T	T	T	T	T	T	T
125	T	T	T	T	T	T	T	T	T
JG family									
50	—	—	—	—	T	T	T	T	T
100	—	—	—	—	T	T	T	T	T
160	—	—	—	—	T	T	T	T	T
250	—	—	—	—	T	T	T	T	T
JD family									
70	—	—	—	—	T	T	T	T	T
125	—	—	—	—	T	T	T	T	T
250	—	—	—	—	T	T	T	T	T
K family									
100	—	—	—	—	T	T	T	T	T
225	—	—	—	—	T	T	T	T	T
250	—	—	—	—	T	T	T	T	T
400	—	—	—	—	T	T	T	T	T
LD family									
250	—	—	—	—	T	T	T	T	T
400	—	—	—	—	T	T	T	T	T
600	—	—	—	—	T	T	T	T	T
LG family									
250	—	—	—	—	T	T	T	T	T
400	—	—	—	—	T	T	T	T	T
600	—	—	—	—	T	T	T	T	T

Note: — = Not applicable.

T = Total coordination up to the interrupting rating of the line side breaker.

The table indicates the maximum fault current value expressed in kA for which coordination is ensured. Load side breakers' AIC ratings must be sized for the appropriate fault level at the installation point (for standalone or series combination ratings). Short time delay settings or magnetic trip settings must be set to properly coordinate for low level faults. Refer to Eaton time current curves for combinations not listed in the table.

Table 13. LVPCB (power circuit breaker)—MCCB selective coordination combinations (all values in kAIC rms current levels at 600 Vac or less) (continued)

Load side breaker	Line side LVPCB												
	Series NRX NF					Series NRX RF							
	630	800	1000	1200/1250	1600	800	1000	1200/1250	1600	2000	2500	3000/3200	4000
EG family													
15	T	T	T	T	T	T	T	T	T	T	T	T	T
40	T	T	T	T	T	T	T	T	T	T	T	T	T
125	T	T	T	T	T	T	T	T	T	T	T	T	T
F family													
15	T	T	T	T	T	T	T	T	T	T	T	T	T
40	T	T	T	T	T	T	T	T	T	T	T	T	T
100	T	T	T	T	T	T	T	T	T	T	T	T	T
125	T	T	T	T	T	T	T	T	T	T	T	T	T
JG family													
50	T	T	T	T	T	T	T	T	T	T	T	T	T
100	T	T	T	T	T	T	T	T	T	T	T	T	T
160	T	T	T	T	T	T	T	T	T	T	T	T	T
250	T	T	T	T	T	T	T	T	T	T	T	T	T
JD family													
70	T	T	T	T	T	T	T	T	T	T	T	T	T
125	T	T	T	T	T	T	T	T	T	T	T	T	T
250	T	T	T	T	T	T	T	T	T	T	T	T	T
K family													
100	T	T	T	T	T	T	T	T	T	T	T	T	T
225	T	T	T	T	T	T	T	T	T	T	T	T	T
250	T	T	T	T	T	T	T	T	T	T	T	T	T
400	T	T	T	T	T	T	T	T	T	T	T	T	T
LD family													
250	T	T	T	T	T	T	T	T	T	T	T	T	T
400	T	T	T	T	T	T	T	T	T	T	T	T	T
600	—	T	T	T	T	T	T	T	T	T	T	T	T
LG family													
250	T	T	T	T	T	T	T	T	T	T	T	T	T
400	T	T	T	T	T	T	T	T	T	T	T	T	T
600	—	T	T	T	T	T	T	T	T	T	T	T	T
N family													
800	—	—	T	T	T	—	T	T	T	T	T	T	T
1200	—	—	—	—	T	—	—	—	T	T	T	T	T
1600	—	—	—	—	—	—	—	—	—	T	T	T	T

Note: — = Not applicable.

T = Total coordination up to the interrupting rating of the line side breaker.

The table indicates the maximum fault current value expressed in kA for which coordination is ensured. Load side breakers' AIC ratings must be sized for the appropriate fault level at the installation point (for standalone or series combination ratings). Short time delay settings or magnetic trip settings must be set to properly coordinate for low level faults. Refer to Eaton time current curves for combinations not listed in the table.

Eaton
 1000 Eaton Boulevard
 Cleveland, OH 44122
 United States
 Eaton.com

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