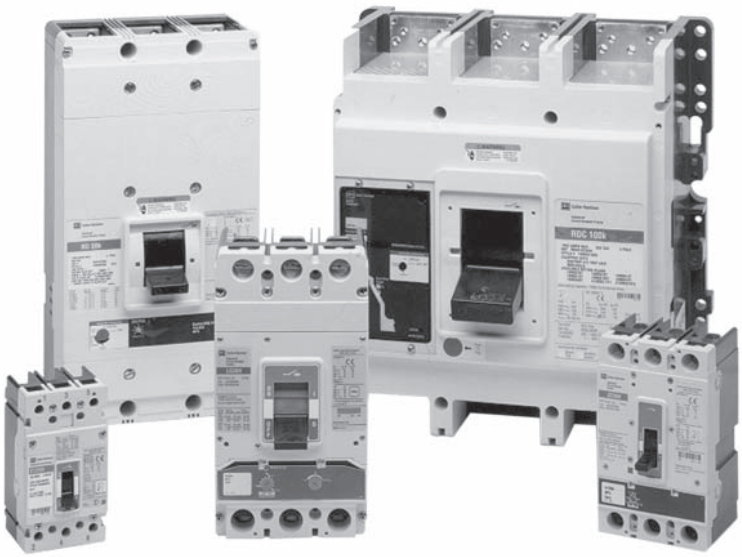
Selective Coordination



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 .1 to 1000 seconds. For Low Voltage Power Circuit Breakers to Molded Case Circuit Breakers, 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 — MCCB Selective Coordination Combinations — Test Data

Table 5 — MCCB to MCCB Selective Coordination Combinations — Time Current Curves 0.1s – 1000s

Table 6 — Low Voltage Power Circuit Breakers to MCCB Selective Coordination Combinations — Time Current Curves

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

- Selective Coordination White Paper, Publication Number IA01200001E, May 2006.
- 2005 NEC Selective Coordination Design Issues, Publication Number IA08304001E, April 2007.
- 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 Cutler-Hammer 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 **Tables 6** through **8**.
3. Determine if Total Selective Coordination is desired or if selective coordination above 0.1s is practicable. Refer to **Table 9** for manufacturer test data for Total Selective Coordination or to **Table 10** for Selective Coordination greater than 0.1s. Find the load side breaker defined in **Step 2** in the appropriate **Table 9** or **10**. 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.

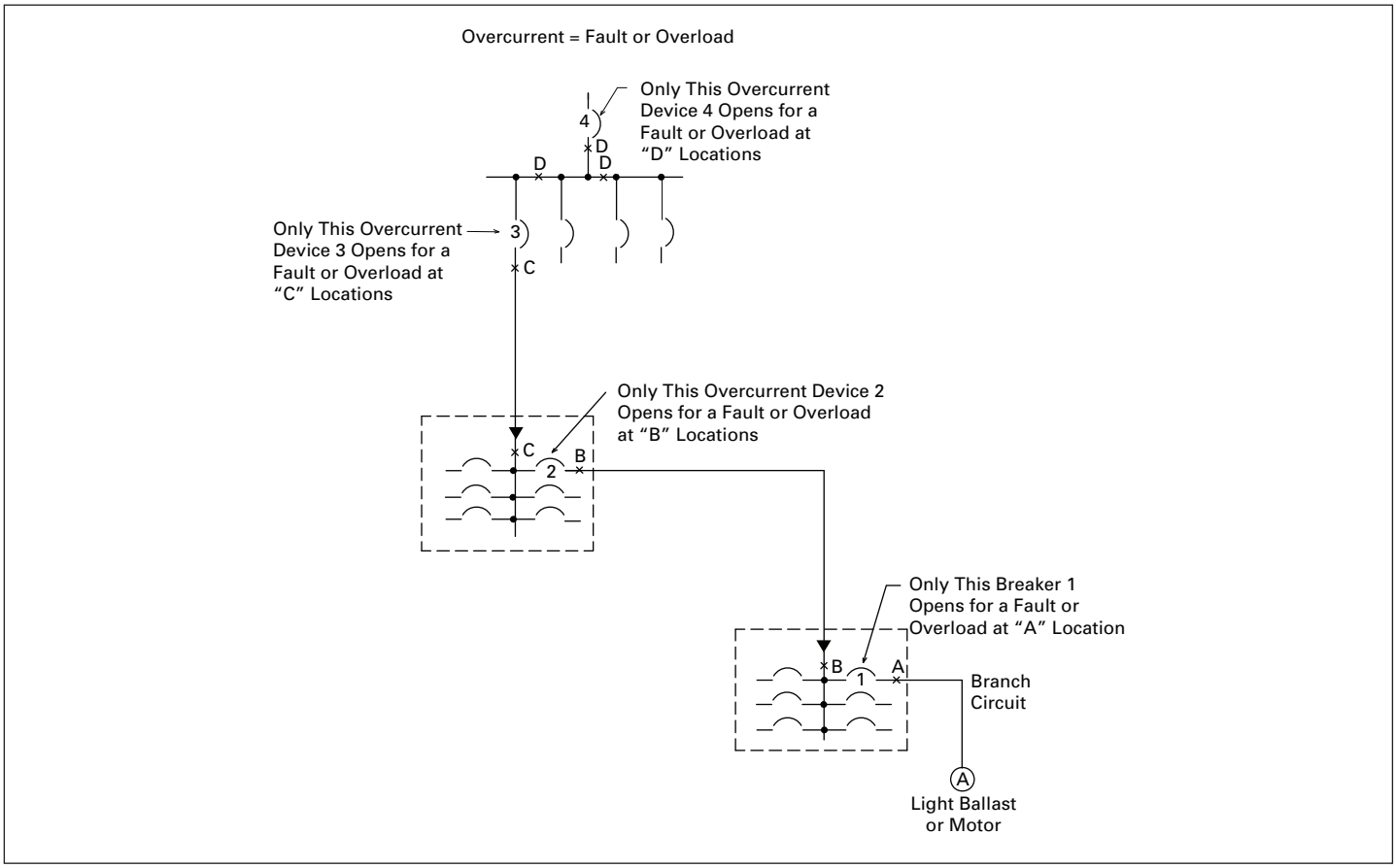

Figure 1. Selective Coordination Molded Case Circuit Breakers

Example 1:

Data: A 208Y/120 volt branch panelboard consisting of main lugs only and 40 – 20A/Trip, single-pole breakers and 1 – 35A trip 2-pole breaker is located 113 feet away from the 225A/trip feeder breaker supplying the panelboard through 1-4/0 copper conductor in metallic conduit per phase and neutral. There is 67,000 amperes rms available at the 225A/Trip breaker.

Solution:

Step 1: Utilize Eaton Web site 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 volts; 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 1 conductor per phase. The calculator yields 10,968 amperes 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 **Tables 6**, **7** and **8**, which has an interrupting capacity greater than or equal to the available fault current of 10,968 amperes 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 9**, find the row for the QBHW breaker having a trip rating of 35 amperes. Since this is NOT shown in the table, go to the next larger trip of 40 amperes. Move horizontally to find the minimum value that exceeds 10,968 amperes. Proceeding horizontal across **Page 20**, stop at the value of 14.4 kA (14,4000 amperes). Proceeding up the column, find the heading of LG Family of breakers having ETU with an available trip unit range of 160 to 400 amperes. Since 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.

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	120/2240	—	—	22,000	—
QBHW	Bolt-on	15 – 100	2, 3	240	—	—	—	22,000

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.

		Line Side Breaker													
Load Side Breaker	**Breaker Family Type Trip Unit Minimum Trip Maximum Trip**	**LG ETU 100 A 250 A**	**LG ETU 160 A 400 A**	**LG ETU 250 A 600 A**	**LG T/M 630A**	**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 & QCHW (120 Vac for 1-Pole, 120/240 Vac for 2-Pole and 240 Vac for Delta Rate 2-Pole and All 3-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

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

Step 5: Check to ensure the other breakers, 20A, 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 ampere trip.

b. Starting at a family of line side breakers equal to or greater than 225 amperes, 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: 10A – 150A BAB: 10A – 125A HQP: 10A – 125A QC: 10A – 100A	BR/BAB/HQP/QC	EG	15A – 125A	20	9
		F	15A – 225A	20	9
		J	70A – 250A	20	9
			70A – 250A Thermal Magnetic	20	9
		JG	20A – 250A Electronic Trip Unit	20	9
		K	100A – 400A	22	9
		LD	300A – 600A	22	9
		LHH	125A – 400A	22	9
			250A – 600A Thermal Magnetic	22	9
		LG	100A – 600A Electronic Trip Unit	25	9
		N	600A – 1200A	25	9
		R	800A – 2500A	25	9
BRH: 15A – 125A QPHW: 15A – 125A QBHW: 15A – 125A QCHW: 15A – 100A	BRH/QPHW/QBHW/QCHW	EG	15A – 125A	20	9
		F	15A – 225A	20	9
		J	70A – 250A	20	9
			70A – 250A Thermal Magnetic	20	9
		JG	20A – 250A Electronic Trip Unit	20	9
		K	100A – 400A	22	9
		LD	300A – 600A	22	9
		LHH	125A – 400A	22	9
			250A – 600A Thermal Magnetic	22	9
		LG	100A – 600A Electronic Trip Unit	25	9
		N	600A – 1200A	25	9
		R	800A – 2500A	25	9
15A – 100A	GHB/GHC	EG	15A – 125A	20	9
		F	15A – 225A	20	9
		J	70A – 250A	20	9
			70A – 250A Thermal Magnetic	20	9
		JG	20A – 250A Electronic Trip Unit	20	9
		K	100A – 400A	22	9
		LD	300A – 600A	22	9
		LHH	125A – 400A	22	9
			250A – 600A Thermal Magnetic	22	9
		LG	100A – 600A Electronic Trip Unit	25	9
		N	600A – 1200A	25	9
		R	800A – 2500A	25	9

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.
15A – 100A	GD	EG	15A – 125A	20	9
		F	15A – 225A	20	9
		J	70A – 250A	20	9
			70A – 250A Thermal Magnetic	20	9
		JG	20A – 250A Electronic Trip Unit	20	9
		K	100A – 400A	23	9
		LD	300A – 600A	23	9
		LHH	125A – 400A	23	9
			250A – 600A Thermal Magnetic	23	9
		LG	100A – 600A Electronic Trip Unit	26	9
		N	600A – 1200A	26	9
		R	800A – 2500A	26	9
15A – 100A	FCL	EG	15A – 125A	21	9
		F	15A – 225A	21	9
		J	70A – 250A	21	9
			70A – 250A Thermal Magnetic	21	9
		JG	20A – 250A Electronic Trip Unit	21	9
		K	100A – 400A	23	9
		LD	300A – 600A	23	9
		LHH	125A – 400A	23	9
			250A – 600A Thermal Magnetic	23	9
		LG	100A – 600A Electronic Trip Unit	26	9
		N	600A – 1200A	26	9
		R	800A – 2500A	26	9
15A – 125A	EG	EG	15A – 125A	21	9
		F	15A – 225A	21	9
		J	70A – 250A	21	9
			70A – 250A Thermal Magnetic	21	9
		JG	20A – 250A Electronic Trip Unit	21	9
		K	100A – 400A	23	9
		LD	300A – 600A	23	9
		LHH	125A – 400A	23	9
			250A – 600A Thermal Magnetic	23	9
		LG	100A – 600A Electronic Trip Unit	26	9
		N	600A – 1200A	26	9
		R	800A – 2500A	26	9

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.
15A – 125A	EG Current Limiting	EG	15A – 125A	21	9
		F	15A – 125A	21	9
		J	70A – 250A	21	9
			70A – 250A Thermal Magnetic	21	9
		JG	20A – 250A Electronic Trip Unit	21	9
		K	100A – 400A	23	9
		LD	300A – 600A	23	9
		LHH	125A – 400A	23	9
			250A – 600A Thermal Magnetic	23	9
		LG	100A – 600A Electronic Trip Unit	26	9
		N	600A – 1200A	26	9
		R	800A – 2500A	26	9
15A – 225A	F Family	F	15A – 225A	21	9
		J	70A – 250A	21	9
			70A – 250A Thermal Magnetic	21	9
		JG	20A – 250A Electronic Trip Unit	21	9
		K	100A – 400A	23	9
		LD	300A – 600A	23	9
		LHH	125A – 400A	23	9
			250A – 600A Thermal Magnetic	23	9
		LG	100A – 600A Electronic Trip Unit	26	9
		N	600A – 1200A	26	9
		R	800A – 2500A	26	9
70A – 250A Thermal Magnetic 20A – 250A Electronic Trip Unit	JG Family	J	70A – 250A	21	9
			70A – 250A Thermal Magnetic	21	9
		JG	20A – 250A Electronic Trip Unit	21	9
		K	100A – 400A	23	9
		LD	300A – 600A	23	9
		LHH	125A – 400A	23	9
			250A – 600A Thermal Magnetic	23	9
		LG	100A – 600A Electronic Trip Unit	26	9
		N	600A – 1200A	26	9
		R	800A – 2500A	26	9
70A – 250A Thermal Magnetic 20A – 250A Electronic Trip Unit	JG Current Limiting	J	70A – 250A	21	9
			70A – 250A Thermal Magnetic	21	9
		JG	20A – 250A Electronic Trip Unit	21	9
		K	100A – 400A	24	9
		LD	300A – 600A	24	9
		LHH	125A – 400A	24	9
			250A – 600A Thermal Magnetic	24	9
		LG	100A – 600A Electronic Trip Unit	28	9
		N	600A – 1200A	28	9
		R	800A – 2500A	28	9

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.
70A – 250A	J Family	K	100A – 400A	24	9
		LD	300A – 600A	24	9
		LHH	125A – 400A	24	9
			250A – 600A Thermal Magnetic	24	9
		LG	100A – 600A Electronic Trip Unit	27	9
		N	600A – 1200A	27	9
		R	800A – 2500A	27	9
125A – 400A	LCL Family	K	100A – 400A	24	9
		LD	300A – 600A	24	9
		LHH	125A – 400A	24	9
			250A – 600A Thermal Magnetic	24	9
		LG	100A – 600A Electronic Trip Unit	27	9
		N	600A – 1200A	27	9
		R	800A – 2500A	27	9
100A – 400A	K Family	K	100A – 400A	24	9
		LD	300A – 600A	24	9
		LHH	125A – 400A	24	9
			250A – 600A Thermal Magnetic	24	9
		LG	100A – 600A Electronic Trip Unit	27	9
		N	600A – 1200A	27	9
		R	800A – 2500A	27	9
300A – 600A	L Family	LD	300A – 600A	24	9
			250A – 600A Thermal Magnetic	24	9
		LG	100A – 600A Electronic Trip Unit	27	9
		N	600A – 1200A	27	9
		R	800A – 2500A	27	9
250A – 600A Thermal Magnetic 100A – 600A Electronic Trip Unit	LG Family	LD	300A – 600A	24	9
			250A – 600A Thermal Magnetic	24	9
		LG	100A – 600A Electronic Trip Unit	27	9
		N	600A – 1200A	27	9
		R	800A – 2500A	27	9
250A – 600A Thermal Magnetic 100A – 600A Electronic Trip Unit	LG Current Limiting Family	LD	300A – 600A	24	9
			250A – 600A Thermal Magnetic	24	9
		LG	100A – 600A Electronic Trip Unit	28	9
		N	600A – 1200A	28	9
		R	800A – 2500A	28	9
600A – 1200A	N Family	N	600A – 1200A	28	9
		R	800A – 2500A	28	9

Table 4. MCCB to MCCB Selective Coordination Combinations — Time Current Curves 0.1s – 1000s

Ampere Range of Load Side Breaker	Load Side Breaker	Line Side Breaker	Ampere Range of Line Side Breaker	Page No.	Table No.
BR: 10A – 150A BAB: 10A – 125A HQP: 10A – 125A QC: 10A – 100A	BR/BAB/HQP/QC	EG	15A – 125A	28	10
		F	15A – 225A	28	10
		J	70A – 250A	28	10
			20A – 250A Electronic Trip Unit	28	10
		JG	70A – 250A Thermal Magnetic	28/31	10
		K	100A – 400A	31/34	10
		LD	300A – 600A	34	10
			250A – 600A Thermal Magnetic	34	10
		LG	100A – 600A Electronic Trip Unit	34	10
		N	600A – 1200A	34	10
		R	800A – 2500A	37	10
BRH: 15A – 125A QPHW: 15A – 125A QBHW: 15A – 125A QCHW: 15A – 100A	BRH/QPHW/QBHW/QCHW	EG	15A – 125A	29	10
		F	15A – 225A	29	10
		J	70A – 250A	29	10
			70A – 250A Thermal Magnetic	29	10
		JG	20A – 250A Electronic Trip Unit	29/31	10
		K	100A – 400A	31/34	10
		LD	300A – 600A	34	10
			250A – 600A Thermal Magnetic	34	10
		LG	100A – 600A Electronic Trip Unit	34	10
		N	600A – 1200A	34	10
		R	800A – 2500A	38	10
15A – 100A	GHB/GHC	EG	15A – 125A	29	10
		F	15A – 225A	29	10
		J	70A – 250A	29	10
			70A – 250A Thermal Magnetic	29	10
		JG	20A – 250A Electronic Trip Unit	29/31	10
		K	100A – 400A	31/34	10
		LD	300A – 600A	34	10
			250A – 600A Thermal Magnetic	34	10
		LG	100A – 600A Electronic Trip Unit	34	10
		N	600A – 1200A	34	10
		R	800A – 2500A	38	10
15A – 100A	GD	EG	15A – 125A	29	10
		F	15A – 225A	29	10
		J	70A – 250A	29	10
			70A – 250A Thermal Magnetic	29	10
		JG	20A – 250A Electronic Trip Unit	29/32	10
		K	100A – 400A	32/34	10
		LD	300A – 600A	34	10
			250A – 600A Thermal Magnetic	34	10
		LG	100A – 600A Electronic Trip Unit	34	10
		N	600A – 1200A	34	10
		R	800A – 2500A	38	10

Table 4. MCCB to MCCB Selective Coordination Combinations — Time Current Curves 0.1s – 1000s (Continued)

Ampere Range of Load Side Breaker	Load Side Breaker	Line Side Breaker	Ampere Range of Line Side Breaker	Page No.	Table No.
15A – 100A	FCL	F	15A – 225A	29	10
		J	70A – 250A	29	10
			70A – 250A Thermal Magnetic	29	10
		JG	20A – 250A Electronic Trip Unit	29/32	10
		K	100A – 400A	32/35	10
		LD	300A – 600A	35	10
			250A – 600A Thermal Magnetic	35	10
		LG	100A – 600A Electronic Trip Unit	35	10
		N	600A – 1200A	35	10
		R	800A – 2500A	38	10
15A – 125A	EG	EG	15A – 125A	29	10
		F	15A – 225A	29	10
		J	70A – 250A	29	10
		JG	20A – 250A Electronic Trip Unit	29/32	10
		K	100A – 400A	32/35	10
		LD	300A – 600A	35	10
			250A – 600A Thermal Magnetic	35	10
		LG	100A – 600A Electronic Trip Unit	35	10
		N	600A – 1200A	35	10
		R	800A – 2500A	38	10
15A – 125A	EG Current Limiting	EG	15A – 125A	30	10
		F	15A – 225A	30	10
		J	70A – 250A	30	10
			70A – 250A Thermal Magnetic	30	10
		JG	20A – 250A Electronic Trip Unit	30/32	10
		K	100A – 400A	32/35	10
		LD	300A – 600A	35	10
			250A – 600A Thermal Magnetic	35	10
		LG	100A – 600A Electronic Trip Unit	35	10
		N	600A – 1200A	35	10
		R	800A – 2500A	39	10
15A – 225A	F Family	F	15A – 225A	30	10
		J	70A – 250A	30	10
			70A – 250A Thermal Magnetic	30	10
		JG	20A – 250A Electronic Trip Unit	30/32	10
		K	100A – 400A	32/35	10
		LD	300A – 600A	35	10
			250A – 600A Thermal Magnetic	35	10
		LG	100A – 600A Electronic Trip Unit	35	10
		N	600A – 1200A	35	10
		R	800A – 2500A	39	10

Table 4. MCCB to MCCB Selective Coordination Combinations — Time Current Curves 0.1s – 1000s (Continued)

Ampere Range of Load Side Breaker	Load Side Breaker	Line Side Breaker	Ampere Range of Line Side Breaker	Page No.	Table No.
70A – 250A Thermal Magnetic 20A – 250A Electronic Trip Unit	JG Family	J	70A – 250A	30	10
			70A – 250A Thermal Magnetic	30	10
		JG	20A – 250A Electronic Trip Unit	30/32	10
		K	100A – 400A	32/33/35	10
		LD	300A – 600A	35	10
			250A – 600A Thermal Magnetic	35	10
		LG	100A – 600A Electronic Trip Unit	35	10
		N	600A – 1200A	35	10
		R	800A – 2500A	39	10
70A – 250A Thermal Magnetic 20A – 250A Electronic Trip Unit	JG Current Limiting	J	70A – 250A	30	10
			70A – 250A Thermal Magnetic	30	10
		JG	20A – 250A Electronic Trip Unit	30/33	10
		K	100A – 400A	33/36	10
		LD	300A – 600A	36	10
			250A – 600A Thermal Magnetic	36	10
		LG	100A – 600A Electronic Trip Unit	36	10
		N	600A – 1200A	36	10
		R	800A – 2500A	39	10
70A – 250A	J Family	K	100A – 400A	33/36	10
		LD	300A – 600A	36	10
			250A – 600A Thermal Magnetic	36	10
		LG	100A – 600A Electronic Trip Unit	36	10
		N	600A – 1200A	36	10
		R	800A – 2500A	39	10
125A – 400A	LCL Family	K	100A – 400A	33/36	10
		LD	300A – 600A	36	10
			250A – 600A Thermal Magnetic	36	10
		LG	100A – 600A Electronic Trip Unit	36	10
		N	600A – 1200A	36	10
		R	800A – 2500A	40	10
100A – 400A	K Family	K	100A – 400A	33/36	10
		LD	300A – 600A	36	10
			250A – 600A Thermal Magnetic	36	10
		LG	100A – 600A Electronic Trip Unit	36	10
		N	600A – 1200A	36	10
		R	800A – 2500A	40	10
300A – 600A	L Family	LD	300A – 600A	36	10
		N	600A – 1200A	36	10
		R	800A – 2500A	40	10
250A – 600A Thermal Magnetic 100A – 600A Electronic Trip Unit	LG Family	LD	300A – 600A	37	10
		N	600A – 1200A	37	10
		R	800A – 2500A	40	10
250A – 600A Thermal Magnetic 100A – 600A Electronic Trip Unit	LG Current Limiting Family	LD	300A – 600A	37	10
		N	600A – 1200A	37	10
		R	800A – 2500A	40	10
600A – 1200A	N Family	N	600A – 1200A	37	10
		R	800A – 2500A	40	10

Table 5. Low Voltage Power Circuit Breakers to MCCB Selective Coordination Combinations — Time Current Curves

Ampere Range of Load Side Breaker	Load Side Breaker	Line Side Breaker	Ampere Range of Line Side Breaker	Page No.	Table No.
15A – 125A	EG Family	MDN-4XX	See **Table 8** for Ampere Ratings	41	11
		MDS-408		41	11
		MDN-5XX		41	11
		MDN-6XX		41	11
		MDS-6XX		41	11
		MDS-X20		43	11
		MDS-X40		43	11
15A – 225A	F Family	MDN-4XX	See **Table 8** for Ampere Ratings	41	11
		MDS-408		41	11
		MDN-5XX		41	11
		MDN-6XX		41	11
		MDS-6XX		42	11
		MDS-8XX		42	11
		MDN-C20		42	11
		MDS-CXX		42	11
		MDS-X20		43	11
		MDS-X40		43	11
70A – 250A Thermal Magnetic 20A – 250A Electronic Trip Unit	JG Family	MDN-4XX	See **Table 8** for Ampere Ratings	41	11
		MDS-408		41	11
		MDN-5XX		41	11
		MDN-6XX		41	11
		MDS-6XX		41	11
		MDN-C20		42	11
		MDS-X40		43	11
70A – 250A	J Family	MDN-4XX	See **Table 8** for Ampere Ratings	41	11
		MDS-408		41	11
		MDN-5XX		41	11
		MDN-6XX		41	11
		MDS-6XX		41	11
		MDS-8XX		42	11
		MDN-C20		42	11
		MDS-CXX		42	11
		MDS-X40		43	11
100A – 400A	K Family	MDN-4XX	See **Table 8** for Ampere Ratings	41	11
		MDS-408		41	11
		MDN-5XX		41	11
		MDN-6XX		41	11
		MDS-6XX		41	11
		MDS-8XX		42	11
		MDN-C20		42	11
		MDS-CXX		42	11
		MDS-X40		43	11

Table 5. Low Voltage Power Circuit Breakers to MCCB Selective Coordination Combinations — Time Current Curves (Continued)

Ampere Range of Load Side Breaker	Load Side Breaker	Line Side Breaker	Ampere Range of Line Side Breaker	Page No.	Table No.
300A – 600A	L Family	MDN-4XX	See **Table 8** for Ampere Ratings	41	11
		MDS-408		41	11
		MDN-5XX		41	11
		MDN-6XX		41	11
		MDS-6XX		41	11
		MDS-8XX		42	11
		MDN-C20		42	11
		MDS-CXX		42	11
		MDS-X40		43	11
250A – 600A Thermal Magnetic 100A – 600A Electronic Trip Unit	LG Family	MDN-4XX	See **Table 8** for Ampere Ratings	41	11
		MDS-408		41	11
		MDN-5XX		41	11
		MDN-6XX		41	11
		MDS-6XX		41	11
		MDN-C20		42	11
		MDS-X40		43	11
600A – 1200A	N Family	MDN-4XX	See **Table 8** for Ampere Ratings	41	11
		MDS-408		41	11
		MDN-5XX		41	11
		MDN-6XX		41	11
		MDS-6XX		41	11
		MDS-8XX		42	11
		MDS-CXX		42	11

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	120/2240	—	—	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
J-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 ⑤	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
L-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 & 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	—	200, 250, 300, 400, 600, 800, 1000, 1200, 1600, 2000
	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. MCCB — 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 125A 125A	F T /M 100A 100A	F T/M 150A 200A	F T/M 225A 225A	F ETU 15A 80A	F ETU 60A 160A	F ETU 100A 225A	J T/M 70A 125A	J T/M 150A 225A	J T/M 250A 250A	JG ① ETU 20A 50A	JG ① ETU 40A 100A	JG ① ETU 63A 160A	JG ① ETU 100A 250A
BR, BAB, HQP & QC (120 Vac for 1-Pole, 120/240 Vac for 2-Pole and 240 Vac for Delta Rate 2-Pole and All 3-Pole Breakers)															
15		1.2	1.0	1.5	2.2	0.6	1.2	2.3	1.0	2.1	4.0	1.0	2.5	4.0	6.0
20		1.2	1.0	1.5	2.2	0.6	1.2	2.3	1.0	2.1	3.4	1.0	2.0	3.0	5.0
30		1.2	1.0	1.5	2.2	0.6	1.2	2.3	0.7	2.1	3.4	0.7	2.0	3.0	5.0
40		0.8	1.0	1.5	2.2	0.6	1.2	2.3	—	1.5	3.4	—	1.2	2.5	4.0
50		0.8	—	1.5	2.2	—	1.2	2.3	—	1.5	2.5	—	1.2	2.5	4.0
60		0.8	—	1.5	2.2	—	1.2	2.3	—	1.5	2.5	—	—	2.5	4.0
70		—	—	1.5	2.2	—	1.2	2.3	—	1.5	2.5	—	—	2.5	3.0
80		—	—	—	2.2	—	—	2.3	—	—	2.5	—	—	2.5	3.0
90		—	—	—	2.2	—	—	2.3	—	—	2.3	—	—	—	3.0
100		—	—	—	1.8	—	—	2.3	—	—	2.3	—	—	—	3.0
125		—	—	—	—	—	—	—	—	—	2.3	—	—	—	3.0
150		—	—	—	—	—	—	—	—	—	—	—	—	—	—
BRH, QPHW, QBHW & QCHW (120 Vac for 1-Pole, 120/240 Vac for 2-Pole and 240 Vac for Delta Rate 2-Pole and All 3-Pole Breakers)															
15		1.2	1.0	1.5	2.2	0.6	1.2	2.3	1.0	2.1	4.0	1.0	2.5	4.0	6.0
20		1.2	1.0	1.5	2.2	0.6	1.2	2.3	1.0	2.1	3.4	1.0	2.0	3.0	5.0
30		1.2	1.0	1.5	2.2	0.6	1.2	2.3	0.7	2.1	3.4	0.7	2.0	3.0	5.0
40		0.8	1.0	1.5	2.2	0.6	1.2	2.3	—	1.5	3.4	—	1.2	2.5	4.0
50		0.8	—	1.5	2.2	—	1.2	2.3	—	1.5	2.5	—	1.2	2.5	4.0
60		0.8	—	1.5	2.2	—	1.2	2.3	—	1.5	2.5	—	—	2.5	4.0
70		—	—	1.5	2.2	—	1.2	2.3	—	1.5	2.5	—	—	2.5	3.0
80		—	—	—	2.2	—	—	2.3	—	—	2.5	—	—	2.5	3.0
90		—	—	—	2.2	—	—	2.3	—	—	2.3	—	—	—	3.0
100		—	—	—	1.8	—	—	2.3	—	—	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		1.2	1.0	1.5	2.2	0.8	1.6	2.8	0.7	1.5	2.5	0.7	2.0	3.0	4.0
30		1.2	1.0	1.5	2.2	0.8	1.6	2.8	0.7	1.5	2.5	0.7	2.0	3.0	4.0
50		1.2	1.0	1.5	2.2	—	1.6	2.3	—	1.5	2.3	—	1.6	2.2	3.6
70		—	—	—	2.2	—	—	2.3	—	—	2.3	—	—	2.5	3.6
100		—	—	—	1.8	—	—	1.8	—	—	2.3	—	—	—	3.6
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	2.8	0.7	1.5	2.5	0.7	2.0	3.0	4.0
30		1.2	1.0	1.5	2.2	0.8	1.6	2.8	0.7	1.5	2.5	0.7	2.0	3.0	4.0
50		1.2	1.0	1.5	2.2	—	1.6	2.3	—	1.5	2.3	—	1.6	2.2	3.6
70		—	—	—	2.2	—	—	2.3	—	—	2.3	—	—	2.5	3.6
100		—	—	—	1.8	—	—	1.8	—	—	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 stand-alone 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 9. MCCB — 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 125A 125A	F T /M 100A 100A	F T/M 150A 200A	F T/M 225A 225A	F ETU 15A 80A	F ETU 60A 160A	F ETU 100A 225A	J T/M 70A 125A	J T/M 150A 225A	J T/M 250A 250A	JG ① ETU 20A 50A	JG ① ETU 40A 100A	JG ① ETU 63A 160A	JG ① ETU 100A 250A
FCL Family Current Limiting (200 kA at 240 Vac, 150 kA at 480 Vac)															
15		1.3	1.0	1.5	2.2	0.8	1.6	2.8	1.0	1.5	2.5	1.0	2.0	3.0	6.0
30		1.3	1.0	1.5	2.2	0.8	1.6	2.8	0.7	1.5	2.5	0.7	2.0	3.0	6.0
50		1.3	1.0	1.5	2.2	0.8	1.6	2.3	—	1.5	2.3	—	1.6	2.5	4.0
100		—	—	—	1.8	—	1.6	1.8	—	—	2.3	—	—	—	4.0
EG Family ①															
15		1.3	1.0	1.5	2.2	0.8	1.6	2.8	1.0	1.5	2.5	1.0	2.0	3.0	4.6
30		1.3	1.0	1.5	2.2	0.8	1.6	2.8	0.7	1.5	2.5	0.7	2.0	3.0	4.6
50		1.3	1.0	1.5	1.8	0.8	1.6	2.3	—	1.5	2.3	—	1.6	2.5	4.6
60		1.3	—	1.5	1.8	—	1.6	2.3	—	1.5	2.3	—	—	2.2	4.0
100		—	—	—	1.8	—	1.2	1.8	—	—	2.3	—	—	—	4.0
125		—	—	—	1.8	—	1.2	1.8	—	—	2.3	—	—	—	4.0
EG Current Limiting Family ①															
15		1.3	1.0	1.5	2.2	0.8	1.6	2.8	1.0	1.5	2.5	1.0	2.0	3.0	4.6
30		1.3	1.0	1.5	2.2	0.8	1.6	2.8	0.7	1.5	2.5	0.7	2.0	3.0	4.6
50		1.3	1.0	1.5	1.8	0.8	1.6	2.3	—	1.5	2.3	—	1.6	2.5	4.6
60		1.3	—	1.5	1.8	—	1.6	2.3	—	1.5	2.3	—	—	2.2	4.0
100		—	—	—	1.8	—	1.2	1.8	—	—	2.3	—	—	—	4.0
125		—	—	—	1.8	—	1.2	1.8	—	—	2.3	—	—	—	4.0
F Family															
15		—	1.0	1.5	1.8	0.8	1.2	2.8	1.0	1.5	2.5	1.0	2.0	2.0	2.5
40		—	1.0	1.5	1.8	0.8	1.2	2.3	0.7	1.5	2.5	—	1.6	1.8	2.5
100		—	—	—	1.8	—	1.2	1.8	—	—	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 stand-alone 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 9. MCCB — 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 100A 175A	K T/M 200A 350A	K T/M 400A 400A	K ETU 70A 125A	K ETU 125A 250A	K ETU 200A 400A	LD T/M 300A 350A	LD T/M 400A 500A	LD T/M 600A 600A	LD ETU 300A 600A	LHH T/M 125A 150A	LHH T/M 175A 200A	LHH T/M 225A 400A
BR, BAB, HQP & QC (120 Vac for 1-Pole, 120/240 Vac for 2-Pole and 240 Vac for Delta Rate 2-Pole and All 3-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 & QCHW (120 Vac for 1-Pole, 120/240 Vac for 2-Pole and 240 Vac for Delta Rate 2-Pole and All 3-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 stand-alone or series combination ratings). Short time delay settings or magnetic trip settings must be set to properly coordinate for low level faults.

Table 9. MCCB — 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 100A 175A	K T/M 200A 350A	K T/M 400A 400A	K ETU 70A 125A	K ETU 125A 250A	K ETU 200A 400A	LD T/M 300A 350A	LD T/M 400A 500A	LD T/M 600A 600A	LD ETU 300A 600A	LHH T/M 125A 150A	LHH T/M 175A 200A	LHH T/M 225A 400A
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 Family Current Limiting (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 stand-alone 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 9. MCCB — 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 100A 175A	K T/M 200A 350A	K T/M 400A 400A	K ETU 70A 125A	K ETU 125A 250A	K ETU 200A 400A	LD T/M 300A 350A	LD T/M 400A 500A	LD T/M 600A 600A	LD ETU 300A 600A	LHH T/M 125A 150A	LHH T/M 175A 200A	LHH T/M 225A 400A
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
J 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 Family Current Limiting														
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 Family Current Limiting														
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	—	—	—
L Family														
300		—	—	—	—	—	—	—	—	6.0	6.0	—	—	—
400		—	—	—	—	—	—	—	—	6.0	6.0	—	—	—
600		—	—	—	—	—	—	—	—	—	—	—	—	—
LG Family														
250		—	—	—	—	—	—	—	—	6.0	6.0	—	—	—
400		—	—	—	—	—	—	—	—	6.0	6.0	—	—	—
630		—	—	—	—	—	—	—	—	—	—	—	—	—
LG Current Limiting Family														
250		—	—	—	—	—	—	—	—	6	6	—	—	—
400		—	—	—	—	—	—	—	—	6	6	—	—	—
630		—	—	—	—	—	—	—	—	—	—	—	—	—

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 stand-alone 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 9. MCCB — 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 100A 250A	LG ETU 160A 400A	LG ETU 250A 600A	LG T/M 630A 630A	NHH ETU 150A 350A	N ETU 400A 600A	N ETU 400A 600A	N ETU 400A 800A	N ETU 600A 1200A	R ETU 800A 800A	R ETU 800A 1000A	R ETU 800A 1200A	R ETU 800A 1600A	R EYU 1000A 2000A	R ETU 1200A 2500A
BR, BAB, HQP & QC (120 Vac for 1-Pole, 120/240 Vac for 2-Pole and 240 Vac for Delta Rate 2-Pole and All 3-Pole Breakers)																
15		10	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	10
30		9.0	10	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	10
50		7.5	10	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	10
70		7.5	10	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	10
90		7.5	10	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	10
125		7.5	10	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	10
BRH, QPHW, QBHW & QCHW (120 Vac for 1-Pole, 120/240 Vac for 2-Pole and 240 Vac for Delta Rate 2-Pole and All 3-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
60		7.5	12	18	22	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	22
80		7.5	12	18	22	—	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	22
100		7.5	12	18	22	—	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	22
150		7.5	12	18	18	—	22	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	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	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	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	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	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 stand-alone or series combination ratings). Short time delay settings or magnetic trip settings must be set to properly coordinate for low level faults.

Table 9. MCCB — 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 100A 250A	LG ETU 160A 400A	LG ETU 250A 600A	LG T/M 630A 630A	NHH ETU 150A 350A	N ETU 400A 400A	N ETU 400A 600A	N ETU 400A 800A	N ETU 600A 1200A	R ETU 800A 800A	R ETU 800A 1000A	R ETU 800A 1200A	R ETU 800A 1600A	R EYU 1000A 2000A	R ETU 1200A 2500A
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 Family Current Limiting (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 stand-alone 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 9. MCCB — 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 100A 250A	LG ETU 160A 400A	LG ETU 250A 600A	LG T/M 630A 630A	NHH ETU 150A 350A	N ETU 400A 400A	N ETU 400A 600A	N ETU 400A 800A	N ETU 600A 1200A	R ETU 800A 800A	R ETU 800A 1000A	R ETU 800A 1200A	R ETU 800A 1600A	R EYU 1000A 2000A	R ETU 1200A 2500A
JG Current Limiting Family ①																
50		2.8	12	14	10	—	42	42	42	42	65	65	65	65	65	65
100		2.8	12	14	—	—	42	42	42	42	65	65	65	65	65	65
160		2.8	10	14	—	—	35	35	35	42	65	65	65	65	65	65
250		—	10	12	—	—	35	35	35	42	65	65	65	65	65	65
J Family																
70		2.8	8.0	12	10	—	35	35	35	35	35	35	65	65	65	65
125		2.8	7.0	12	—	—	30	30	30	30	30	30	65	65	65	65
250		—	7.0	10	—	—	30	30	30	30	30	30	50	65	65	65
LCL 250 Family Current Limiting																
125		2.8	4.2	17	—	—	65	65	65	65	65	65	65	65	65	65
200		—	3.2	17	—	—	65	65	65	65	65	65	65	65	65	65
250		—	—	17	—	—	65	65	65	65	65	65	65	65	65	65
LCL 400 Family Current Limiting																
200		—	3.2	15	—	—	30	30	30	30	65	65	65	65	65	65
300		—	—	15	—	—	30	30	30	30	65	65	65	65	65	65
400		—	—	15	—	—	—	30	30	30	65	65	65	65	65	65
K Family																
100		3.5	4.2	10	—	—	22	22	22	22	42	42	42	42	65	65
200		—	3.7	10	—	—	18	18	18	18	40		40	40	65	65
400		—	—	10	—	—	—	—	18	18	35	35	35	35	50	50
L Family																
300		—	—	6.0	—	—	—	18	18	18	25	25	25	25	42	42
400		—	—	6.0	—	—	—	—	18	18	22	22	22	22	35	35
600		—	—	—	—	—	—	—	—	18	20	20	20	20	30	30
LG Family																
250		—	—	6.0	—	—	10	18	18	18	25	25	25	25	50	50
400		—	—	6.0	—	—	—	—	18	18	22	22	22	22	35	35
630		—	—	—	—	—	—	—	—	18	20	20	20	20	30	30

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 stand-alone 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 9. MCCB — 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 100A 250A	LG ETU 160A 400A	LG ETU 250A 600A	LG T/M 630A 630A	NHH ETU 150A 350A	N ETU 400A 400A	N ETU 400A 600A	N ETU 400A 800A	N ETU 600A 1200A	R ETU 800A 800A	R ETU 800A 1000A	R ETU 800A 1200A	R ETU 800A 1600A	R EYU 1000A 2000A	R ETU 1200A 2500A
LG Current Limiting Family																
250		—	—	6	—	—	15	22	25	25	42	42	42	50	50	50
400		—	—	6	—	—	—	—	25	25	35	35	35	50	50	50
630		—	—	—	—	—	—	—	—	25	30	30	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 stand-alone or series combination ratings). Short time delay settings or magnetic trip settings must be set to properly coordinate for low level faults.

Table 10. .1s — 1000s MCCB — 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 125A	F T/M 100A	F T/M 150A	F T/M 225A	F ETU 50A	F ETU 80A	F ETU 100A	F ETU 150A 160A	F ETU 200A	F ETU 225A	J T/M 70A	J T/M 150A	J T/M 250A	JG ETU 50A	JG ETU 70A
BR, BAB, HQP and QC (240 Vac, 10 kA) 1, 2 and 3-Pole																
15		T	T	T	T	T	T	T	T	T	T	T	T	T	T	T
20		T	T	T	T	T	T	T	T	T	T	T	T	T	T	T
30		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
50		T	—	T	T	—	—	T	T	T	T	—	T	T	—	T
60		T	—	T	T	—	—	T	T	T	T	—	T	T	—	T
70		—	—	—	T	—	—	—	—	T	T	—	—	T	—	—
80		—	—	—	T	—	—	—	—	T	T	—	—	T	—	—
90		—	—	—	T	—	—	—	—	T	T	—	—	T	—	—
100		—	—	—	T	—	—	—	—	T	T	—	—	T	—	—
125		—	—	—	—	—	—	—	—	—	T	—	—	T	—	—
150		—	—	—	—	—	—	—	—	—	T	—	—	T	—	—

Note: — = Not applicable.
T = Total coordination up to the interrupting rating of the line side breaker.
The table indicates the maximum currents the breaker curves indicates, at .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 stand-alone 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.

Tabel 10. .1s — 1000s MCCB — 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 125A	F T/M 100A	F T/M 150A	F T/M 225A	F ETU 50A	F ETU 80A	F ETU 100A	F ETU 150A 160A	F ETU 200A	F ETU 225A	J T/M 70A	J T/M 150A	J T/M 250A	JG ETU 50A	JG ETU 70A
BRH, QPHW, QBHW and QCHW (240 Vac, 22 kA) 1, 2 and 3-Pole																
15		T	T	T	T	T	T	T	T	T	T	T	T	T	T	T
20		T	T	T	T	T	T	T	T	T	T	T	T	T	T	T
30		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
50		T	—	T	T	—	—	T	T	T	T	—	T	T	—	T
60		T	—	T	T	—	—	T	T	T	T	—	T	T	—	T
70		—	—	—	T	—	—	T	—	T	T	—	—	T	—	—
80		—	—	—	T	—	—	—	—	T	T	—	—	T	—	—
90		—	—	—	T	—	—	—	—	T	T	—	—	T	—	—
100		—	—	—	T	—	—	—	—	T	T	—	—	T	—	—
125		—	—	—	—	—	—	—	—	—	—	—	—	T	—	—
150		—	—	—	—	—	—	—	—	—	—	—	—	T	—	—
GHB/GHC Family (65 kA @ 240 Vac, 14 kA @ 480Y/277 Vac)																
20		T	T	T	T	T	T	T	T	T	T	T	T	T	—	T
30		T	T	T	T	T	T	T	T	T	T	T	—	T	—	T
50		—	—	T	T	—	—	T	T	T	T	T	—	T	—	T
70		—	—	—	T	—	—	T	—	T	T	—	—	T	—	T
100		—	—	—	T	—	—	—	—	T	T	—	—	T	—	—
GD Family (65 kA @ 240 Vac, 22 kA @ 480 Vac)																
15		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
50		—	—	T	T	—	—	T	T	T	T	T	—	T	—	T
60		—	—	—	T	—	—	T	—	T	T	—	—	T	—	T
70		—	—	—	T	—	—	T	—	T	T	—	—	T	—	T
100		—	—	—	T	—	—	—	—	T	T	—	—	T	—	—
FCL Family Current Limiting (200 kA @ 240 Vac, 150 kA @ 480 Vac)																
15		—	—	—	T	—	—	—	T	T	T	—	T	T	—	T
40		—	—	—	T	—	—	—	T	T	T	—	T	T	—	T
50		—	—	—	T	—	—	—	T	T	T	—	T	T	—	—
100		—	—	—	T	—	—	—	T	T	T	—	T	T	—	—
EG Family																
15		T	—	T	T	—	T	—	T	T	T	—	T	T	—	T
20		T	—	T	T	—	T	—	T	T	T	—	T	T	—	T
50		—	—	T	T	—	T	—	T	T	T	—	T	T	—	T
60		—	—	—	T	—	—	—	T	T	T	—	T	T	—	—
90		—	—	—	T	—	—	—	T	T	T	—	T	T	—	—
100		—	—	—	—	—	—	—	T	T	T	—	—	T	—	—
125		—	—	—	—	—	—	—	—	—	—	—	—	T	—	—

Note: — = Not applicable.
T = Total coordination up to the interrupting rating of the line side breaker.
The table indicates the maximum currents the breaker curves indicates, at .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 stand-alone 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.

Tabel 10. .1s — 1000s MCCB — 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 125A	F T/M 100A	F T/M 150A	F T/M 225A	F ETU 50A	F ETU 80A	F ETU 100A	F ETU 150A 160A	F ETU 200A	F ETU 225A	J T/M 70A	J T/M 150A	J T/M 250A	JG ETU 50A	JG ETU 70A
EG Current Limitations Family																
15		T	—	T	T	—	T	—	T	T	T	—	T	T	—	T
20		T	—	T	T	—	T	—	T	T	T	—	T	T	—	T
50		—	—	T	T	—	T	—	T	T	T	—	T	T	—	T
60		—	—	—	T	—	—	—	T	T	T	—	T	T	—	—
90		—	—	—	T	—	—	—	T	T	T	—	T	T	—	—
100		—	—	—	—	—	—	—	T	T	T	—	—	T	—	—
125		—	—	—	—	—	—	—	—	—	—	—	—	T	—	—
F Family																
15		—	—	—	T	—	—	T	T	T	T	—	T	T	—	T
40		—	—	—	T	—	—	T	T	T	T	—	T	T	—	—
70		—	—	—	T	—	—	T	T	T	T	—	T	T	—	—
100		—	—	—	T	—	—	—	T	T	T	—	—	T	—	—
125		—	—	—	—	—	—	—	—	—	—	—	—	T	—	—
150		—	—	—	—	—	—	—	—	—	—	—	—	T	—	—
225		—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
JG Family																
50		—	—	—	—	—	—	—	—	—	—	—	—	T	—	T
100		—	—	—	—	—	—	—	—	—	—	—	—	T	—	—
150		—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
175		—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
200		—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
225		—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
250		—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
JG Current Limiting Family																
50		—	—	—	—	—	—	—	—	—	—	—	—	T	—	T
100		—	—	—	—	—	—	—	—	—	—	—	—	T	—	—
150		—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
175		—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
200		—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
225		—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
250		—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Note: — = Not applicable.
T = Total coordination up to the interrupting rating of the line side breaker.
The table indicates the maximum currents the breaker curves indicates, at .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 stand-alone 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.

Tabel 10. .1s — 1000s MCCB — 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 100A	JG ETU 150A 160A	JG ETU 200A	JG ETU 250A	K T/M 100A	K T/M 200A	K T/M 400A	K ETU 70A	K ETU 100A	K ETU 125A	K ETU 150A	K ETU 200A	K ETU 225A	K ETU 250A	K ETU 300A
BR, BAB, HQP and QC (240 Vac, 10 kA) 1, 2 and 3-Pole																
15		T	T	T	T	T	T	T	T	T	T	T	T	T	T	T
20		T	T	T	T	T	T	T	T	T	T	T	T	T	T	T
30		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
50		T	T	T	T	T	T	T	—	—	T	T	T	T	T	T
60		T	T	T	T	T	T	T	—	—	T	T	T	T	T	T
70		T	T	T	T	T	T	T	—	—	—	—	—	T	T	T
80		—	T	T	T	—	T	T	—	—	—	—	—	T	T	T
90		—	T	T	T	—	T	T	—	—	—	—	—	T	T	T
100		—	T	T	T	—	T	T	—	—	—	—	—	T	T	T
125		—	—	—	T	—	—	T	—	—	—	—	—	—	—	—
150		—	—	—	T	—	—	T	—	—	—	—	—	—	—	—
BRH, QPHW, QBHW and QCHW (240 Vac, 22 kA) 1, 2 and 3-Pole																
15		T	T	T	T	T	T	T	T	T	T	T	T	T	T	T
20		T	T	T	T	T	T	T	T	T	T	T	T	T	T	T
30		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
50		T	T	T	T	T	T	T	—		T	T	T	T	T	T
60		T	T	T	T	T	T	T	—	—	T	T	T	T	T	T
70		T	T	T	T	T	T	T	—	—	—	—	—	T	T	T
80		—	T	T	T	—	T	T	—	—	—	—	—	T	T	T
90		—	T	T	T	—	T	T	—	—	—	—	—	T	T	T
100		—	T	T	T	—	T	T	—	—	—	—	—	T	T	T
125		—	—	—	T	—	—	T	—	—	—	—	—	—	—	—
150		—	—	—	T	—	—	T	—	—	—	—	—	—	—	—
GHB/GHC Family (65 kA @ 240 Vac, 14 kA @ 480Y/277 Vac)																
20		T	T	T	T	T	T	T	—	T	T	T	T	T	T	T
30		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
70		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

Note: — = Not applicable.
T = Total coordination up to the interrupting rating of the line side breaker.
The table indicates the maximum currents the breaker curves indicates, at .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 stand-alone 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.

Tabel 10. .1s — 1000s MCCB — 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 100A	JG ETU 150A 160A	JG ETU 200A	JG ETU 250A	K T/M 100A	K T/M 200A	K T/M 400A	K ETU 70A	K ETU 100A	K ETU 125A	K ETU 150A	K ETU 200A	K ETU 225A	K ETU 250A	K ETU 300A
GD Family (65 kA @ 240 Vac, 22 kA @ 480 Vac)																
15		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
50		T	T	T	T	T	T	T	—	T	T	T	T	T	T	T
60		T	T	T	T	T	T	T	—	T	T	T	T	T	T	T
70		T	T	T	T	—	T	T	—	—	—	T	T	T	T	T
100		—	T	T	T	—	T	T	—	—	—	T	T	T	T	T
FCL Family Current Limiting (200 kA @ 240 Vac, 150 kA @ 480 Vac)																
15		T	T	T	T	—	T	T	—	—	T	T	T	T	T	T
40		T	T	T	T	—	T	T	—	—	—	T	T	T	T	T
50		—	T	T	T	—	T	T	—	—	—	—	T	T	T	T
100		—	T	T	T	—	T	T	—	—	—	—	T	T	T	T
EG Family																
15		T	T	T	T	T	T	T	—	—	T	T	T	T	T	T
20		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
60		T	T	T	T	—	T	T	—	—	T	T	T	T	T	T
90		—	T	T	T	—	T	T	—	—	—	—	T	T	T	T
100		—	—	T	T	—	T	T	—	—	—	—	T	T	T	T
125		—	—	—	T	—	—	T	—	—	—	—	—	—	T	T
EG Current Limitations Family																
15		T	T	T	T	T	T	T	—	—	T	T	T	T	T	T
20		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
60		T	T	T	T	—	T	T	—	—	T	T	T	T	T	T
90		—	T	T	T	—	T	T	—	—	—	—	T	T	T	T
100		—	—	T	T	—	T	T	—	—	—	—	T	T	T	T
125		—	—	—	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
70		—	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
150		—	—	—	T	—	T	T	—	—	—	—	—	—	—	T
225		—	—	—	—	—	—	T	—	—	—	—	—	—	—	—
JG Family																
50		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

Note: — = Not applicable.
T = Total coordination up to the interrupting rating of the line side breaker.
The table indicates the maximum currents the breaker curves indicates, at .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 stand-alone 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.

Tabel 10. .1s — 1000s MCCB — 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 100A	JG ETU 150A 160A	JG ETU 200A	JG ETU 250A	K T/M 100A	K T/M 200A	K T/M 400A	K ETU 70A	K ETU 100A	K ETU 125A	K ETU 150A	K ETU 200A	K ETU 225A	K ETU 250A	K ETU 300A
JG Family (Continued)																
150		—	—	—	—	—	—	T	—	—	—	—	—	—	—	—
175		—	—	—	—	—	—	T	—	—	—	—	—	—	—	—
200		—	—	—	—	—	—	T	—	—	—	—	—	—	—	—
225		—	—	—	—	—	—	T	—	—	—	—	—	—	—	—
250		—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
JG Current Limiting Family																
50		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
150		—	—	—	—	—	—	T	—	—	—	—	—	—	—	—
175		—	—	—	—	—	—	T	—	—	—	—	—	—	—	—
200		—	—	—	—	—	—	T	—	—	—	—	—	—	—	—
225		—	—	—	—	—	—	T	—	—	—	—	—	—	—	—
250		—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
J Family																
70		—	—	—	—	—	T	T	—	—	—	—	T	T	T	T
100		—	—	—	—	—	—	T	—	—	—	—	—	T	T	T
125		—	—	—	—	—	—	T	—	—	—	—	—	—	—	T
175		—	—	—	—	—	—	T	—	—	—	—	—	—	—	—
225		—	—	—	—	—	—	T	—	—	—	—	—	—	—	—
250		—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
LCL 250 Family Current Limiting																
150		—	—	—	—	—	—	T	—	—	—	—	T	T	T	T
200		—	—	—	—	—	—	T	—	—	—	—	—	—	—	T
225		—	—	—	—	—	—	T	—	—	—	—	—	—	—	—
250		—	—	—	—	—	—	T	—	—	—	—	—	—	—	—
LCL 400 Family Current Limiting																
225		—	—	—	—	—	—	T	—	—	—	—	—	—	—	—
275		—	—	—	—	—	—	T	—	—	—	—	—	—	—	—
300		—	—	—	—	—	—	T	—	—	—	—	—	—	—	—
400		—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
K Family																
100		—	—	—	—	—	T	T	—	—	—	—	—	—	T	T
150		—	—	—	—	—	—	T	—	—	—	—	—	—	—	—
200		—	—	—	—	—	—	T	—	—	—	—	—	—	—	—
250		—	—	—	—	—	—	T	—	—	—	—	—	—	—	—
300		—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
400		—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Note: — = Not applicable.
T = Total coordination up to the interrupting rating of the line side breaker.
The table indicates the maximum currents the breaker curves indicates, at .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 stand-alone 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.

Tabel 10. .1s — 1000s MCCB — 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 400A	L T/M 300A	L T/M 400A	L T/M 600A	L ETU 300A	L ETU 400A	L ETU 600A	LG ETU 250A	LG ETU 300A	LG ETU 400A	LG ETU 500A 600A	N ETU 400A	N ETU 600A	N ETU 800A	N ETU 1000A 1200A
BR, BAB, HQP and QC (240 Vac, 10 kA) 1, 2 and 3-Pole																
15		T	T	T	T	T	T	T	T	T	T	T	T	T	T	T
20		T	T	T	T	T	T	T	T	T	T	T	T	T	T	T
30		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
50		T	T	T	T	T	T	T	T	T	T	T	T	T	T	T
60		T	T	T	T	T	T	T	T	T	T	T	T	T	T	T
70		T	T	T	T	T	T	T	T	T	T	T	T	T	T	T
80		T	T	T	T	T	T	T	T	T	T	T	T	T	T	T
90		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
125		T	T	T	T	—	T	T	T	T	T	T	T	T	T	T
150		T	T	T	T	—	T	T	T	T	T	T	T	T	T	T
BRH, QPHW, QBHW and QCHW (240 Vac, 22 kA) 1, 2 and 3-Pole																
15		T	T	T	T	T	T	T	T	T	T	T	T	T	T	T
20		T	T	T	T	T	T	T	T	T	T	T	T	T	T	T
30		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
50		T	T	T	T	T	T	T	T	T	T	T	T	T	T	T
60		T	T	T	T	T	T	T	T	T	T	T	T	T	T	T
70		T	T	T	T	T	T	T	T	T	T	T	T	T	T	T
80		T	T	T	T	T	T	T	T	T	T	T	T	T	T	T
90		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
125		T	T	T	T	—	T	T	T	T	T	T	T	T	T	T
150		T	T	T	T	—	T	T	T	T	T	T	T	T	T	T
GHB/GHC Family (65 kA @ 240 Vac, 14 kA @ 480Y/277 Vac)																
20		T	T	T	T	T	T	T	T	T	T	T	T	T	T	T
30		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
70		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
GD Family (65 kA @ 240 Vac, 22 kA @ 480 Vac)																
15		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
50		T	T	T	T	T	T	T	T	T	T	T	T	T	T	T
60		T	T	T	T	T	T	T	T	T	T	T	T	T	T	T
70		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

Note: — = Not applicable.
T = Total coordination up to the interrupting rating of the line side breaker.
The table indicates the maximum currents the breaker curves indicates, at .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 stand-alone 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.

Tabel 10. .1s — 1000s MCCB — 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 400A	L T/M 300A	L T/M 400A	L T/M 600A	L ETU 300A	L ETU 400A	L ETU 600A	LG ETU 250A	LG ETU 300A	LG ETU 400A	LG ETU 500A 600A	N ETU 400A	N ETU 600A	N ETU 800A	N ETU 1000A 1200A
FCL Family Current Limiting (200 kA @ 240 Vac, 150 kA @ 480 Vac)																
15		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
50		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
EG Family																
15		T	T	T	T	T	T	T	T	T	T	T	T	T	T	T
20		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
60		T	T	T	T	T	T	T	T	T	T	T	T	T	T	T
90		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
125		T	T	T	T	T	T	T	T	T	T	T	T	T	T	T
EG Current Limitations Family																
15		T	T	T	T	T	T	T	T	T	T	T	T	T	T	T
20		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
60		T	T	T	T	T	T	T	T	T	T	T	T	T	T	T
90		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
125		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
40		T	T	T	T	T	T	T	T	T	T	T	T	T	T	T
70		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
125		T	T	T	T	T	T	T	T	T	T	T	T	T	T	T
150		T	T	T	T	T	T	T	T	T	T	T	T	T	T	T
225		—	—	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
100		T	T	T	T	T	T	T	T	T	T	T	T	T	T	T
150		T	T	T	T	—	—	T	T	—	T	T	T	T	T	T
175		T	T	T	T	—	—	T	T	—	T	T	—	T	T	T
200		—	T	T	T	—	—	T	T	—	T	T	—	T	T	T
225		—	—	T	T	—	—	—	T	—	T	T	—	—	T	T
250		—	—	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 currents the breaker curves indicates, at .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 stand-alone 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.

Tabel 10. .1s — 1000s MCCB — 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 400A	L T/M 300A	L T/M 400A	L T/M 600A	L ETU 300A	L ETU 400A	L ETU 600A	LG ETU 250A	LG ETU 300A	LG ETU 400A	LG ETU 500A 600A	N ETU 400A	N ETU 600A	N ETU 800A	N ETU 1000A 1200A
JG Current Limiting Family																
50		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
150		T	T	T	T	—	—	T	T	—	T	T	T	T	T	T
175		T	T	T	T	—	—	T	T	—	T	T	—	T	T	T
200		—	T	T	T	—	—	T	T	—	T	T	—	T	T	T
225		—	—	T	T	—	—	—	T	—	T	T	—	—	T	T
250		—	—	T	T	—	—	—	—	—	—	—	—	—	T	T
J Family																
70		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
125		T	T	T	T	T	T	T	T	T	T	T	T	T	T	T
175		T	T	T	T	T	T	T	T	—	T	T	T	T	T	T
225		—	—	T	T	—	—	T	—	—	T	T	—	T	T	T
250		—	—	T	T	—	—	T	—	—	—	—	—	T	T	T
LCL 250 Family Current Limiting																
150		T	T	T	T	T	T	T	T	T	T	T	T	T	T	T
200		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
250		T	T	T	T	—	T	T	—	T	T	T	T	T	T	T
LCL 400 Family Current Limiting																
225		T	—	T	T	—	T	T	T	T	T	T	T	T	T	T
275		T	—	T	T	—	—	T	—	—	T	T	T	T	T	T
300		—	—	T	T	—	—	T	—	—	T	T	—	T	T	T
400		—	—	—	T	—	—	T	—	—	—	—	—	T	T	T
K Family																
100		T	T	T	T	T	T	T	—	T	T	T	T	T	T	T
150		T	T	T	T	—	T	T	—	T	T	T	T	T	T	T
200		—	—	T	T	—	—	T	—	—	T	T	—	T	T	T
250		—	—	—	T	—	—	T	—	—	—	T	—	T	T	T
300		—	—	—	T	—	—	—	—	—	—	—	—	—	T	T
400		—	—	—	—	—	—	—	—	—	—	—	—	—	—	T
L Family																
300		—	—	—	T	—	—	—	—	—	—	—	—	—	T	T
350		—	—	—	T	—	—	—	—	—	—	—	—	—	—	T
400		—	—	—	—	—	—	—	—	—	—	—	—	—	—	T
500		—	—	—	—	—	—	—	—	—	—	—	—	—	—	T
600		—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Note: — = Not applicable.
T = Total coordination up to the interrupting rating of the line side breaker.
The table indicates the maximum currents the breaker curves indicates, at .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 stand-alone 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.

Tabel 10. .1s — 1000s MCCB — 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 400A	L T/M 300A	L T/M 400A	L T/M 600A	L ETU 300A	L ETU 400A	L ETU 600A	LG ETU 250A	LG ETU 300A	LG ETU 400A	LG ETU 500A 600A	N ETU 400A	N ETU 600A	N ETU 800A	N ETU 1000A 1200A
LG Family																
300		—	—	—	T	—	—	T	—	—	—	—	—	T	T	T
350		—	—	—	T	—	—	—	—	—	—	—	—	—	T	T
400		—	—	—	T	—	—	—	—	—	—	—	—	—	T	T
500		—	—	—	—	—	—	—	—	—	—	—	—	—	—	T
600		—	—	—	—	—	—	—	—	—	—	—	—	—	—	T
LG Current Limiting Family																
300		—	—	—	T	—	—	T	—	—	—	—	—	T	T	T
350		—	—	—	T	—	—	—	—	—	—	—	—	—	T	T
400		—	—	—	T	—	—	—	—	—	—	—	—	—	T	T
500		—	—	—	—	—	—	—	—	—	—	—	—	—	—	T
630		—	—	—	—	—	—	—	—	—	—	—	—	—	—	T
N Family																
400		—	—	—	—	—	—	—	—	—	—	—	—	—	—	T
600		—	—	—	—	—	—	—	—	—	—	—	—	—	—	T
800		—	—	—	—	—	—	—	—	—	—	—	—	—	—	T
1200		—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Tabel 10. .1s — 1000s MCCB — 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 800A	R ETU 1000A	R ETU 1200A	R ETU 1600A	R ETU 2000A	R ETU 2500A
BR, BAB, HQP and QC (240 Vac, 10 kA) 1, 2 and 3-Pole							
15		T	T	T	T	T	T
20		T	T	T	T	T	T
30		T	T	T	T	T	T
40		T	T	T	T	T	T
50		T	T	T	T	T	T
60		T	T	T	T	T	T
70		T	T	T	T	T	T
80		T	T	T	T	T	T
90		T	T	T	T	T	T
100		T	T	T	T	T	T
125		T	T	T	T	T	T
150		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 currents the breaker curves indicates, at .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 stand-alone 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.

Tabel 10. .1s — 1000s MCCB — 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 800A	R ETU 1000A	R ETU 1200A	R ETU 1600A	R ETU 2000A	R ETU 2500A
BRH, QPHW, QBHW and QCHW (240 Vac, 22 kA) 1, 2 and 3-Pole							
15		T	T	T	T	T	T
20		T	T	T	T	T	T
30		T	T	T	T	T	T
40		T	T	T	T	T	T
50		T	T	T	T	T	T
60		T	T	T	T	T	T
70		T	T	T	T	T	T
80		T	T	T	T	T	T
90		T	T	T	T	T	T
100		T	T	T	T	T	T
125		T	T	T	T	T	T
150		T	T	T	T	T	T
GHB/GHC Family (65 kA @ 240 Vac, 14 kA @ 480Y/277 Vac)							
20		T	T	T	T	T	T
30		T	T	T	T	T	T
50		T	T	T	T	T	T
70		T	T	T	T	T	T
100		T	T	T	T	T	T
GD Family (65 kA @ 240 Vac, 22 kA @ 480 Vac)							
15		T	T	T	T	T	T
40		T	T	T	T	T	T
50		T	T	T	T	T	T
60		T	T	T	T	T	T
70		T	T	T	T	T	T
100		T	T	T	T	T	T
FCL Family Current Limiting (200 kA @ 240 Vac, 150 kA @ 480 Vac)							
15		T	T	T	T	T	T
40		T	T	T	T	T	T
50		T	T	T	T	T	T
100		T	T	T	T	T	T
EG Family							
15		T	T	T	T	T	T
20		T	T	T	T	T	T
50		T	T	T	T	T	T
60		T	T	T	T	T	T
90		T	T	T	T	T	T
100		T	T	T	T	T	T
125		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 currents the breaker curves indicates, at .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 stand-alone 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.

Tabel 10. .1s — 1000s MCCB — 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 800A	R ETU 1000A	R ETU 1200A	R ETU 1600A	R ETU 2000A	R ETU 2500A
EG Current Limitations Family							
15		T	T	T	T	T	T
20		T	T	T	T	T	T
50		T	T	T	T	T	T
60		T	T	T	T	T	T
90		T	T	T	T	T	T
100		T	T	T	T	T	T
125		T	T	T	T	T	T
F Family							
15		T	T	T	T	T	T
40		T	T	T	T	T	T
70		T	T	T	T	T	T
100		T	T	T	T	T	T
125		T	T	T	T	T	T
150		T	T	T	T	T	T
225		T	T	T	T	T	T
JG Family							
50		T	T	T	T	T	T
100		T	T	T	T	T	T
150		T	T	T	T	T	T
175		T	T	T	T	T	T
200		T	T	T	T	T	T
225		T	T	T	T	T	T
250		T	T	T	T	T	T
JG Current Limiting Family							
50		T	T	T	T	T	T
100		T	T	T	T	T	T
150		T	T	T	T	T	T
175		T	T	T	T	T	T
200		T	T	T	T	T	T
225		T	T	T	T	T	T
250		T	T	T	T	T	T
J Family							
70		T	T	T	T	T	T
100		T	T	T	T	T	T
125		T	T	T	T	T	T
175		T	T	T	T	T	T
225		T	T	T	T	T	T
250		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 currents the breaker curves indicates, at .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 stand-alone 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.

Tabel 10. .1s — 1000s MCCB — 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 800A	R ETU 1000A	R ETU 1200A	R ETU 1600A	R ETU 2000A	R ETU 2500A
LCL 250 Family Current Limiting							
150		T	T	T	T	T	T
200		T	T	T	T	T	T
225		T	T	T	T	T	T
250		T	T	T	T	T	T
LCL 400 Family Current Limiting							
225		T	T	T	T	T	T
275		T	T	T	T	T	T
300		T	T	T	T	T	T
400		T	T	T	T	T	T
K Family							
100		T	T	T	T	T	T
150		T	T	T	T	T	T
200		T	T	T	T	T	T
250		T	T	T	T	T	T
300		T	T	T	T	T	T
400		—	T	T	T	T	T
L Family							
300		T	T	T	T	T	T
350		—	T	T	T	T	T
400		—	T	T	T	T	T
500		—	—	T	T	T	T
600		—	—	—	T	T	T
LG Family							
300		T	T	T	T	T	T
350		T	T	T	T	T	T
400		—	T	T	T	T	T
500		—	T	T	T	T	T
600		—	—	—	T	T	T
LG Current Limiting Family							
300		T	T	T	T	T	T
350		T	T	T	T	T	T
400		—	T	T	T	T	T
500		—	T	T	T	T	T
630		—	—	—	T	T	T
N Family							
400		T	T	T	T	T	T
600		T	T	T	T	T	T
800		—	T	T	T	T	T
1200		—	—	—	T	T	T

Note: — = Not applicable.
T = Total coordination up to the interrupting rating of the line side breaker.
The table indicates the maximum currents the breaker curves indicates, at .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 stand-alone 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. LVPCB (Power Circuit Breaker) — MCCB Selective Coordination Combinations (All Values in kAIC rms Current Levels at 480 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
J 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
L 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
630	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 stand-alone 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.

Tabel 11. LVPCB (Power Circuit Breaker) — MCCB Selective Coordination Combinations (All Values in kaic rms Current Levels at 480 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	—	—	—	—	—	—	—	—	—	—
J 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
L 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	—	—	—	—	—	—	—	—	—	—
630	—	—	—	—	—	—	—	—	—	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 stand-alone 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.

Tabel 11. LVPCB (Power Circuit Breaker) — MCCB Selective Coordination Combinations (All Values in kaic rms Current Levels at 480 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
J 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
L 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
630	—	—	—	—	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 stand-alone 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.

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