

■ Protective coordination between MMSs and contactors/combination starters

• IEC 60947-4-1 Type 1 The rated conditional short-circuit current $I_q=50\text{kA}/240\text{V AC}, 415\text{V AC}$

Motor capacity and full load current 3-phase				Manual motor starter		Magnetic contactor		Link module	Base plate
200–240V AC		380–415V AC		Type	Adjustable current range (A)	Type	Rated operational current AC-3 (A)		
Capacity (kW)	Current (A)	Capacity (kW)	Current (A)						
0.03	0.24	0.06	0.23	BM3RSB-P25 BM3RHB-P25	0.16 to 0.25	SC-M01 SC-E02	6 9	BZ0LRC09AA BZ0LRE22AA	*1 (BZ0BPVE22A) BZ0BPVE22A
0.06	0.37	0.09	0.32	BM3RSB-P40 BM3RHB-P40	0.25 to 0.4	SC-M01 SC-E02	6 9	BZ0LRC09AA BZ0LRE22AA	*1 (BZ0BPVE22A) BZ0BPVE22A
–	–	0.12	0.5	BM3RSB-P63 BM3RHB-P63	0.4 to 0.63	SC-M01 SC-E02	6 9	BZ0LRC09AA BZ0LRE22AA	*1 (BZ0BPVE22A) BZ0BPVE22A
0.12	0.68	0.18	0.65	BM3RSB-001 BM3RHB-001	0.63 to 1.0	SC-M01 SC-E02	6 9	BZ0LRC09AA BZ0LRE22AA	*1 (BZ0BPVE22A) BZ0BPVE22A
–	–	0.25	0.9	BM3RSB-001 BM3RHB-001	0.63 to 1.0	SC-M01 SC-E02	6 9	BZ0LRC09AA BZ0LRE22AA	*1 (BZ0BPVE22A) BZ0BPVE22A
0.2	1.3	0.37	1.25	BM3RSB-1P6 BM3RHB-1P6	1.0 to 1.6	SC-M01 SC-E02	6 9	BZ0LRC09AA BZ0LRE22AA	*1 (BZ0BPVE22A) BZ0BPVE22A
–	–	0.55	1.6	BM3RSB-2P5 BM3RHB-2P5	1.0 to 1.6	SC-M01 SC-E02	6 9	BZ0LRC09AA BZ0LRE22AA	*1 (BZ0BPVE22A) BZ0BPVE22A
0.4	2.3	0.75	2	BM3RSB-2P5 BM3RHB-2P5	1.6 to 2.5	SC-M01 SC-E02	6 9	BZ0LRC09AA BZ0LRE22AA	*1 (BZ0BPVE22A) BZ0BPVE22A
–	–	1.1	2.5	BM3RSB-004 BM3RHB-004	2.5 to 4.0	SC-M01 SC-E02	6 9	BZ0LRC09AA BZ0LRE22AA	*1 (BZ0BPVE22A) BZ0BPVE22A
0.75	3.6	1.5	3.5	BM3RSB-004 BM3RHB-004	2.5 to 4.0	SC-M01 SC-E02	6 9	BZ0LRC09AA BZ0LRE22AA	*1 (BZ0BPVE22A) BZ0BPVE22A
–	–	2.2	5	BM3RSB-6P3 BM3RHB-6P3	4.0 to 6.3	SC-M01 SC-E02	6 9	BZ0LRC09AA BZ0LRE22AA	*1 (BZ0BPVE22A) BZ0BPVE22A
1.5	6.1	3	6.5	BM3RSB-010 BM3RHB-010	6.3 to 10	SC-M02 SC-E02	9 9	BZ0LRC09AA BZ0LRE22AA	*1 (BZ0BPVE22A) BZ0BPVE22A
2.2	9	4	9	BM3RSB-010 BM3RHB-010	6.3 to 10	SC-M02 SC-E02	9 9	BZ0LRC09AA BZ0LRE22AA	*1 (BZ0BPVE22A) BZ0BPVE22A
3	12	5.5	12	BM3RSB-013 BM3RHB-013	9 to 13	SC-E03	12	BZ0LRE22AA	BZ0BPVE22A
4	16	7.5	16	BM3RHB-020	14 to 20	SC-E04	18	BZ0LRE22AA	BZ0BPVE22A
5.5	22	11	22	BM3RHB-025	19 to 25	SC-E05	25	BZ0LRE22AA	BZ0BPVE22A
7.5	29	15	30	BM3RHB-032 BM3VHB-032	24 to 32	SC-E1	32	BZ0LRE32AA BZ0LVE51AA	BZ0BPVE32A BZ0BPVE51A
11	40	18.5	37	BM3VHB-040	28 to 40	SC-E2	40	BZ0LVE51AA	BZ0BPVE51A
15	50	22	48	BM3VHB-050	35 to 50	SC-E2S	50	BZ0LVE51AA	BZ0BPVE51A

Notes: • The full-load current of each three-phase motor is a reference value.
Check the actual full-load current of the motor before use.

• The above table shows combinations with AC operated type magnetic contactors.
The link module will differ if the magnetic contactor is a DC operated type.

*1 Use the base plate type in () when you use the base plate.

DUO series Combination Starters

Protective coordination

• IEC 60947-4-1 Type 2 The rated conditional short-circuit current $I_q=50kA/240V AC, 415V AC$

Motor capacity and full load current 3-phase				Manual motor starter		Magnetic contactor		Link module	Base plate
200–240V AC		380–415V AC		Type	Adjustable current range (A)	Type	Rated operational current AC-3 (A)		
Capacity (kW)	Current (A)	Capacity (kW)	Current (A)						
0.03	0.24	0.06	0.23	BM3RSB-P25 BM3RHB-P25	0.16 to 0.25	SC-M01 SC-E02	6 9	BZ0LRC09AA BZ0LRE22AA	*1 (BZ0BPPE22A) BZ0BPPE22A
0.06	0.37	0.09	0.32	BM3RSB-P40 BM3RHB-P40	0.25 to 0.4	SC-M01 SC-E02	6 9	BZ0LRC09AA BZ0LRE22AA	*1 (BZ0BPPE22A) BZ0BPPE22A
–	–	0.12	0.5	BM3RSB-P63 BM3RHB-P63	0.4 to 0.63	SC-M01 SC-E02	6 9	BZ0LRC09AA BZ0LRE22AA	*1 (BZ0BPPE22A) BZ0BPPE22A
0.12	0.68	0.18	0.65	BM3RSB-001 BM3RHB-001	0.63 to 1.0	SC-M01 SC-E02	6 9	BZ0LRC09AA BZ0LRE22AA	*1 (BZ0BPPE22A) BZ0BPPE22A
–	–	0.25	0.9	BM3RSB-001 BM3RHB-001	0.63 to 1.0	SC-M01 SC-E02	6 9	BZ0LRC09AA BZ0LRE22AA	*1 (BZ0BPPE22A) BZ0BPPE22A
0.2	1.3	0.37	1.25	BM3RSB-1P6 BM3RHB-1P6	1.0 to 1.6	SC-M01 SC-E02	6 9	BZ0LRC09AA BZ0LRE22AA	*1 (BZ0BPPE22A) BZ0BPPE22A
–	–	0.55	1.6	BM3RSB-1P6 BM3RHB-1P6	1.0 to 1.6	SC-M01 SC-E02	6 9	BZ0LRC09AA BZ0LRE22AA	*1 (BZ0BPPE22A) BZ0BPPE22A
0.4	2.3	0.75	2	BM3RSB-2P5 BM3RHB-2P5	1.6 to 2.5	SC-M01 SC-E02	6 9	BZ0LRC09AA BZ0LRE22AA	*1 (BZ0BPPE22A) BZ0BPPE22A
–	–	1.1	2.5	BM3RSB-004 BM3RHB-004	2.5 to 4.0	SC-M01 SC-E02	6 9	BZ0LRC09AA BZ0LRE22AA	*1 (BZ0BPPE22A) BZ0BPPE22A
0.75	3.6	1.5	3.5	BM3RSB-004 BM3RHB-004	2.5 to 4.0	SC-E03	12	BZ0LRE22AA	BZ0BPPE22A
–	–	2.2	5	BM3RSB-6P3 BM3RHB-6P3	4.0 to 6.3	SC-E04	18	BZ0LRE22AA	BZ0BPPE22A
1.5	6.1	3	6.5	BM3RSB-010 BM3RHB-010	6.3 to 10	SC-E04	18	BZ0LRE22AA	BZ0BPPE22A
2.2	9	4	9	BM3RSB-010 BM3RHB-010	6.3 to 10	SC-E04	18	BZ0LRE22AA	BZ0BPPE22A
3	12	5.5	12	BM3RSB-013 BM3RHB-013	9 to 13	SC-E05	25	BZ0LRE22AA	BZ0BPPE22A
4	16	7.5	16	BM3RHB-020	14 to 20	SC-E05	25	BZ0LRE22AA	BZ0BPPE22A
5.5	22	11	22	BM3RHB-025 BM3VHB-025	19 to 25	SC-E1	32	BZ0LRE32AA BZ0LVE51AA	BZ0BPPE32A BZ0BPVE51A
7.5	29	15	30	BM3RHB-032 BM3VHB-032	24 to 32	SC-E1	32	BZ0LRE32AA BZ0LVE51AA	BZ0BPPE32A BZ0BPVE51A
11	40	18.5	37	BM3VHB-040	28 to 40	SC-E2	40	BZ0LVE51AA	BZ0BPVE51A

Notes: • The full-load current of each three-phase motor is a reference value.
Check the actual full-load current of the motor before use.

• The above table shows combinations with AC operated type magnetic contactors.
The link module will differ if the magnetic contactor is a DC operated type.

*1 Use the base plate type in () when you use the base plate.

■ Protective coordination between MMSs and contactors/combination starters (ring terminal connection type)

• IEC 60947-4-1 Type 1 The rated conditional short-circuit current $I_q=50kA/240V$ AC, 415V AC

Motor capacity and full load current 3-phase				Manual motor starter (ring terminal connection type)		Magnetic contactor (ring terminal connection type)		Link module (ring terminal connection type)	Base plate
200–240V AC		380–415V AC		Type	Adjustable current range (A)	Type	Rated operational current AC-3 (A)	Type	
Capacity (kW)	Current (A)	Capacity (kW)	Current (A)						
0.03	0.24	0.06	0.23	BM3RSR-P25	0.16 to 0.25	SC-M01	6	BZ0LRC09AA	*1 (BZ0BP22A)
				BM3RHR-P25		SC-E02P	9	BZ0LRE22AA	BZ0BP22A *3
0.06	0.37	0.09	0.32	BM3RSR-P40	0.25 to 0.4	SC-M01	6	BZ0LRC09AA	*1 (BZ0BP22A)
				BM3RHR-P40		SC-E02P	9	BZ0LRE22AA	BZ0BP22A *3
–	–	0.12	0.5	BM3RSR-P63	0.4 to 0.63	SC-M01	6	BZ0LRC09AA	*1 (BZ0BP22A)
				BM3RHR-P63		SC-E02P	9	BZ0LRE22AA	BZ0BP22A *3
0.1	0.68	0.18	0.65	BM3RSR-001	0.63 to 1.0	SC-M01	6	BZ0LRC09AA	*1 (BZ0BP22A)
				BM3RHR-001		SC-E02P	9	BZ0LRE22AA	BZ0BP22A *3
–	–	0.25	0.9	BM3RSR-001	0.63 to 1.0	SC-M01	6	BZ0LRC09AA	*1 (BZ0BP22A)
				BM3RHR-001		SC-E02P	9	BZ0LRE22AA	BZ0BP22A *3
0.2	1.3	0.37	1.25	BM3RSR-1P6	1.0 to 1.6	SC-M01	6	BZ0LRC09AA	*1 (BZ0BP22A)
				BM3RHR-1P6		SC-E02P	9	BZ0LRE22AA	BZ0BP22A *3
–	–	0.55	1.5	BM3RSR-2P5	1.0 to 1.6	SC-M01	6	BZ0LRC09AA	*1 (BZ0BP22A)
				BM3RHR-2P5		SC-E02P	9	BZ0LRE22AA	BZ0BP22A *3
0.4	2.3	0.75	2	BM3RSR-2P5	1.6 to 2.5	SC-M01	6	BZ0LRC09AA	*1 (BZ0BP22A)
				BM3RHR-2P5		SC-E02P	9	BZ0LRE22AA	BZ0BP22A *3
–	–	1.1	2.5	BM3RSR-004	2.5 to 4.0	SC-M01	6	BZ0LRC09AA	*1 (BZ0BP22A)
				BM3RHR-004		SC-E02P	9	BZ0LRE22AA	BZ0BP22A *3
0.75	3.6	1.5	3.5	BM3RSR-004	2.5 to 4.0	SC-M01	6	BZ0LRC09AA	*1 (BZ0BP22A)
				BM3RHR-004		SC-E02P	9	BZ0LRE22AA	BZ0BP22A *3
–	–	2.2	5	BM3RSR-6P3	4.0 to 6.3	SC-M01	6	BZ0LRC09AA	*1 (BZ0BP22A)
				BM3RHR-6P3		SC-E02P	9	BZ0LRE22AA	BZ0BP22A *3
1.5	6.1	3	6.5	BM3RSR-010	6.3 to 10	SC-M02	9	BZ0LRC09AA	*1 (BZ0BP22A)
				BM3RHR-010		SC-E02P	9	BZ0LRE22AA	BZ0BP22A *3
2.2	9	4	9	BM3RSR-010	6.3 to 10	SC-M02	9	BZ0LRC09AA	*1 (BZ0BP22A)
				BM3RHR-010		SC-E02P	9	BZ0LRE22AA	BZ0BP22A *3
3	12	5.5	12	BM3RSR-013	9 to 13	SC-E03P	12	BZ0LRE22AA	(BZ0BP22A) *3
				BM3RHR-013					
4	16	7.5	16	BM3RHR-020	14 to 20	SC-E04P	18	BZ0LRE22AA	(BZ0BP22A) *3
5.5	22	11	22	BM3RHR-025	19 to 25	SC-E05P	25	BZ0LRE22AA	(BZ0BP22A) *3
7.5	29	15	30	BM3RHR-032	24 to 32	SC-E1P	32	*2	(BZ0BP32A) *3

Notes: • The full-load current of each three-phase motor is a reference value.
Check the actual full-load current of the motor before use.

• The above table shows combinations with AC operated type magnetic contactors.
The link module will differ if the magnetic contactor is a DC operated type.

*1 Use the base plate type in () when you use the base plate.

*2 Use electric wire.

*3 If you do not use the base plate, use two mounting rails.

DUO series Combination Starters

Protective coordination

• IEC 60947-4-1 Type 2 The rated conditional short-circuit current $I_q=50kA/240V$ AC, 415V AC

Motor capacity and full load current 3-phase				Manual motor starter (ring terminal connection type)		Magnetic contactor (ring terminal connection type)		Link module (ring terminal connection type)	Base plate
200–240V AC		380–415V AC		Type	Adjustable current range (A)	Type	Rated operational current AC-3 (A)	Type	
Capacity (kW)	Current (A)	Capacity (kW)	Current (A)						
0.03	0.24	0.06	0.23	BM3RSR-P25	0.16 to 0.25	SC-M01	6	BZ0LRC09AA	*1 (BZ0BPRE22A)
				BM3RHR-P25		SC-E02P	9	BZ0LRE22AA	BZ0BPRE22A *3
0.06	0.37	0.09	0.32	BM3RSR-P40	0.25 to 0.4	SC-M01	6	BZ0LRC09AA	*1 (BZ0BPRE22A)
				BM3RHR-P40		SC-E02P	9	BZ0LRE22AA	BZ0BPRE22A *3
–	–	0.12	0.5	BM3RSR-P63	0.4 to 0.63	SC-M01	6	BZ0LRC09AA	*1 (BZ0BPRE22A)
				BM3RHR-P63		SC-E02P	9	BZ0LRE22AA	BZ0BPRE22A *3
0.12	0.68	0.18	0.65	BM3RSR-001	0.63 to 1.0	SC-M01	6	BZ0LRC09AA	*1 (BZ0BPRE22A)
				BM3RHR-001		SC-E02P	9	BZ0LRE22AA	BZ0BPRE22A *3
–	–	0.25	0.9	BM3RSR-001	0.63 to 1.0	SC-M01	6	BZ0LRC09AA	*1 (BZ0BPRE22A)
				BM3RHR-001		SC-E02P	9	BZ0LRE22AA	BZ0BPRE22A *3
0.2	1.3	0.37	1.25	BM3RSR-1P6	1.0 to 1.6	SC-M01	6	BZ0LRC09AA	*1 (BZ0BPRE22A)
				BM3RHR-1P6		SC-E02P	9	BZ0LRE22AA	BZ0BPRE22A *3
–	–	0.55	1.6	BM3RSR-2P5	1.0 to 1.6	SC-M01	6	BZ0LRC09AA	*1 (BZ0BPRE22A)
				BM3RHR-2P5		SC-E02P	9	BZ0LRE22AA	BZ0BPRE22A *3
0.4	2.3	0.75	2	BM3RSR-2P5	1.6 to 2.5	SC-M01	6	BZ0LRC09AA	*1 (BZ0BPRE22A)
				BM3RHR-2P5		SC-E02P	9	BZ0LRE22AA	BZ0BPRE22A *3
–	–	1.1	2.5	BM3RSR-004	2.5 to 4.0	SC-M01	6	BZ0LRC09AA	*1 (BZ0BPRE22A)
				BM3RHR-004		SC-E02P	9	BZ0LRE22AA	BZ0BPRE22A *3
0.75	3.6	1.5	3.5	BM3RSR-004	2.5 to 4.0	SC-E03P	12	BZ0LRE22AA	(BZ0BPRE22A) *3
				BM3RHR-004					
–	–	2.2	5	BM3RSR-6P3	4.0 to 6.3	SC-E04P	18	BZ0LRE22AA	(BZ0BPRE22A) *3
				BM3RHR-6P3					
1.5	6.1	3	6.5	BM3RSR-010	6.3 to 10	SC-E04P	18	BZ0LRE22AA	(BZ0BPRE22A) *3
				BM3RHR-010					
2.2	9	4	9	BM3RSR-010	6.3 to 10	SC-E04P	18	BZ0LRE22AA	(BZ0BPRE22A) *3
				BM3RHR-010					
3	12	5.5	12	BM3RSR-013	9 to 13	SC-E05P	25	BZ0LRE22AA	(BZ0BPRE22A) *3
				BM3RHR-013					
4	16	7.5	16	BM3RHR-020	14 to 20	SC-E05P	25	BZ0LRE22AA	(BZ0BPRE22A) *3
5.5	22	11	22	BM3RHR-025	19 to 25	SC-E1P	32	*2	(BZ0BPRE32A)
7.5	29	15	30	BM3RHR-032	24 to 32	SC-E1P	32	*2	(BZ0BPRE32A)

Notes: • The full-load current of each three-phase motor is a reference value.
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• The above table shows combinations with AC operated type magnetic contactors.
The link module will differ if the magnetic contactor is a DC operated type.

*1 Use the base plate type in () when you use the base plate.

*2 Use electric wire.

*3 If you do not use the base plate, use two mounting rails.