Shihlin Electric

MOLDED CASE CIRCUIT BREAKER

EARTH LEAKAGE CIRCUIT BREAKER

ISO 9001 BSMI REGISTERED ISO 14001 BSMI REGISTERED

SHIHLIN ELECTRIC & ENGINEERING

MCCB Frame Size Selection Table

BM	60	SN	3P	30A	

Frame Size	Type	Rated Breaking Capacity (kA) IEC60947-2 220V	380V	440V	500V	Pole	Rated Current In(A)
30	CN	2.5	1.5	-	-	2, 3	3, 5, 10, 15, 20, 30.
	SN	5	2.5	2.5	1.5	3	
50	CN	5	2.5	2.5	1.5	2, 3	10, 15, 20, 30, 40, 50.
60	SN	10	7.5	7.5	5	2, 3, 4	10, 15, 20, 25, 30, 40, 50, 60.
	HN	25	15	10	5	2, 3, 4	
	HBN	50	30	25	15	3	10, 15, 20, 30, 40, 50, 60.
100	MN	15	10	7.5	5	2, 3	10, 15, 20, 30, 40, 50, 60, 75, 100.
	SN	25	15	10	5	2, 3	
	HN	50	30	25	15	2, 3, 4	
	HBN	85	36	32	20	3, 4	40, 50, 63, 80, 100.
	H	85	50	42	25	3, 4	15, 20, 30, 40, 50, 60, 75, 100.
	HC	100	70	55	42	3, 4	40, 50, 63, 80, 100.
	HS	125	85	70	50	3, 4	
125	SN	30	22	15	7.5	2, 3, 4	15, 20, 30, 40, 50, 60, 75, 100, 125.
	HN	50	30	25	15	2, 3, 4	
160	SN	50	30	25	15	2, 3, 4	125, 140, 160.
	HN	85	36	32	20	3, 4	
	HB	85	50	42	25	3, 4	
	HC	100	70	55	42	3, 4	
	HS	125	85	70	50	3, 4	
250	SN	50	30	25	15	3, 4	125, 150, 175, 200, 225, 250.
	HN	85	36	32	20	3, 4	175, 200, 225, 250.
	HB	85	50	42	25	3, 4	100, 125, 150, 160, 175, 200, 225, 250.
	HC	100	70	55	42	3, 4	175, 200, 225, 250.
	HS	125	85	70	50	3, 4	
400	SN	50	35	30	20	3, 4	250, 300, 350, 400.
	HN	85	50	42	25	3, 4	
	RN	100	70	55	42	3, 4	
	UN	125	85	85	65	3, 4	
630	SN	50	35	30	20	3, 4	500, 630.
	HN	85	50	50	25	3, 4	
	RN	100	70	70	42	3, 4	
	UN	125	100	85	65	3, 4	
800	CN	50	35	30	20	3, 4	700, 800.
	SN	85	50	50	25	3, 4	
	HN	100	70	70	42	3, 4	
	RN	125	100	85	65	3, 4	
1000	HS	130	100	85	65	3	1000
1200	HS	130	100	85	65	3	1200
1600	HS	130	100	85	65	3	1400, 1600.

Accessory	
Blank	No Acc.
AX	Auxiliary Switch
AL	Alarm Switch
SHT	Shunt Trip
UVT	Under Voltage Trip

Note 1. There is no SHT for 100H, 100HC, 100HS, 30A and below.
2. There is no UVT for 100H, 100HC, 100HS, 160HB, 160HC, 160HS, 250HB, 250HC, 250HS.

BM Series
BL Series
ACC.
DIM.
Curve.
Other

ELCB Frame Size Selection Table

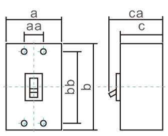
BL	100	SN	3P	30A	
Frame Size	Rated Breaking Capacity (kA)		Pole	Rated Current In(A)	Accessory

Frame Size	Rated Breaking Capacity (kA)				Pole	Rated Current In(A)	Accessory	
	Type	IEC60947-2						
		220V	380V	440V				
50	SN	10	7.5	7.5	3, 4	15, 20, 30, 40, 50.	Blank	No Acc.
100	SN	25	15	10	3, 4	15, 20, 30, 40, 50, 60, 75, 100.	AX	Auxiliary Switch
	HN	50	30	25	3, 4		AL	Alarm Switch
160	SN	50	30	25	3, 4	125, 140, 160.	SHT	Shunt Trip
250	SN	50	30	25	3, 4	175, 200, 225, 250.	UVT	Under Voltage Trip
400	SN	50	35	30	3, 4	250, 300, 350, 400.		
	HN	85	50	42	3, 4			
	RN	100	70	55	3, 4			
	UN	125	85	85	3, 4			
630	HN	85	50	50	3, 4	500, 630.		
	RN	100	70	70	3, 4			
	UN	125	100	85	3, 4			
800	SN	85	50	50	3, 4	700, 800.		
	HN	100	70	70	3, 4			
	RN	125	100	85	3, 4			

MCCB/ELCB Breaking Capacity Selection Table

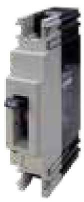
Series	Rated Breaking Capacity (kA) IEC60947-2 AC380V	30	50/60	100	125	160	250	400	630	800	1000	1200	1600
BM	100kA								630-UN	800-RN	1000-HS	1200-HS	1600-HS
	85kA			100-HS		160-HS	250-HS	400-UN					
	70kA			100-HC		160-HC	250-HC	400-RN	630-RN	800-HN			
	50kA			100-H		160-HBN	250-HBN	400-HN	630-HN	800-SN			
	35/36kA			100-HBN		160-HN	250-HN	400-SN	630-SN	800-CN			
	30kA		60-HBN	100-HN		160-SN	250-SN						
	25kA				125-HN								
	15kA		60-HN	100-SN	125-SN								
	10kA			100-MN									
	7.5kA		60-SN										
	2.5kA	30-SN	50-CN										
	1.5kA	30-CN											
BL	100kA								630-UN	800-RN			
	85kA							400-RN					
	70kA							400-RN	630-RN	800-HN			
	50kA							400-HN	630-HN	800-SN			
	35kA							400-SN					
	30kA			100-HN		160-SN	250-SN						
	15kA			100-SN									
	10kA												
	7.5kA		50-SN										

Molded Case Circuit Breaker

Frame size (AF) (Inm)			30		50	60		
Type			BM30-CN	BM30-SN	BM50-CN	BM60-SN	BM60-HN	BM60-HBN
Appearance								
Rated current In (A) at ambient temp. 40℃			3, 5, 10, 15, 20, 30.	3, 5, 10, 15, 20, 30.	10, 15, 20, 30, 40, 50.	10, 15, 20, 25, 30, 40, 50, 60.	10, 15, 20, 25, 30, 40, 50, 60.	10, 15, 20, 30, 40, 50, 60.
Number of poles (P)			2 / 3	2 / 3	2 / 3	2 / 3 / 4	2 / 3 / 4	3
Rated insulation voltage Ui (V)	AC		690	690	690	690	690	690
	DC		—	—	—	—	—	—
Dimensions	 (mm)	a	45 / 67.5	50 / 75	50 / 75	50 / 75 / 100	50 / 75 / 100	90
		b	96	130	130	130	130	155
		c	52	68	68	68	68	68
		ca	67	90	90	90	90	90
		bb	84	111	111	111	111	132
		aa	23.5	25	25	25	25	30
Weight (kg)			0.3 / 0.4	0.45 / 0.65	0.45 / 0.65	0.45 / 0.65 / 0.85	0.45 / 0.65 / 0.85	1.3
Rated breaking capacity (kA)	IEC 60947-2 EN 60947-2 Icu AC	500V	—	1.5	1.5	5	5	15
		440V	—	2.5	2.5	7.5	10	25
		380V	1.5	2.5	2.5	7.5	15	30
		220V(240V)	2.5	5	5	10	25	50
	DC	250V	—	—	—	—	—	—
		125V	—	—	—	—	—	—
Connection			Clamp terminal	Clamp terminal	Clamp terminal	Clamp terminal	Clamp terminal	Clamp terminal
Optional accessories	Alarm switch	(AL)	—	○	○	○	○	○
	Auxiliary switch	(AX)	—	○	○	○	○	○
	Shunt trip	(SHT)	—	○	○	○	○	○
	Under-voltage trip	(UVT)	—	○	○	○	○	○
	Rotary handle	(EH)	—	●	●	●	●	●
	Terminal cover	(TC)	●	●	●	●	●	●
	Box lug	(TL)	●	●	●	●	●	●
Trip Unit			Hydraulic magnetic	Hydraulic magnetic	Hydraulic magnetic	Hydraulic magnetic	Hydraulic magnetic	Hydraulic magnetic
Tripping button			—	Equipped	Equipped	Equipped	Equipped	Equipped

Note 1. "●" which can be installed by client, "○" which have to be installed by manufacturer. "—" which is not available.
Above accessories table is for 3P breaker.
2. Ics= 50% Icu
3. Adjustable thermal: 80%~100% In.

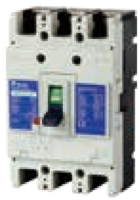
80% ~ 100% Adj. (A)

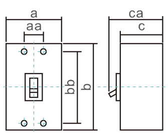
100											
BM100-FTD	BM100-MN		BM100-SN		BM100-HN			BM100-HBN		BM100-H	
											
15, 20, 30, 40, 50 60, 75, 100.	10, 15, 20, 30, 40, 50, 60, 75, 100.		10, 15, 20, 30, 40, 50, 60, 75, 100.		10, 15, 20, 30, 40, 50, 60, 75, 100.			40, 50, 63, 80, 100.		15, 20, 30, 40, 50, 60, 75, 100.	
1	2	3	2	3	2	3	4	3	4	3	4
690	690		690		690			690		690	
—	—		250	—	—			—		—	
25.4	50	75	50	75	60	90	120	105	140	105	140
130	130		130		155			165		165	
60	68		68		68			68		86	
91	90		90		90			92		112	
111	111		111		132			126		126	
—	25		25		30			35		35	
0.29	0.45	0.65	0.45	0.65	0.9	1.3	1.6	1.5	1.9	2.1	2.6
—	5		5		15			20		25	
5	7.5		10		25			32		42	
5	10		15		30			36		50	
25	15		25		50			85		85	
—	—		10	—	—			—		—	
—	—		15	—	—			—		—	
Clamp terminal	Clamp terminal		Clamp terminal		Clamp terminal			Clamp terminal		Clamp terminal	
—	○		○		○			●		○	
—	○		○		○			●		○	
—	○		○		○			●		○	
—	○		○		○			●		—	
—	●		●		●			●		●	
—	●		●		●			●		●	
●	●		●		●			●		●	
Thermal magnetic	Hydraulic magnetic		Hydraulic magnetic		Hydraulic magnetic			Adj. thermal Fixed magnetic		Thermal magnetic	
Equipped	Equipped		Equipped		Equipped			Equipped		Equipped	

BM Series
BL Series
ACC.
DIM.
Curve.
Other

Molded Case Circuit Breaker

80% ~ 100% Adj. (A)

Frame size (AF) (Inm)	100				125						160		
Model	BM100-HC		BM100-HS		BM125-SN			BM125-HN			BM160-SN		
Appearance													
Rated current In (A) at ambient temp. 40℃	40, 50, 63, 80, 100.		40, 50, 63, 80, 100.		10, 15, 20, 30, 40, 50, 60, 75, 100, 125.			10, 15, 20, 30, 40, 50, 60, 75, 100, 125.			125, 140, 160.		
Number of poles (P)	3	4	3	4	2	3	4	2	3	4	2	3	4
Rated insulation voltage Ui (V) AC	690		690		690			690			690		
Rated insulation voltage Ui (V) DC	—		—		—			—			—		
Dimensions (mm) a	105	140	105	140	60	90	120	60	90	120	105	105	140
Dimensions (mm) b	165		165		155			155			165		
Dimensions (mm) c	86		86		68			68			68		
Dimensions (mm) ca	112		112		90			90			92		
Dimensions (mm) bb	126		126		132			132			126		
Dimensions (mm) aa	35		35		30			30			35		
Weight (kg)	2.1	2.6	2.1	2.6	0	30	30	0	30	30	1.3	1.5	1.9
Rated breaking capacity (kA) IEC 60947-2 EN 60947-2 Icu AC 500V	42		50		7.5			15			15		
Rated breaking capacity (kA) AC 440V	55		70		15			25			25		
Rated breaking capacity (kA) AC 380V	70		85		22			30			30		
Rated breaking capacity (kA) AC 220V(240V)	100		125		30			50			50		
Rated breaking capacity (kA) DC 250V	—		—		—			—			—		
Rated breaking capacity (kA) DC 125V	—		—		—			—			—		
Connection	Clamp terminal		Clamp terminal		Clamp terminal			Clamp terminal			Clamp terminal		
Optional accessories: Alarm switch (AL)	○		○		○			○			●		
Auxiliary switch (AX)	○		○		○			○			●		
Shunt trip (SHT)	○		○		○			○			●		
Under-voltage trip (UVT)	—		—		—	○	○	—	○	○	●		
Rotary handle (EH)	●		●		●			●			●		
Terminal cover (TC)	●		●		●			●			●		
Box lug (TL)	●		●		●			●			●		
Trip Unit	Thermal magnetic		Thermal magnetic		Hydraulic magnetic			Hydraulic magnetic			Adj. thermal Fixed magnetic		
Tripping button	Equipped		Equipped		Equipped			Equipped			Equipped		



Note 1. "●" which can be installed by client, "○" which have to be installed by manufacturer. "—" which is not available.
Above accessories table is for 3P breaker.
2. Ics= 50% Icu
3. Adjustable thermal: 80%~100% In.

80% ~ 100% Adj. (A)								80% ~ 100% Adj. (A)				
160								250				
BM160-HN		BM160-HB		BM160-HC		BM160-HS		BM250-CN			BM250-SN	
												
125, 140, 160.		125, 140, 160.		125, 140, 160.		125, 140, 160.		125, 150, 175, 200, 225, 250.			125, 150, 175, 200, 225, 250.	
3	4	3	4	3	4	3	4	2	3	4	3	4
690		690		690		690		690			690	
—		—		—		—		250	—	—	—	
105	140	105	140	105	140	105	140	105	105	140	105	140
165		165		165		165		165			165	
68		86		86		86		68			68	
92		112		112		112		92			92	
126		126		126		126		126			126	
35		35		35		35		35			35	
1.5	1.9	2.1	2.6	2.1	2.6	2.1	2.6	1.3	1.5	1.9	1.5	1.9
20		25		42		50		7.5			15	
32		42		55		70		15			25	
36		50		70		85		22			30	
85		85		100		125		30			50	
—		—		—		—		10	—	—	—	
—		—		—		—		15	—	—	—	
Clamp terminal		Clamp terminal		Clamp terminal		Clamp terminal		Clamp terminal			Clamp terminal	
●		○		○		○		●			●	
●		○		○		○		●			●	
●		○		○		○		●			●	
●		—		—		—		●			●	
●		●		●		●		●			●	
●		●		●		●		●			●	
●		●		●		●		●			●	
Adj. thermal Fixed magnetic		Thermal magnetic		Thermal magnetic		Thermal magnetic		Adj. thermal Fixed magnetic			Adj. thermal Fixed magnetic	
Equipped		Equipped		Equipped		Equipped		Equipped			Equipped	

BM
Series
BL
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ACC.
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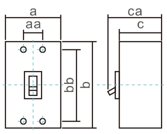
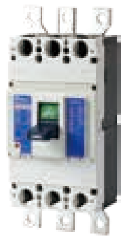
Molded Case Circuit Breaker

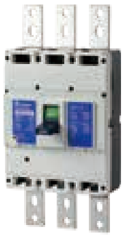
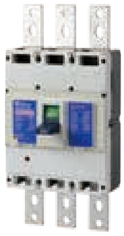
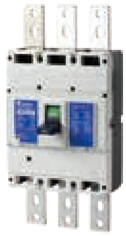
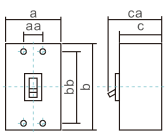
80% ~ 100% Adj. (A)

Frame size (AF) (Inm)			250								400		
Model			BM250-HN		BM250-HB		BM250-HC		BM250-HS		BM400-CN		
Appearance													
Rated current In (A) at ambient temp. 40℃			175, 200, 225, 250.		100, 125, 150, 160, 175, 200, 225, 250.		175, 200, 225, 250.		175, 200, 225, 250.		250, 300, 350, 400.		
Number of poles (P)			3	4	3	4	3	4	3	4	2	3	4
Rated insulation voltage Ui (V)		AC	690		690		690		690		690		
		DC	—		—		—		—		250	—	—
Dimensions	 (mm)	a	105	140	105	140	105	140	105	140	140	140	185
		b	165		165		165		165		257		
		c	68		86		86		86		103		
		ca	92		112		112		112		155		
		bb	126		126		126		126		194		
		aa	35		35		35		35		44		
Weight (kg)			1.5	1.9	2.1	2.6	2.1	2.6	2.1	2.6	5.0	5.7	7.5
Rated breaking capacity (kA)	IEC 60947-2 EN 60947-2 Icu AC	500V	20		25		42		50		14		
		440V	32		42		55		70		22		
		380V	36		50		70		85		25		
		220V(240V)	85		85		100		125		35		
	DC	250V	—		—		—		—		10	—	—
		125V	—		—		—		—		15	—	—
Connection			Clamp terminal		Clamp terminal		Clamp terminal		Clamp terminal		Busbar		
Optional accessories	Alarm switch	(AL)	●		○		○		○		●		
	Auxiliary switch	(AX)	●		○		○		○		●		
	Shunt trip	(SHT)	●		○		○		○		●		
	Under-voltage trip	(UVT)	●		—		—		—		●		
	Rotary handle	(EH)	●		●		●		●		●		
	Terminal cover	(TC)	●		●		●		●		●		
	Box lug	(TL)	●		●		●		●		●		
Trip Unit			Adj. thermal Fixed magnetic		Thermal magnetic		Thermal magnetic		Thermal magnetic		Thermal magnetic		
Tripping button			Equipped		Equipped		Equipped		Equipped		Equipped		

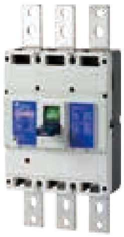
Note
1. "●" which can be installed by client, "○" which have to be installed by manufacturer. "—" which is not available.
Above accessories table is for 3P breaker.
2. Ics= 50% Icu
3. Adjustable thermal: 80%~100% In.

400								630		
BM400-SN		BM400-HN		BM400-RN		BM400-UN		BM630-CN	BM630-SN	
										
250, 300, 350, 400.		250, 300, 350, 400.		250, 300, 350, 400.		250, 300, 350, 400.		500, 600, 630.	500, 630.	
3	4	3	4	3	4	3	4	3	3	4
690		690		690		690		690	690	
—		—		—		—		250	250	
140	185	140	185	140	185	140	185	210	210	280
257		257		257		257		275	275	
103		103		103		103		103	103	
155		155		155		155		155	155	
194		194		194		194		243	243	
44		44		44		44		70	70	
5.7	7.5	5.7	7.5	5.7	7.5	5.7	7.5	10	10	13
20		25		42		65		14	20	
30		42		55		85		22	30	
35		50		70		85		25	35	
50		85		100		125		35	50	
—		—		—		—		10	20	—
—		—		—		—		—	—	
Busbar		Busbar		Busbar		Busbar		Busbar	Busbar	
●		●		●		●		●	●	
●		●		●		●		●	●	
●		●		●		●		●	●	
●		●		●		●		●	●	
●		●		●		●		●	●	
●		●		●		●		●	●	
●		●		●		●		●	●	
Thermal magnetic		Thermal magnetic		Thermal magnetic		Thermal magnetic		Fixed thermal Adj. magnetic	Fixed thermal Adj. magnetic	
Equipped		Equipped		Equipped		Equipped		Equipped	Equipped	

Molded Case Circuit Breaker

Frame size (AF) (Inm)			630						800			
Model			BM630-HN		BM630-RN		BM630-UN		BM800-CN		BM800-SN	
Appearance												
Rated current In (A) at ambient temp. 40℃			500, 630.		500, 630.		500, 630.		700, 800.		700, 800.	
Number of poles (P)			3	4	3	4	3	4	3	4	3	4
Rated insulation voltage Ui (V)		AC	690		690		690		690		690	
		DC	250	—	—		—		250	—	250	—
Dimensions	 (mm)	a	210	280	210	280	210	280	210	280	210	280
		b	275		275		275		275		275	
		c	103		103		103		103		103	
		ca	155		155		155		155		155	
		bb	243		243		243		243		243	
		aa	70		70		70		70		70	
Weight (kg)			10	13	10	13	10	13	10.5	13.5	10.5	13.5
Rated breaking capacity (kA)	IEC 60947-2 EN 60947-2 Icu AC	500V	25		42		65		20		25	
		440V	50		70		85		30		50	
		380V	50		70		100		35		50	
		220V(240V)	85		100		125		50		85	
	DC	250V	40	—	—		—		20	—	40	—
		125V	—		—		—		—		—	
Connection			Busbar		Busbar		Busbar		Busbar		Busbar	
Optional accessories	Alarm switch	(AL)	●		●		●		●		●	
	Auxiliary switch	(AX)	●		●		●		●		●	
	Shunt trip	(SHT)	●		●		●		●		●	
	Under-voltage trip	(UVT)	●		●		●		●		●	
	Rotary handle	(EH)	●		●		●		●		●	
	Terminal cover	(TC)	●		●		●		●		●	
	Box lug	(TL)	●		●		●		●		●	
Trip Unit			Fixed thermal Adj. magnetic		Fixed thermal Adj. magnetic		Fixed thermal Adj. magnetic		Fixed thermal Adj. magnetic		Fixed thermal Adj. magnetic	
Tripping button			Equipped		Equipped		Equipped		Equipped		Equipped	

Note 1 "●" which can be installed by client, "○" which have to be installed by manufacturer. "—" which is not available.
Above accessories table is for 3P breaker.
2. Ics= 50% Icu

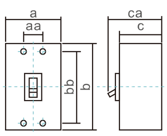
800				1000	1200	1600
BM800-HN		BM800-RN		BM1000-HS	BM1200-HS	BM1600-HS
						
700, 800.		700, 800.		1000	1200	1400, 1600.
3	4	3	4	3	3	3
690		690		690	690	690
—		—		—	—	—
210	280	210	280	210	210	210
275		275		406	406	406
103		103		140	140	140
155		155		190	190	190
243		243		375	375	375
70		70		70	70	70
10.5	13.5	10.5	13.5	23	23	23
42		65		65	65	65
70		85		85	85	85
70		100		100	100	100
100		125		130	130	130
—		—		—	—	—
—		—		—	—	—
Busbar		Busbar		Busbar	Busbar	Busbar
●		●		○	○	○
●		●		○	○	○
●		●		○	○	○
●		●		○	○	○
●		●		—	—	—
●		●		—	—	—
●		●		●	●	●
Fixed thermal Adj. magnetic		Fixed thermal Adj. magnetic		Fixed thermal Adj. magnetic	Fixed thermal Adj. magnetic	Fixed thermal Adj. magnetic
Equipped		Equipped		Equipped	Equipped	Equipped

Molded Case Circuit Breaker (BMA Series)

Frame size (AF) (Inm)	125			160			250		
Model	BMA125-STA	BMA125-LTA	BMA125-HTA	BMA160-STA	BMA160-LTA	BMA160-HTA	BMA250-STA	BMA250-LTA	BMA250-HTA
Appearance									
Rated current In (A) at ambient temp. 40℃	15, 16, 20, 25, 30, 32, 40, 50, 60, 63, 75, 80, 100, 125A			40, 50, 60, 63, 70, 75, 80, 100, 125, 140, 150, 160A			175, 200, 225, 250A		
Rated insulation voltage Ui (V) AC	800			800			800		

Frame size (AF)	125		160		250	
Number of poles (P)	3	4	3	4	3	4
Dimensions (mm) a	90	120	105	140	105	140
Dimensions (mm) b	155	155	165	165	165	165
Dimensions (mm) c	68	68	68	68	68	68
Dimensions (mm) ca	92	92	92	92	92	92
Dimensions (mm) bb	132	132	126	126	126	126
Dimensions (mm) aa	30	30	35	35	35	35
Weight (kg)	0.7	0.9	1.5	1.9	1.5	1.9

Dimensions



(mm)

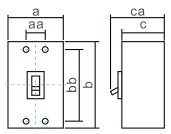
Model	BMA125-STA	BMA125-LTA	BMA125-HTA	BMA160-STA	BMA160-LTA	BMA160-HTA	BMA250-STA	BMA250-LTA	BMA250-HTA
Rated breaking capacity (kA) IEC 60947-2 EN 60947-2 Icu AC 500V	18 kA	22 kA	30 kA	20 kA	22 kA	30 kA	20 kA	22 kA	30 kA
440V	25 kA	30 kA	42 kA	25 kA	30 kA	42 kA	25 kA	30 kA	42 kA
380V	25 kA	36 kA	50 kA	25 kA	36 kA	50 kA	25 kA	36 kA	50 kA
220V(240V)	50 kA	85 kA	100 kA	85 kA	85 kA	100 kA	85 kA	85 kA	100 kA
Connection	Clamp terminal	Clamp terminal	Clamp terminal	Clamp terminal	Clamp terminal	Clamp terminal	Clamp terminal	Clamp terminal	Clamp terminal
Optional accessories: Alarm switch (AL)	●	●	●	●	●	●	●	●	●
Auxiliary switch (AX)	●	●	●	●	●	●	●	●	●
Shunt trip (SHT)	●	●	●	●	●	●	●	●	●
Under-voltage trip (UVT)	●	●	●	●	●	●	●	●	●
Rotary handle (EH)	●	●	●	●	●	●	●	●	●
Terminal cover (TC)	●	●	●	●	●	●	●	●	●
Trip Unit	Adjustable Thermal Fixed Magnetic			Adjustable Thermal Fixed Magnetic			Adjustable Thermal Fixed Magnetic		
Tripping button	Equipped	Equipped	Equipped	Equipped	Equipped	Equipped	Equipped	Equipped	Equipped

Note 1. Isc=100%Icu

400			630		800		630		800	
BMA400-LTA	BMA400-HTA	BMA400-RTA	BMA630-HTA	BMA630-RTA	BMA800-HTA	BMA800-RTA	BMA630-HED	BMA630-RED	BMA800-HED	BMA800-RED
										
250, 300, 350, 400A			500, 600, 630A		700, 800A		630A		800A	
3	4		3	4	3	4	3	4	3	4
800			1000		1000		1000		1000	
140	185		210	280	210	280	210	280	210	280
257	257		275	275	275	275	275	275	275	275
103	103		103	103	103	103	103	103	103	103
155	155		155	155	155	155	155	155	155	155
194	194		243	243	243	243	243	243	243	243
44	44		70	70	70	70	70	70	70	70
5.7	7.5		10	13	10	13	11.5	15.3	12	15.8
22 kA	30 kA	50 kA	30 kA	50 kA	30 kA	50 kA	30 kA	50 kA	30 kA	50 kA
30 kA	42 kA	65 kA	42 kA	65 kA	42 kA	65 kA	42 kA	65 kA	42 kA	65 kA
36 kA	50 kA	70 kA	50 kA	70 kA	50 kA	70 kA	50 kA	70 kA	50 kA	70 kA
70 kA	85 kA	100 kA	85 kA	100 kA	85 kA	100 kA	85 kA	100 kA	85 kA	100 kA
Busbar	Busbar	Busbar	Busbar	Busbar	Busbar	Busbar	Busbar	Busbar	Busbar	Busbar
●	●	●	●	●	●	●	●	●	●	●
●	●	●	●	●	●	●	●	●	●	●
●	●	●	●	●	●	●	●	●	●	●
●	●	●	●	●	●	●	●	●	●	●
●	●	●	●	●	●	●	●	●	●	●
●	●	●	●	●	●	●	●	●	●	●
Adjustable Thermal Fixed Magnetic			Adjustable Thermal Adjustable Magnetic		Adjustable Thermal Adjustable Magnetic		Electronic		Electronic	
Equipped	Equipped	Equipped	Equipped	Equipped	Equipped	Equipped	Equipped	Equipped	Equipped	Equipped

BM Series
BL Series
ACC.
DIM.
Curve.
Other

Earth Leakage Circuit Breaker

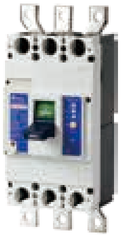
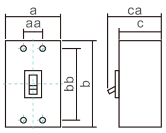
Frame size (AF) (Inm)		50		100			
Model		BL50-SN		BL100-SN		BL100-HN	
Appearance							
Rated current In (A) at ambient temp. 40℃		15, 20, 30, 40, 50.		15, 20, 30, 40, 50, 60, 75, 100.		15, 20, 30, 40, 50, 60, 75, 100.	
Phase & wire (P)		1ø2W, 3ø3W.	3ø4W	1ø2W, 3ø3W.	3ø4W	1ø2W, 3ø3W.	3ø4W
Number of poles (P)		3	4	3	4	3	4
Rated voltage (VAC)		230, 400.		230, 400.		230, 400.	
High speed	Rated current sensitivity I△n (mA)	30-100-500 adjustable		30-100-500 adjustable		30-100-500 adjustable	
	2I△n operating time (S)	0.1		0.1		0.1	
	5I△n operating time (S)	0.04		0.04		0.04	
Delay	Rated current sensitivity I△n (mA)	100- 300- 500 adjustable		100- 300- 500 adjustable		100- 300- 500 adjustable	
	2I△n operating time (S)	0.1- 0.4- 0.8- 2.0 adjustable		0.1- 0.4- 0.8- 2.0 adjustable		0.1- 0.4- 0.8- 2.0 adjustable	
	2I△n max. non-operating time (S)	0, 0.2, 0.4, 1.0		0, 0.2, 0.4, 1.0		0, 0.2, 0.4, 1.0	
	Leakage detection mode	Mechanical push-button		Mechanical push-button		Mechanical push-button	
Dimensions  (mm)	a	75	100	90	120	90	120
	b	130		155		155	
	c	68		68		68	
	ca	90		90		90	
	bb	111		132		132	
	aa	25		30		30	
Weight (kg)		0.7	0.9	1.5	1.8	1.5	1.8
Rated breaking capacity (kA)	IEC 60947-2 EN 60947-2 CNS 14816-2 AC Icu 440V	7.5		10		25	
	380V	7.5		15		30	
	220V	10		25		50	
Connection		Clamp terminal		Clamp terminal		Clamp terminal	
Optional accessories	Alarm switch (AL)	○		○		○	
	Auxiliary switch (AX)	○		○		○	
	Shunt trip (SHT)	○		○		○	
	Under-voltage trip (UVT)	—		○		○	
	Rptary handle (EH)	●		●		●	
	Terminal cover (TC)	●		●		●	
	Leakage alarm module (AM)	—		○		○	
	Box lug (TL)	●		●		●	
Trip Unit		Hydraulic magnetic		Hydraulic magnetic		Hydraulic magnetic	
Tripping button		Equipped		Equipped		Equipped	

Note
1. "●" which can be installed by client, "○" which have to be installed by manufacturer. "—" which is not available.
2. Specify defult rated current sensitivity when place the order.
3. Ics= 50% Icu
4. Adjustable thermal: 80%~100% In.
5. Specify, when order delay type rated current sensitivity 30-100-500mA.

80% ~ 100% Adj. (A)

160		250		400					
BL160-SN		BL250-SN		BL400-SN		BL400-HN		BL400-RN	
									
125, 140, 160.		175, 200, 225, 250.		250, 300, 350, 400.		250, 300, 350, 400.		250, 300, 350, 400.	
1ø2W, 3ø3W.	3ø4W	1ø2W, 3ø3W.	3ø4W	1ø2W, 3ø3W.	3ø4W	1ø2W, 3ø3W.	3ø4W	1ø2W, 3ø3W.	3ø4W
3	4	3	4	3	4	3	4	3	4
230, 400.		230, 400.		230, 400.		230, 400.		230, 400.	
30-100-500 adjustable		30- 100- 500 adjustable		30- 100- 500 adjustable		30- 100- 500 adjustable		30- 100- 500 adjustable	
0.1		0.1		0.1		0.1		0.1	
0.04		0.04		0.04		0.04		0.04	
100- 300- 500 adjustable		100- 300- 500 adjustable		100- 300- 500 adjustable		100- 300- 500 adjustable		100- 300- 500 adjustable	
0.1- 0.4- 0.8- 2.0 adjustable		0.1- 0.4- 0.8- 2.0 adjustable		0.1- 0.4- 0.8- 2.0 adjustable		0.1- 0.4- 0.8- 2.0 adjustable		0.45- 1.0- 2.0 adjustable	
0, 0.2, 0.4, 1.0		0, 0.2, 0.4, 1.0		0, 0.2, 0.4, 1.0		0, 0.2, 0.4, 1.0		0.1, 0.5, 1.0	
Mechanical push-button		Mechanical push-button		Mechanical push-button		Mechanical push-button		Mechanical push-button	
105	140	105	140	140	185	140	185	140	185
165		165		257		257		257	
68		68		103		103		103	
92		92		155		155		155	
126		126		194		194		194	
35		35		44		44		44	
1.7	2.3	1.7	2.3	6.6	8.4	6.6	8.4	5.7	7.5
25		25		30		42		55	
30		30		35		50		70	
50		50		50		85		100	
Clamp terminal		Clamp terminal		Busbar		Busbar		Busbar	
●		●		●		●		●	
●		●		●		●		●	
●		●		●		●		●	
●		●		●		●		●	
●		●		●		●		●	
●		●		●		●		●	
○		○		○		○		○	
●		●		●		●		●	
Adj. thermal Fixed magnetic		Adj. thermal Fixed magnetic		Thermal magnetic		Thermal magnetic		Thermal magnetic	
Equipped		Equipped		Equipped		Equipped		Equipped	

Earth Leakage Circuit Breaker

	Frame size (AF) (Inm)	400		630			
	Model	BL400-UN		BL630-HN		BL630-RN	
	Appearance						
	Rated current In (A) at ambient temp. 40℃	250, 300, 350, 400.		500, 630.		500, 630.	
	Phase & wire (P)	1ø2W, 3ø3W.	3ø4W	1ø2W, 3ø3W.	3ø4W	1ø2W, 3ø3W.	3ø4W
	Number of poles (P)	3	4	3	4	3	4
	Rated voltage (VAC)	230, 400.		230, 400.		230, 400.	
High speed	Rated current sensitivity I△n (mA)	30- 100- 500 adjustable		100- 300- 500 adjustable		100- 300- 500 adjustable	
High speed	2I△n operating time (S)	0.1		0.1		0.1	
High speed	5I△n operating time (S)	0.04		0.04		0.04	
Delay	Rated current sensitivity I△n (mA)	100- 300- 500 adjustable		100- 300- 500 adjustable		100- 300- 500 adjustable	
Delay	2I△n operating time (S)	0.45- 1.0- 2.0 adjustable		0.45- 1.0- 2.0 adjustable		0.45- 1.0- 2.0 adjustable	
Delay	2I△n max. non-operating time (S)	0.1, 0.5, 1.0		0.1, 0.5, 1.0		0.1, 0.5, 1.0	
Delay	Leakage detection mode	Mechanical push-button		Mechanical push-button		Mechanical push-button	
Dimensions  (mm)	a	140	185	210	280	210	280
Dimensions	b	257		257		257	
Dimensions	c	103		103		103	
Dimensions	ca	155		155		155	
Dimensions	bb	194		243		243	
Dimensions	aa	44		70		70	
	Weight (kg)	5.7	7.5	10.0	13.0	10.0	13.0
Rated breaking capacity (kA) IEC 60947-2 EN 60947-2 CNS 14816-2 AC Icu	440V	85		50		70	
	380V	85		50		70	
	220V	125		85		100	
	Connection	Busbar		Busbar		Busbar	
Optional accessories	Alarm switch (AL)	●		●		●	
Optional accessories	Auxiliary switch (AX)	●		●		●	
Optional accessories	Shunt trip (SHT)	●		●		●	
Optional accessories	Under-voltage trip (UVT)	●		●		●	
Optional accessories	Rotary handle (EH)	●		●		●	
Optional accessories	Terminal cover (TC)	●		●		●	
Optional accessories	Leakage alarm module (AM)	○		○		○	
Optional accessories	Box lug (TL)	●		●		●	
	Trip Unit	Thermal magnetic		Fixed thermal Adj. magnetic		Fixed thermal Adj. magnetic	
	Tripping button	Equipped		Equipped		Equipped	

Note
1. "●" which can be installed by client, "○" which have to be installed by manufacturer. "—" which is not available.
2. Specify defult rated current sensitivity when place the order.
3. Ics= 50% Icu
4. Adjustable thermal: 80%~100% In.
5. Specify, when order delay type rated current sensitivity 30-100-500mA.

630		800					
BL630-UN		BL800-SN		BL800-HN		BL800-RN	
							
500, 630.		700, 800.		700, 800.		700, 800.	
1ø2W, 3ø3W.	3ø4W	1ø2W, 3ø3W.	3ø4W	1ø2W, 3ø3W.	3ø4W	1ø2W, 3ø3W.	3ø4W
3	4	3	4	3	4	3	4
230, 400.		230, 400.		230, 400.		230, 400.	
100- 300- 500 adjustable		100- 300- 500 adjustable		100- 300- 500 adjustable		100- 300- 500 adjustable	
0.1		0.1		0.1		0.1	
0.04		0.04		0.04		0.04	
100- 300- 500 adjustable		100- 300- 500 adjustable		100- 300- 500 adjustable		100- 300- 500 adjustable	
0.45- 1.0- 2.0 adjustable		0.45- 1.0- 2.0 adjustable		0.45- 1.0- 2.0 adjustable		0.45- 1.0- 2.0 adjustable	
0.1, 0.5, 1.0		0.1, 0.5, 1.0		0.1, 0.5, 1.0		0.1, 0.5, 1.0	
Mechanical push-button		Mechanical push-button		Mechanical push-button		Mechanical push-button	
210	280	210	280	210	280	210	280
257		257		257		257	
103		103		103		103	
155		155		155		155	
243		243		243		243	
70		70		70		70	
10.0	13.0	10.5	13.5	10.5	13.5	10.5	13.5
85		50		70		85	
100		50		70		100	
125		85		100		125	
Busbar		Busbar		Busbar		Busbar	
●		●		●		●	
●		●		●		●	
●		●		●		●	
●		●		●		●	
●		●		●		●	
●		●		●		●	
○		○		○		○	
●		●		●		●	
Fixed thermal Adj. magnetic		Fixed thermal Adj. magnetic		Fixed thermal Adj. magnetic		Fixed thermal Adj. magnetic	
Equipped		Equipped		Equipped		Equipped	

Optional Accessories Installation Table

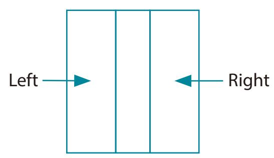
- **AL: Alarm Switch / AX: Auxiliary Switch / SHT: Shunt Trip / UVT: Under Voltage Trip**

Model	Poles	AL	AX	SHT or UVT	AL+AX	AL+ SHT or UVT	AX+ SHT or UVT	AL+AX+ SHT or UVT
BM30-SN BM50-CN BM60-SN/HN BM100-SN/MN	3P							—
BL50-SN	3P 4P			(#1.)	—	—	—	—
BM60-HBN BM100-HN BM125-SN/HN	3P 4P			(3P) (4P)		(3P) (4P)	(3P) (4P)	—
BL100-SN BL100-HN	3P 4P			No UVT for 3P	—	(#2.)	(#2.)	—
BM100-H/HC/HS BM160-HB/HC/HS BM250-HB/HC/HS	3P 4P			(#1.)		(#1.)	(#1.)	—
BM100-HBN BM160-SN/HN BM250-SN/HN BMA125-STA/LTA/HTA BMA160-STA/LTA/HTA BMA250-STA/LTA/HTA	3P 4P							
BL160-SN BL250-SN/ CN	3P 4P				—	—	—	—
BM400-SN/HN/CN/ RN/UN BMA400-LTA/HTA/RTA	3P 4P				AX can be installed in AL position			
BL400-SN/HN/RN/UN	3P 4P				AX can be installed in AL position			—
BM630-SN/HN/CN/ RN/UN BM800-CN/SN/HN/RN BMA630-HTA/RTA BMA800-HTA/RTA	3P 4P				AX can be installed in AL position			AX can be installed in AL position
BL630-HN/RN/UN BL800-SN/HN/RN	3P 4P							
BM1000-HS BM1200-HS BM1600-HS	3P				—			—

2P, 125Af and below : Accessories are installed on the right side.

Note:
1. Standard: AL and AX are installed on left side, SHT and UVT are installed on right side.
2. SHT is equipped with coil anti-burn switch.
3. BL series can not do right side installation.
4. UVT of BM30-SN~BM100-HN can not install on its left side.
5. #1 means have no UVT.
6. #2 means only can apply to 4P breakers.

● : AL
○ : AX
▮ : SHT or UVT



BM Series
BL Series
ACC.
DIM.
Curve.
Other

Optional Accessories | Application Table

Rotary Handle

TYPE	Poles	Model
EH-100N	2P、3P、4P	BM30-SN, BM50-CN, BM60-SN/HN, BM100-SN/MN, BL50-SN
EH-125N	2P、3P、4P	BM60-HBN, BM100-HN, BM125-SN/HN, BL100-SN/HN, BMA125-STA/LTA/HTA
EH-250N	3P、4P	BM100-HBN, BM160-SN/HN, BM250-SN/HN, BL160-SN, BL250-SN
EH-250T	2P、3P、4P	BMA160-STA/LTA/HTA, BMA250-STA/LTA/HTA
EH-400N	3P、4P	BM400-SN/HN/RN/UN, BL400-SN/HN/RN/UN, BMA400-LTA/HTA/RTA
EH-800N	3P、4P	BM630-SN/HN/RN/UN, BM800-CN/SN/HN/RN, BL630-HN/RN/UN, BL800-SN/HN/RN, BMA630-HTA/RTA, BMA800-HTA/RTA
EH-250H	3P、4P	BM100-H/HC/HS, BM160-HB/HC/HS, BM250-HB/HC/HS

Extended Rotary Handle

TYPE	Poles	Model
MA-100N	3P、4P	BM30-SN, BM50-CN, BM60-SN/HN, BM100-SN/MN, BL50-SN
MA-125N	3P、4P	BM60-HBN, BM100-HN, BM125-SN/HN, BL100-SN/HN, BMA125-STA/LTA/HTA
MA-250N	3P、4P	BM100-HBN, BM160-SN/HN, BM250-SN/HN, BL160-SN, BL250-SN
MA-250T	3P、4P	BMA160-STA/LTA/HTA, BMA250-STA/LTA/HTA
MA-400N	3P、4P	BM400-SN/HN/RN/UN, BL400-SN/HN/RN/UN, BMA400-LTA/HTA/RTA
MA-800N	3P、4P	BM630-SN/HN/RN/UN, BM800-CN/SN/HN/RN, BL630-HN/RN/UN, BL800-SN/HN/RN, BMA630-HTA/RTA, BMA800-HTA/RTA

Motor Operation Device

TYPE	Poles	Model
MT-100N	3P、4P	BM30-SN, BM50-CN, BM60-SN/HN, BM100-SN/MN, BL50-SN
MT-125N	3P、4P	BM60-HBN, BM100-HN, BM125-SN/HN, BL100-SN/HN, BMA125-STA/LTA/HTA
MT-250N	3P、4P	BM100-HBN, BM160-SN/HN, BM250-SN/HN, BL160-SN, BL250-SN, BMA160-STA/LTA/HTA, BMA250-STA/LTA/HTA
MT-400N	3P、4P	BM400-SN/HN/RN/UN, BL400-SN/HN/RN/UN, BMA400-LTA/HTA/RTA
MT-800N	3P、4P	BM630-SN/HN/RN/UN, BM800-CN/SN/HN/RN, BL630-HN/RN/UN, BL800-SN/HN/RN, BMA630-HTA/RTA, BMA800-HTA/RTA
MT-250E	3P、4P	BM100-H/HC/HS, BM160-HB/HC/HS, BM250-HB/HC/HS

Note：Applicable voltage : ① DC 24V ② AC 110V/ DC 110V ③ AC 230V/ DC 220V

Rear Connection

TYPE	Poles	Model
PGI-100N50	3P	BM30-SN, BM50-CN, BM60-SN/HN, BL50-SN (50A and below), BM50-CN
PGI-100N	3P	BM60-SN/HN, BM100-SN/MN (60A and below)
PGI-125N50	3P	BM60-HBN, BM100-HN, BM125-SN/HN, BL100-SN/HN (50A and below)
	4P	BM100-HN, BM125-SN, BL100-SN/HN (50A and below)
PGI-125N	3P	BM60-HBN, BM100-HN, BM125-SN, BL100-SN/HN (60A and above)
	4P	BM100-HN, BM125-SN, BL100-SN/HN (60A and above)
PGI-250N	3P、4P	BM100-HBN, BM160-SN/HN, BM250-SN/HN, BL160-SN, BL250-SN
PGI-400N	3P、4P	BM400-SN/HN/RN/UN, BL400-SN/HN/RN/UN
PGI-800N	3P、4P	BM630-SN/HN/RN/UN, BM800-CN/SN/HN/RN, BL630-HN/RN/UN, BL800-SN/HN/RN
PGI-BM250	3P	BM100-H/HC/HS, BM160-HB/HC/HS, BM250-HB/HC/HS

Box Lug

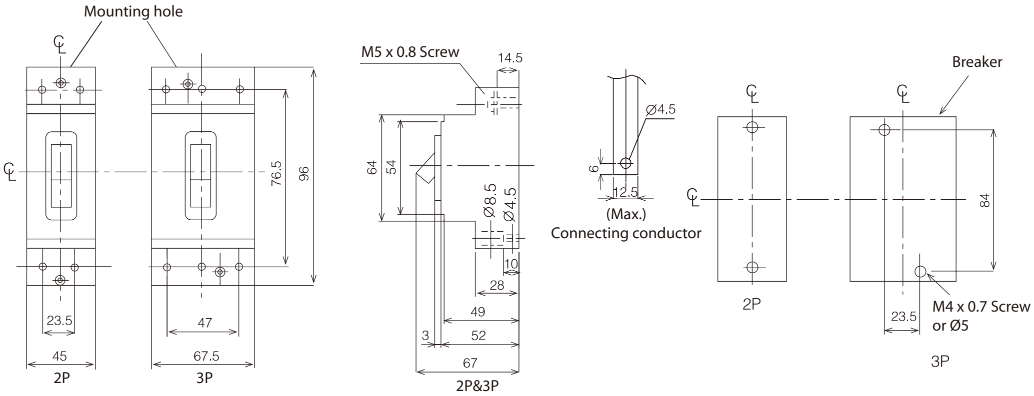
Model	Rated Current	Applicable Breaker	
		MCCB	ELCB
TL-100N	50A	BM30-SN, BM50-CN, BM60-SN*, BM60-HN*, BM100-SN*	BL50-SN
TL-125N	50A	BM60-HBN*, BM100-HN*, BM125-SN*, BM125-HN*	BL100-SN*, BL100-HN*
	125A	BM60-SN**, BM60-HN**, BM60-HBN**, BM100-MN**, BM100-SN**, BM100-HN**, BM125-SN**, BM125-HN**	BL100-SN**, BL100-HN**
TL-250N	50A	BM100-HBN*	–
	100A	BM100-HBN**	–
	250A	BM160-SN, BM160-HN, BM250-CN, BM250-SN, BM250-HN	BL160-SN, BL250-SN
TL-250H	50A	BM100-H*, BM100-HC*, BM100-HS*	–
	100A	BM100-H**, BM100-HC**, BM100-HS**, BM100-HE, BM100-RE, BM100-UE	–
	250A	BM160-HB, BM160-HC, BM160-HS, BM250-HB, BM250-HS, BM160-HE, BM160-RE, BM160-UE, BM250-HE, BM250-RE, BM250-UE	–
TL-400N	400A	BM400-CN, BM400-SN, BM400-HN, BM400-RN, BM400-UN, BM400-HE, BM400-RE, BM400-UE	BL400-SN, BL400-HN BL400-RN, BL400UN
TL-800N	800A	BM630-CN, BM630-SN, BM630-HN, BM630-RN, BM630-UN, BM630-HE, BM630-RE, BM630-UE	BL630-HN, BL630-RN, BL630-UN
		BM800-CN, BM800-SN, BM800-HN, BM800-RN, BM800-SE, BM800-HE, BM800-RE	BL800-SN, BL800-HN BL800-RN
TL-1200H	1200A	BM1000-HS, BM1200-HS, BM1000-SE, BM1000-HE, BM1250-SE, BM1250-HE	–
TL-1600H	1600A	BM1600-HS	–

Torque Table

Model	Rated Current	Screw "A" torque			Screw "A" torque			Applicable wire		Length(mm)	
		N · m	kgf · cm	lb · in	N · m	kgf · cm	lb · in	ISO	AWG / MCM	L1	L2
TL-100N	50A	2~3	20~30	17.5~26.5	2*~3	20*~30	17*~27	2.5~16 mm²	14 AWG~6 AWG	14	–
TL-125N	50A	3.9~4.9	40~50	35~43.5							
	125A	4.9~6.9	50~70	43.5~61	6	61	53	10~50 mm²	8 AWG~1 AWG		
TL-250N	50A	4.9~6.9	50~70	43.5~61	2*~3	20*~30	17*~27	2.5~16 mm²	14 AWG~6 AWG	21	–
	100A				6	61	53	10~50 mm²	8 AWG~1 AWG		
	250A				15	153	133	50~120 mm²	1 AWG~250 AWG		
TL-250H	50A				2*~3	20*~30	17*~27	2.5~16 mm²	14 AWG~6 AWG		
	100A				6	61	53	10~50 mm²	8 AWG~1 AWG		
	250A				15	153	133	50~120 mm²	1 AWG~250 AWG		
TL-400N	400A	40~50	400~500	350~440	31	316	275	120~240 mm²	250 AWG~500 AWG	30	–
TL-800N	800A										
TL-1200H	1200A										60
TL-1600H	1600A	22.5~37.2	230~380	200~330							

Dimension of circuit breaker

BM30-CN



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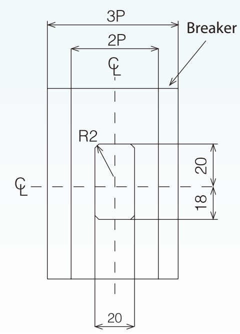
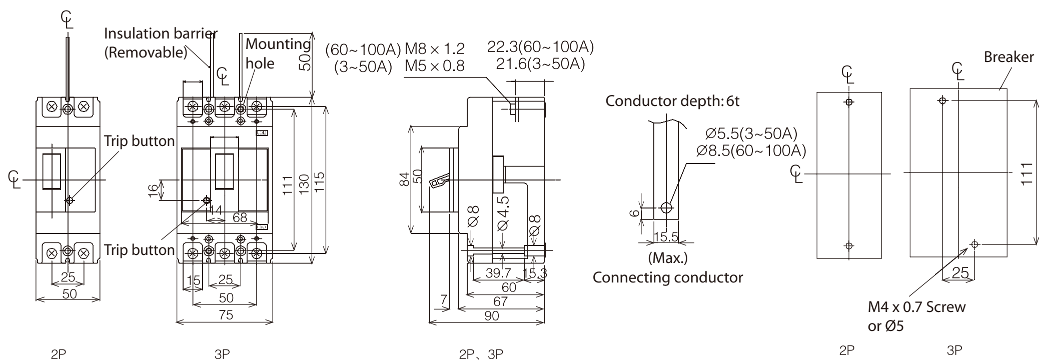


BM30-SN, BM50-CN, 60-SN/HN, 100-SN



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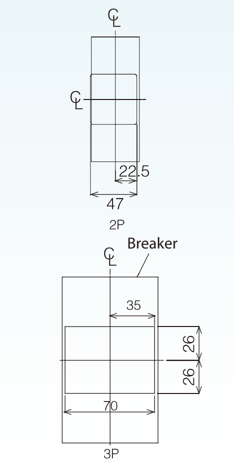
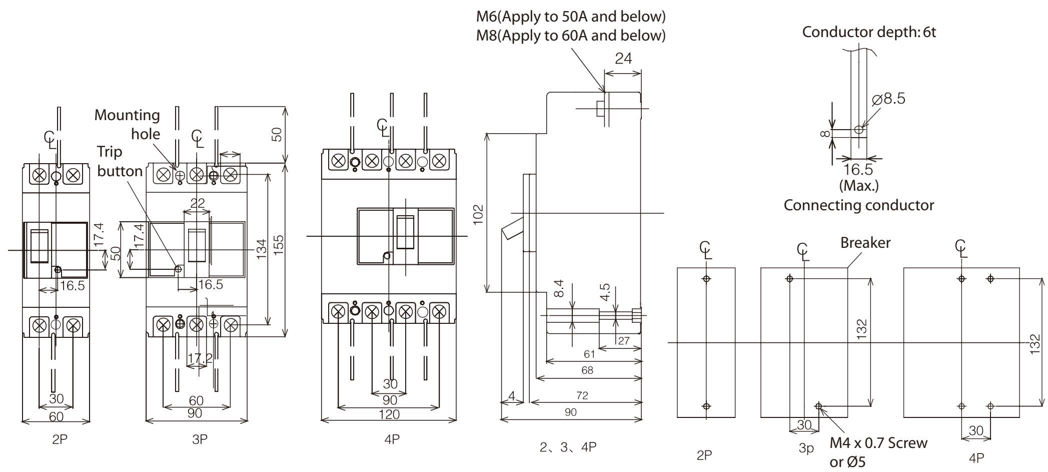


BM60-HBN, BM100-HN, BM125-SN/NH



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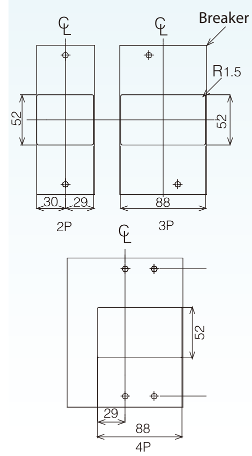
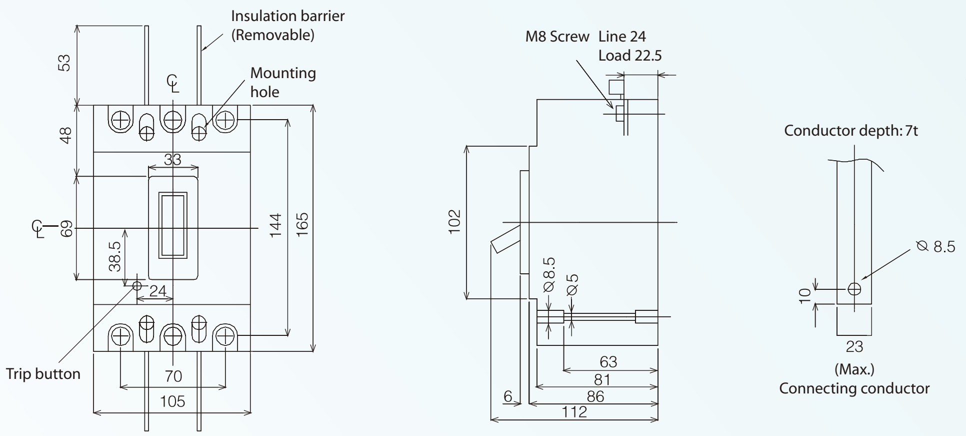


BM100-H/HC/HS, BM160HB/HC/HS, BM250-HB/HC/HS



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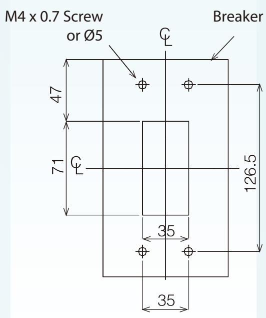
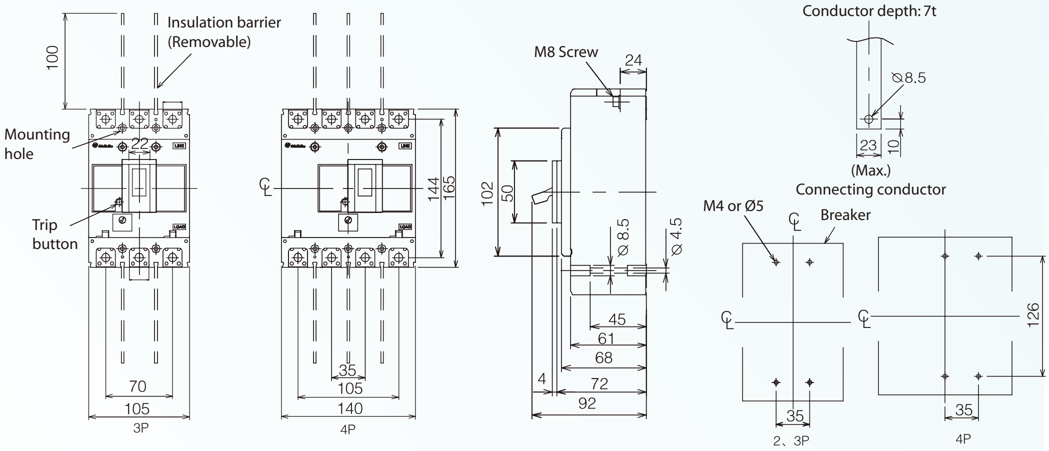


BM100-HBN, BM160-SN/HN, BM250-SN/HN



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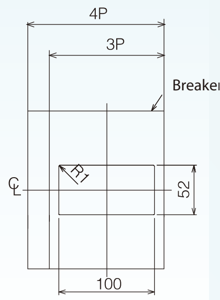
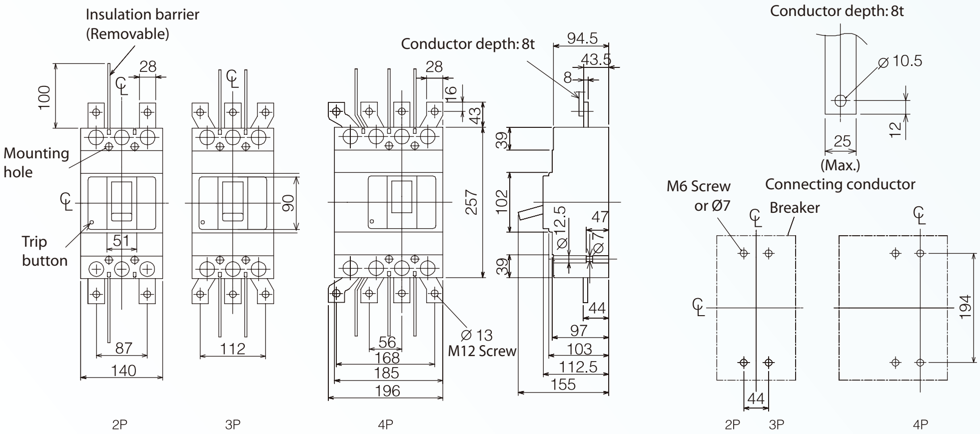


BM400-SN/HN/RN/UN



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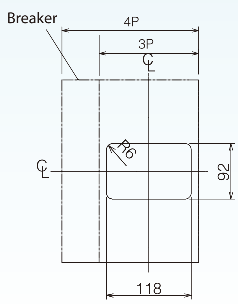
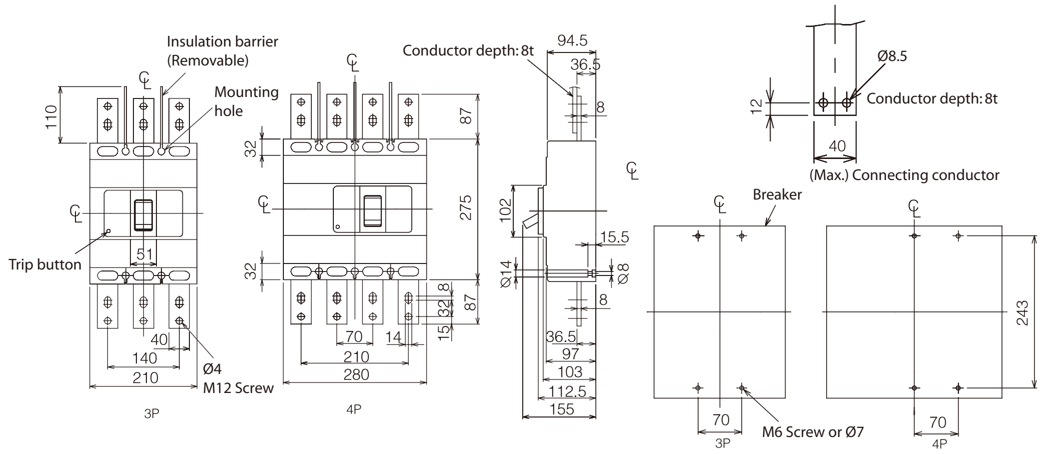


Dimension of circuit breaker

BM630-SN/HN/RN/UN



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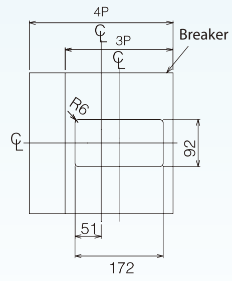
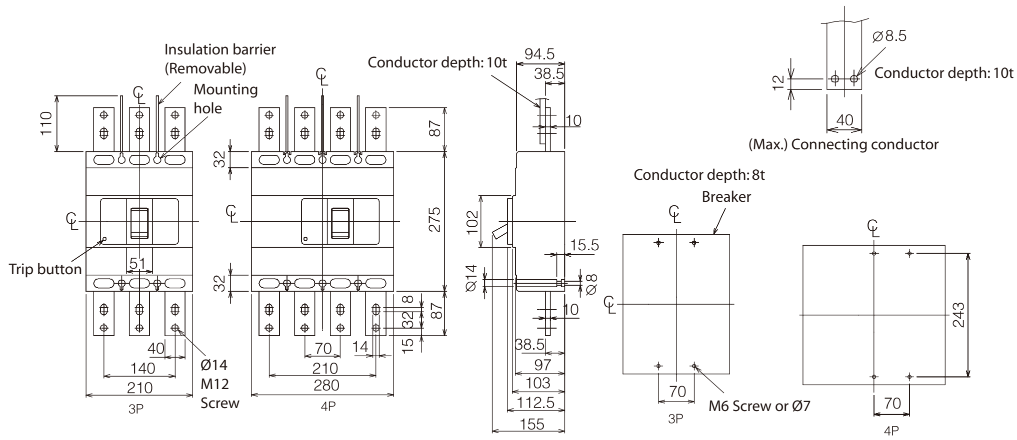
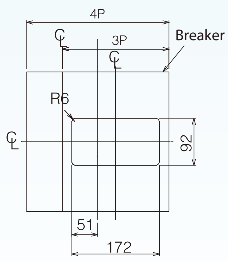


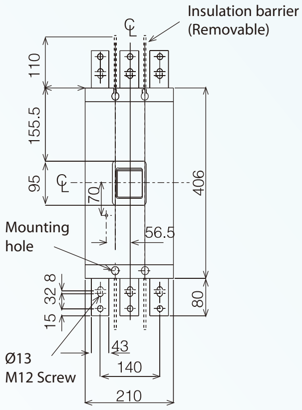
BM800-CN/SN/HN/RN

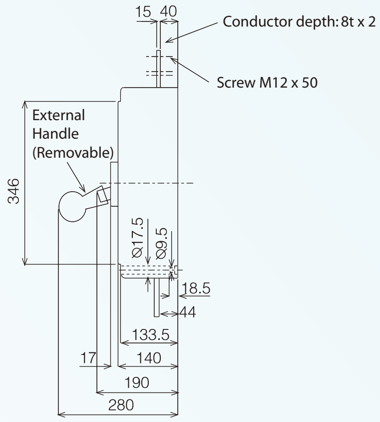


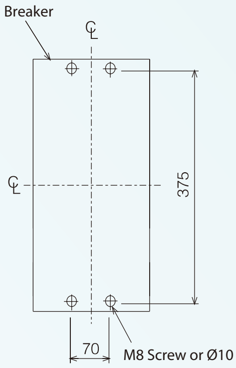
Panel cut



BM1000-HS, BM1200-HS







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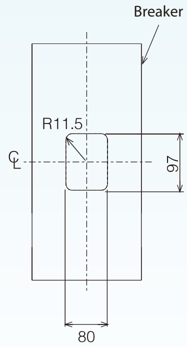
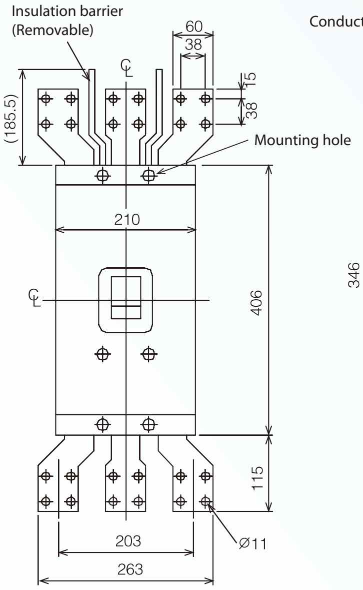
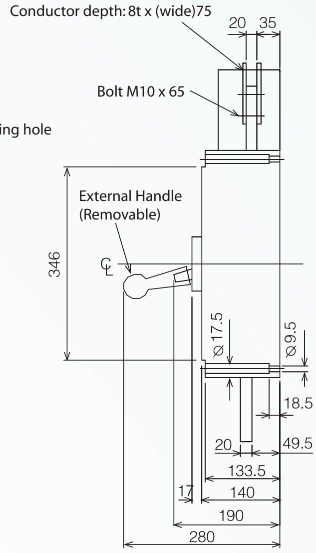
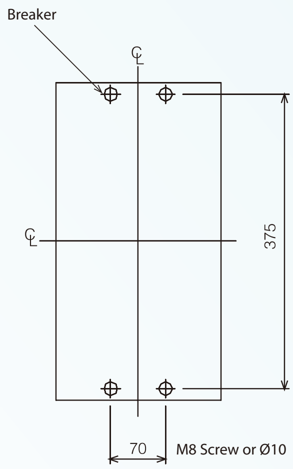


BM1600-HS







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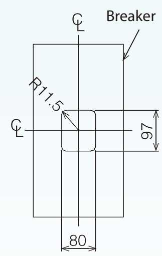
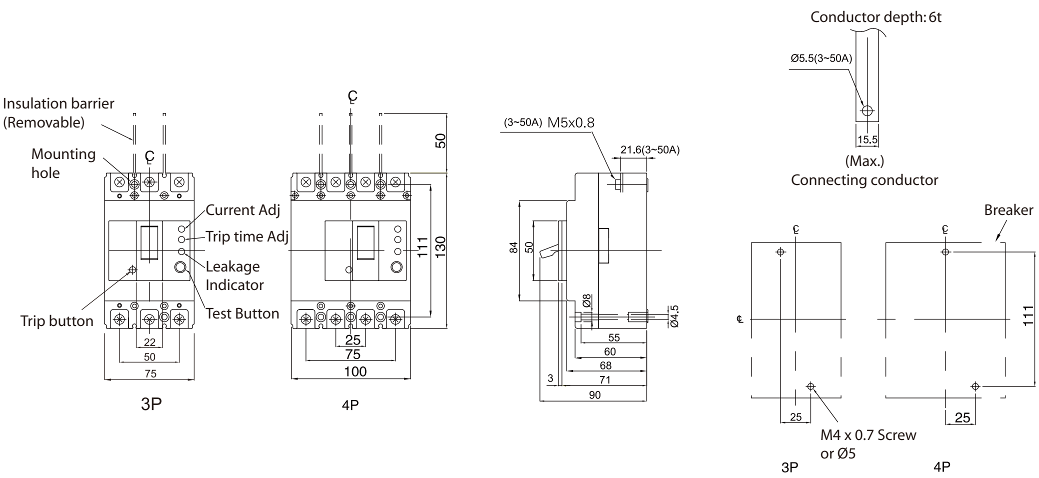


Dimension of circuit breaker

BL50-SN



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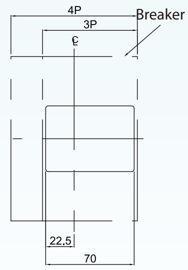
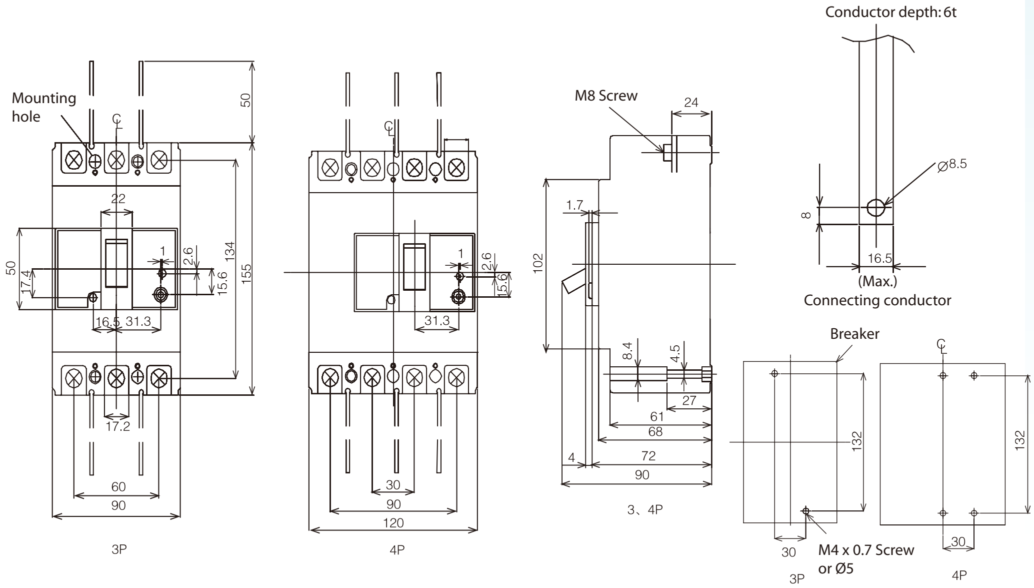


BL100-SN/HN



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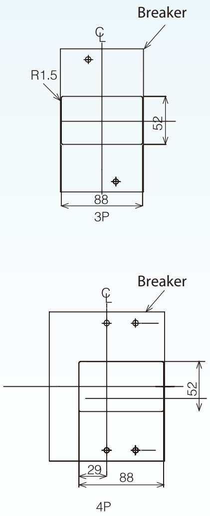
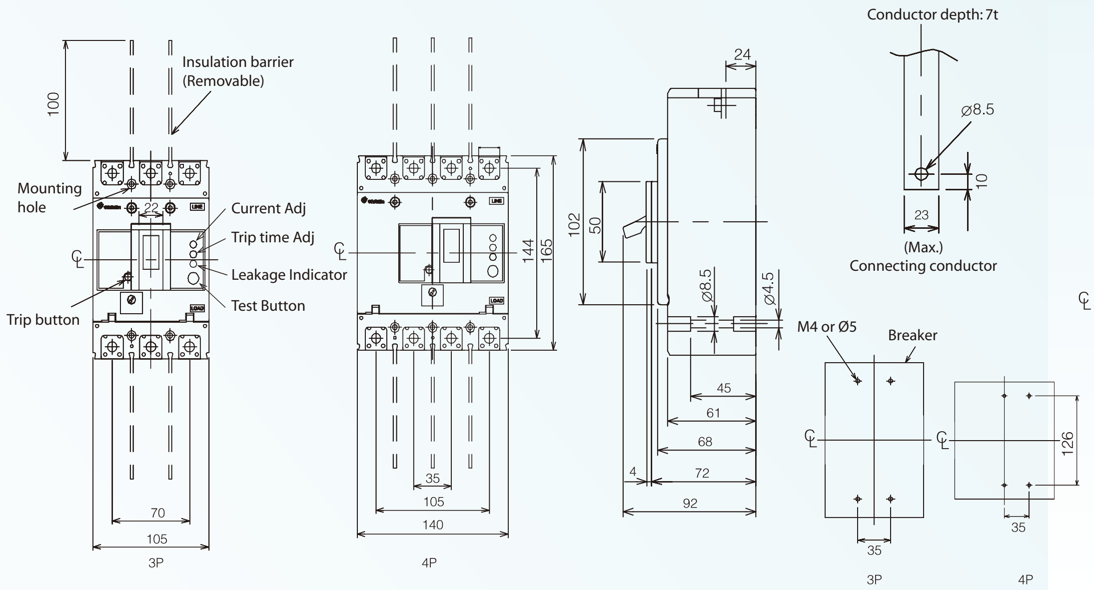


BL160-SN, BL250-SN



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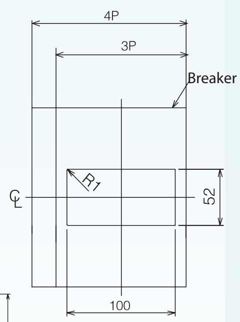
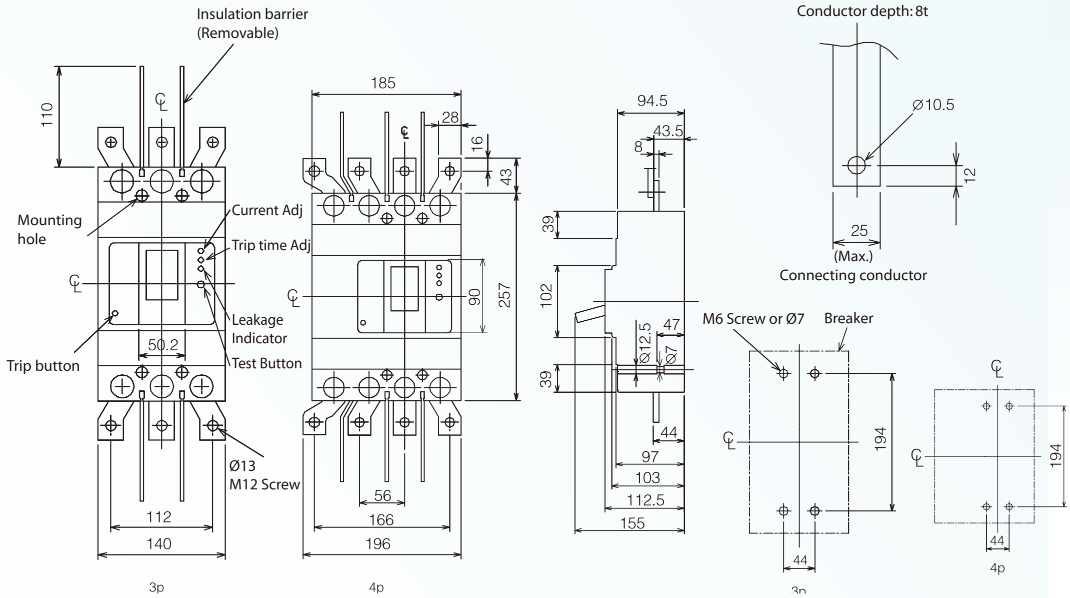


BL400-SN/HN/RN/UN



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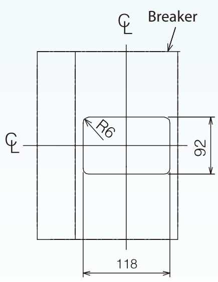
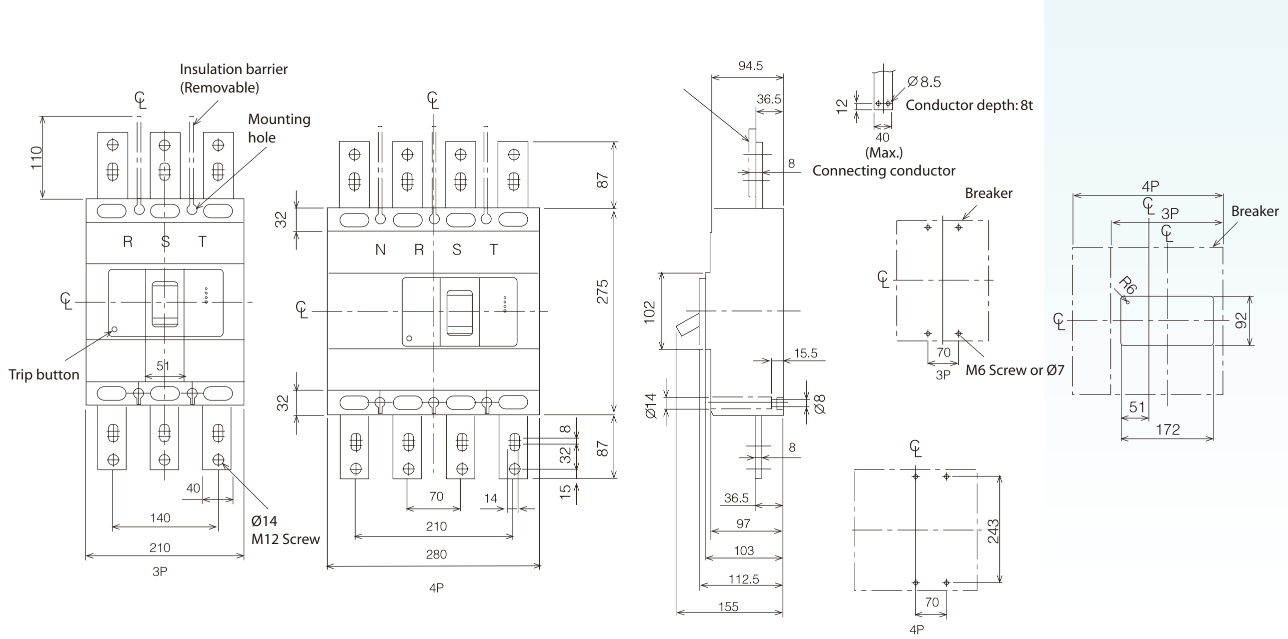


Dimension of circuit breaker

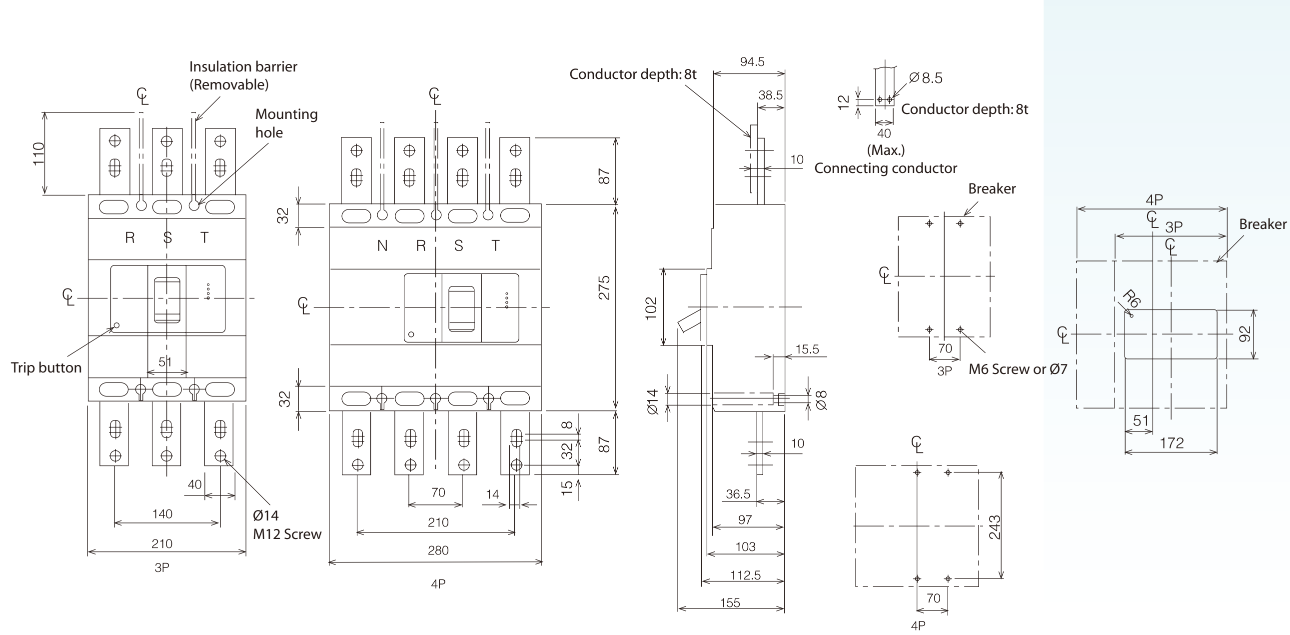
BL630-HN/RN/UN

Panel cut



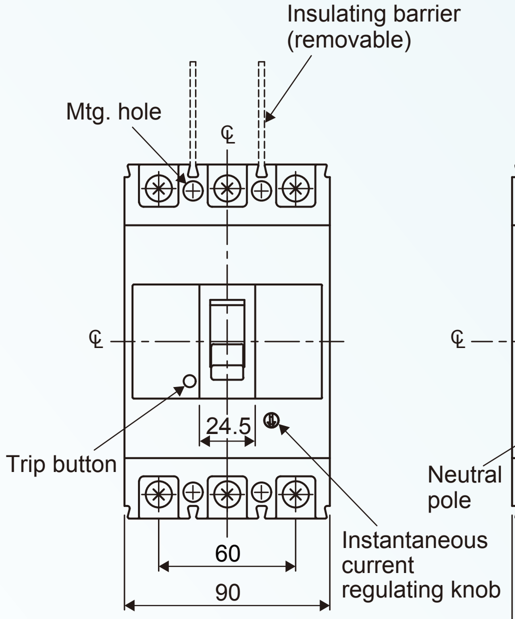
BL800-SN/HN/RN

Panel cut

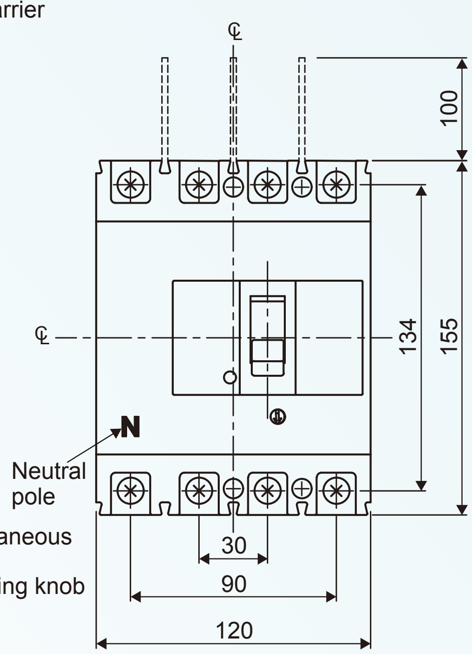


Dimension of circuit breaker

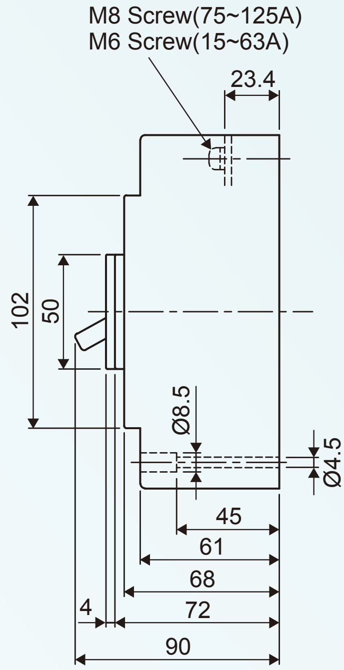
BMA125-STA / LTA / HTA

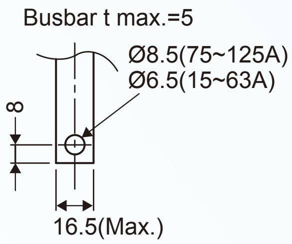


2-pole 3-pole



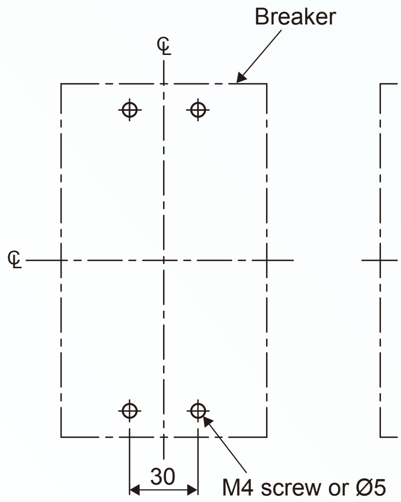
4-pole



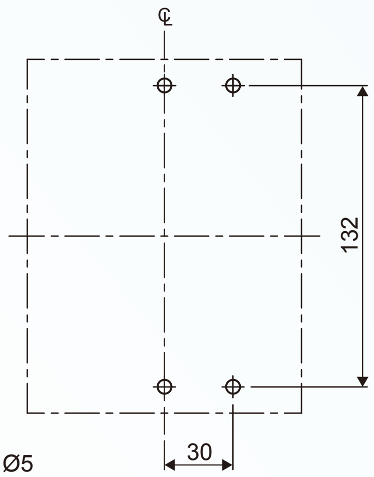


Bus drilling for
direct connection

Mounting

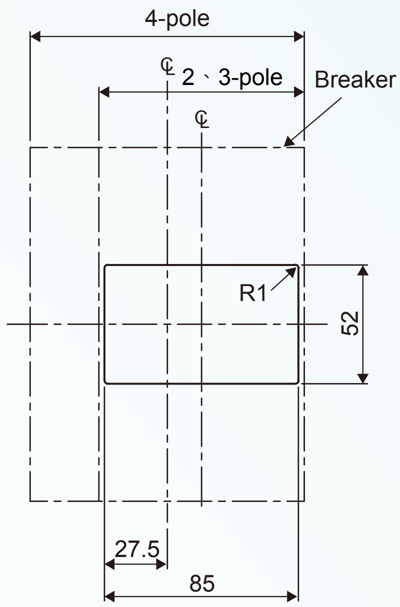


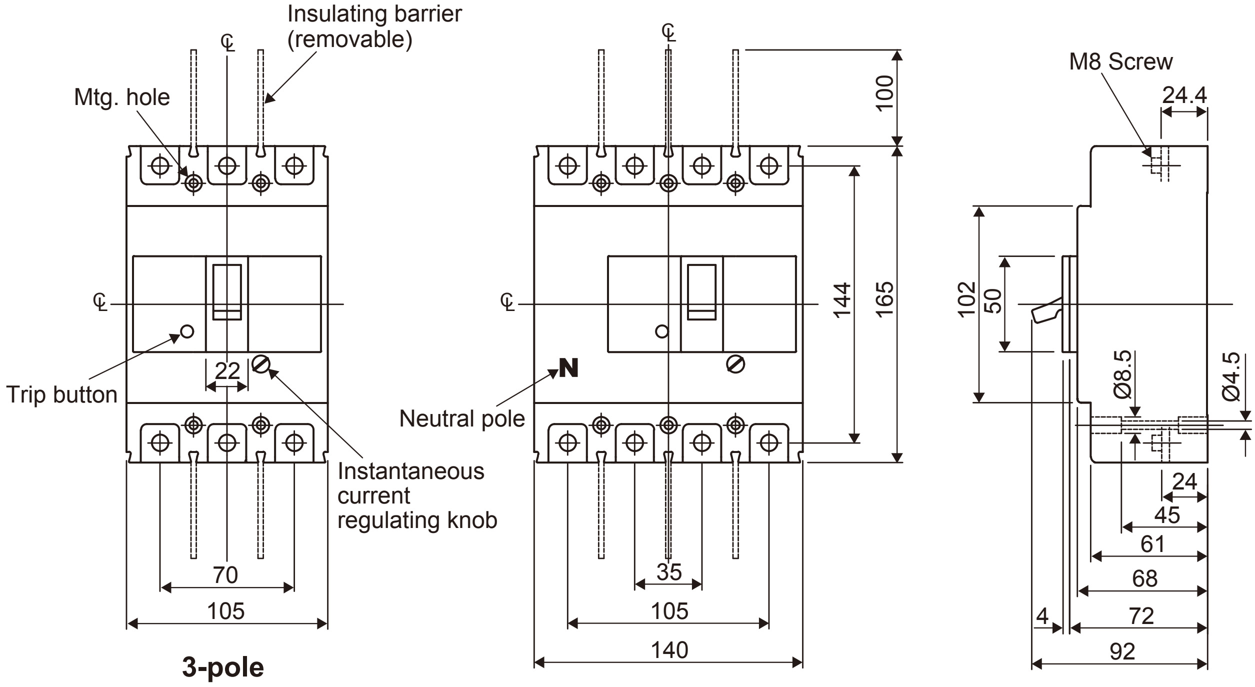
2-pole 3-pole



4-pole

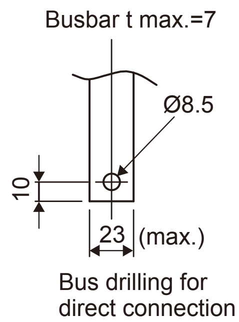
Panel cut



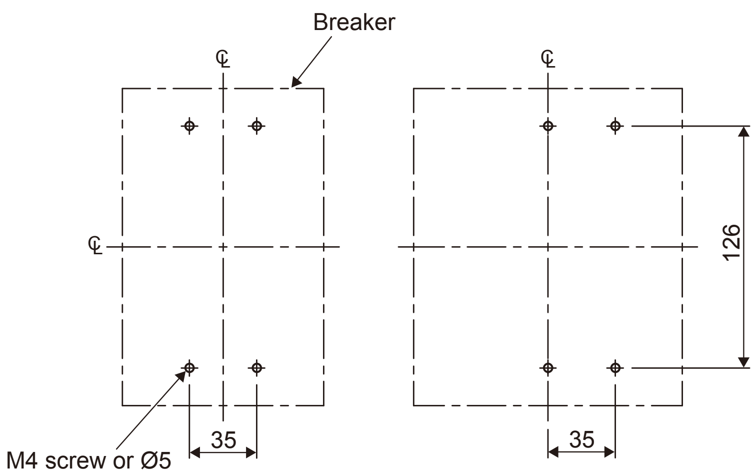


3-pole

4-pole



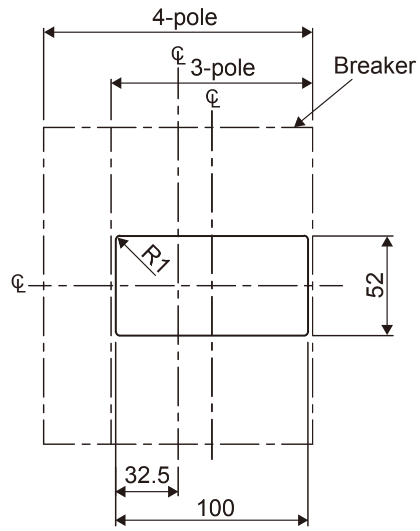
Mounting



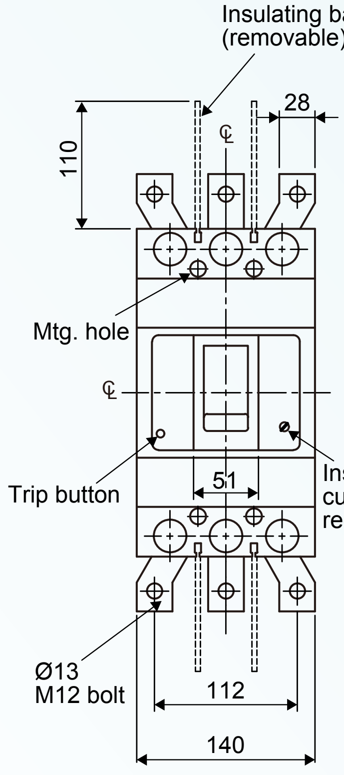
3-pole

4-pole

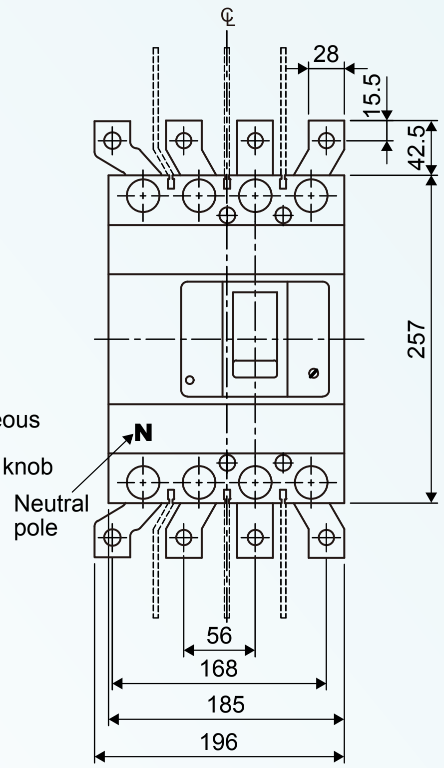
Panel cut



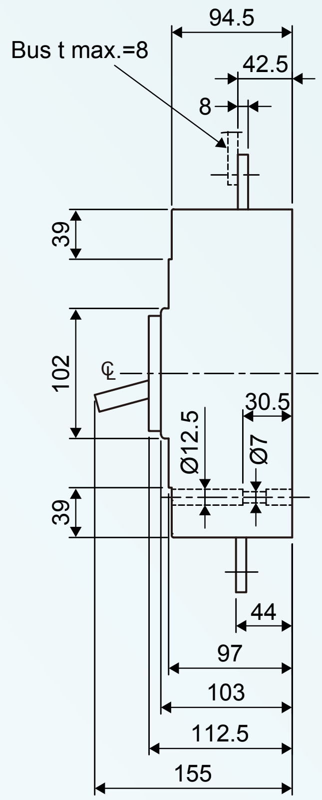
BMA400-LTA / HTA / RTA

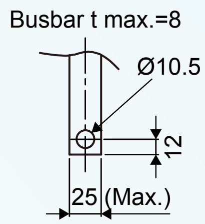


3-pole



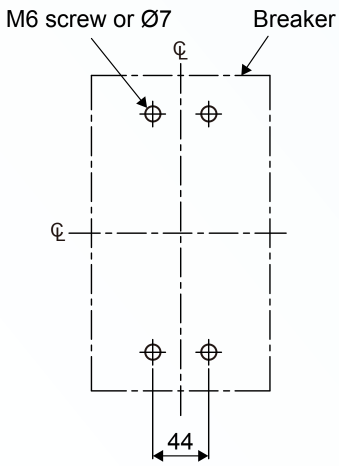
4-pole



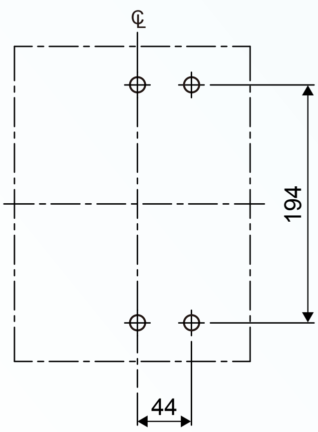


Bus drilling for direct connection

Mounting

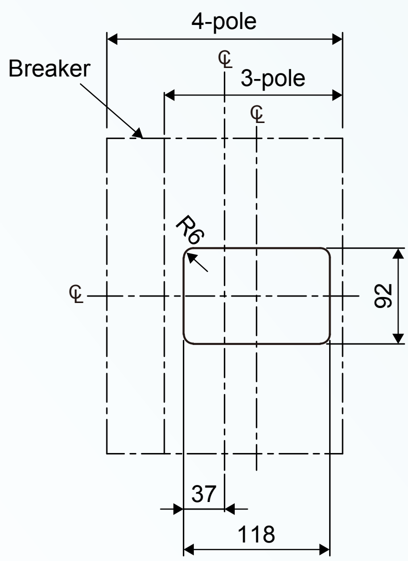


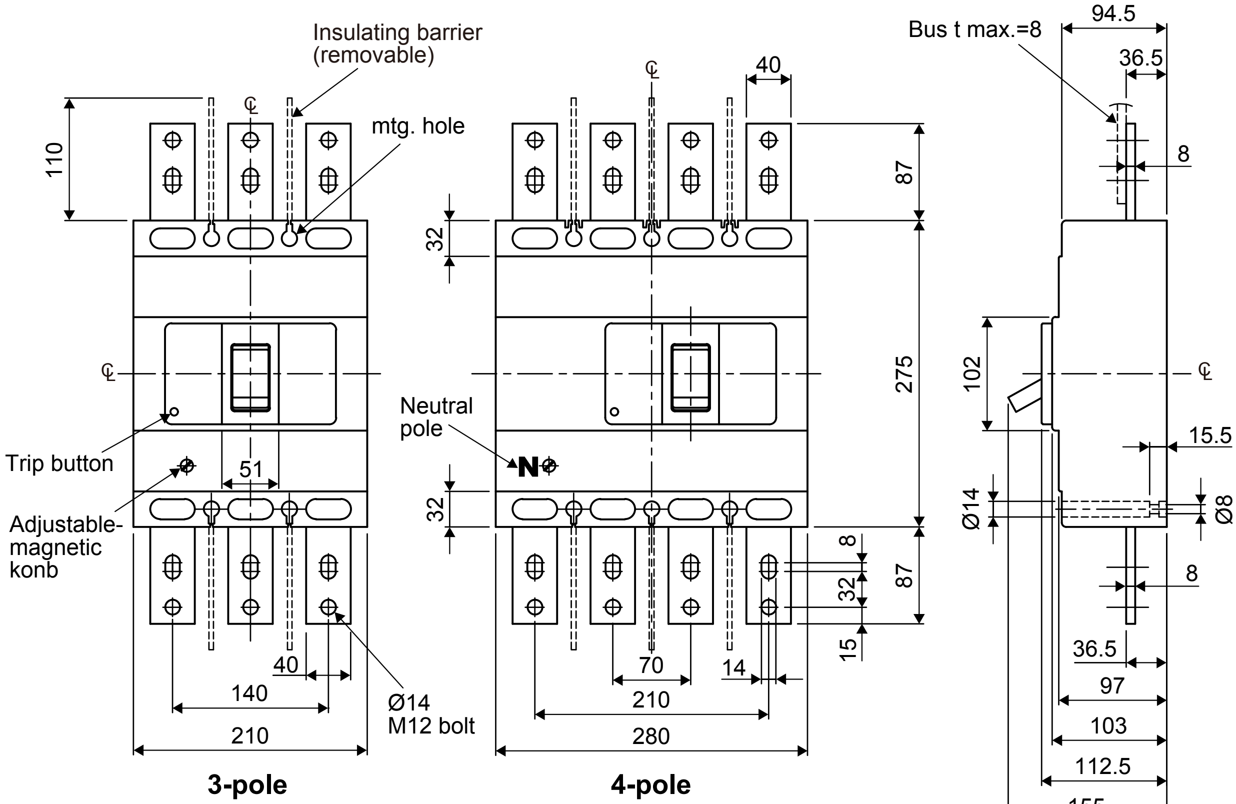
3-pole

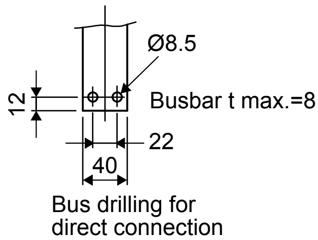


4-pole

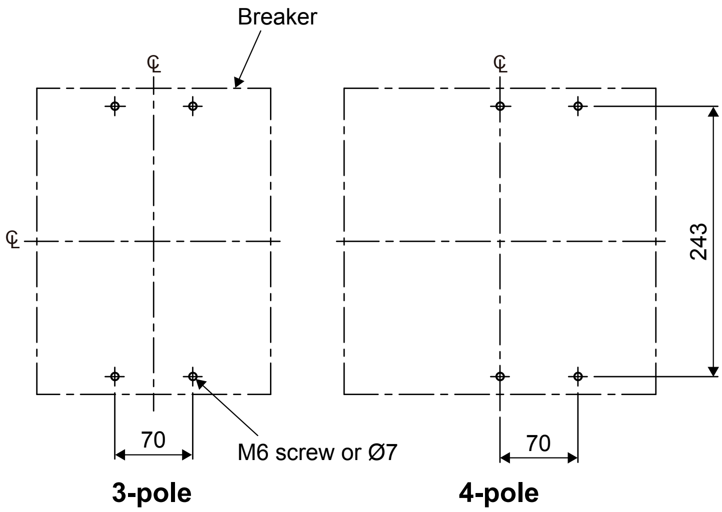
Panel cut



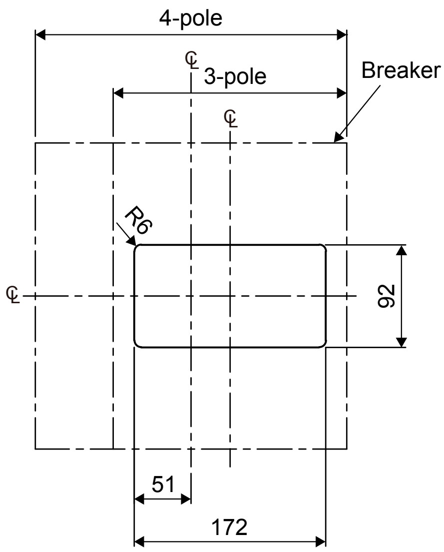




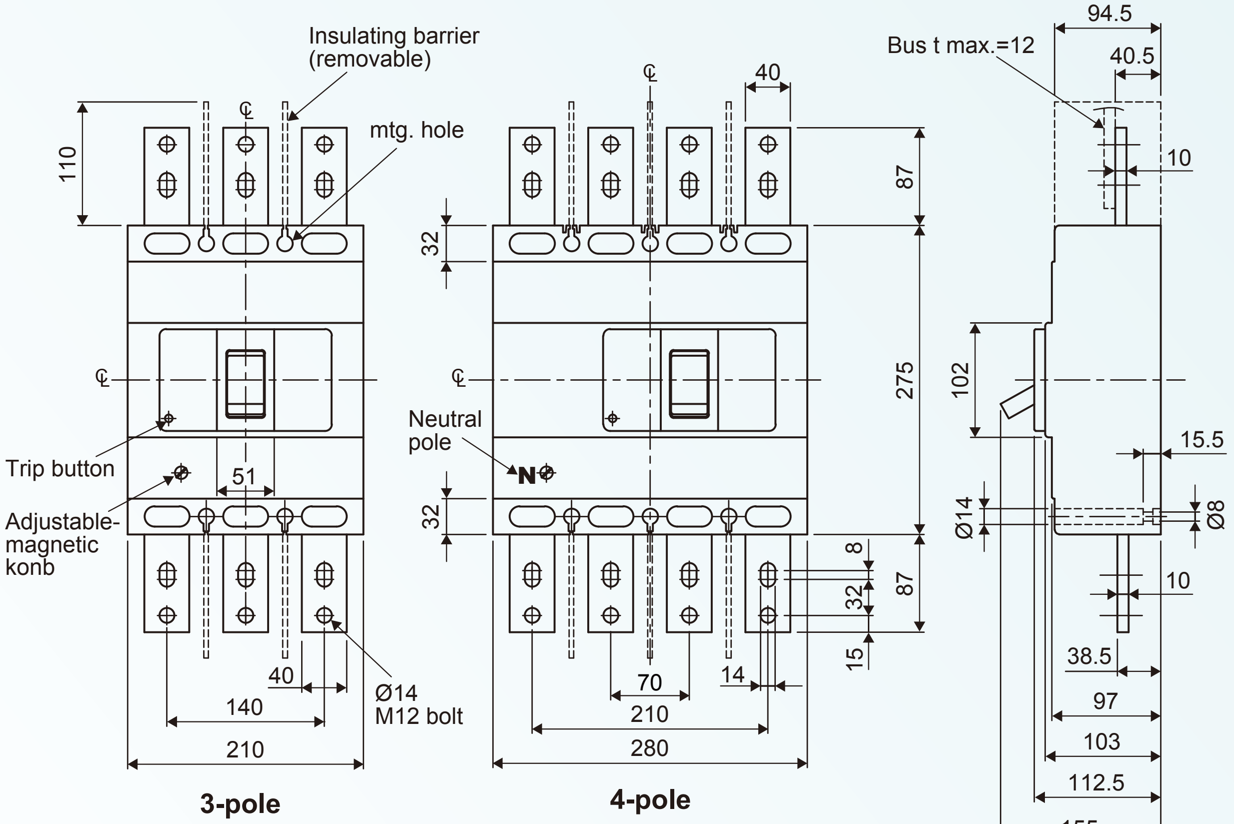
Mounting

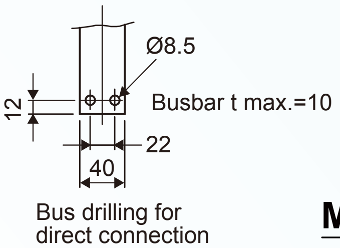


Panel Cut

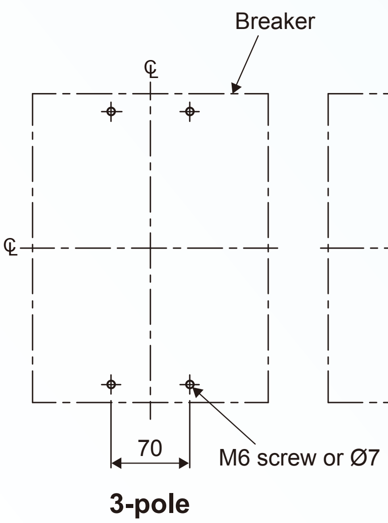


BMA800-RTD / HTD

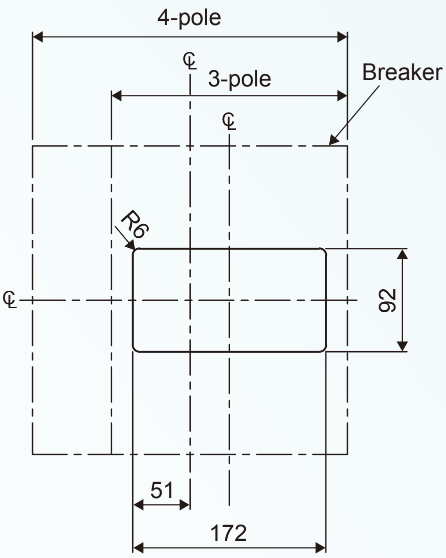




Mounting



Panel Cut



Optional Accessories | Dimensions

Rotary Handle

Type	Poles	fig.1			fig.2			fig.3		
		A	B	C	D	E	F	G	H	J
EH-100N	2P、3P、4P	104	105	39	90	78	10	*25	111	
EH-125N	2P、3P、4P	104	105	39	90	78	10	*30	132	
EH-250N	3P, 4P	104	105	39	90	78	10	35	126	
EH-250T	3P, 4P	104	105	39	90	78	10	35	126	M4 screw or ø5
EH-400N	3P, 4P	150	183	53	108	112	10	44	194	
EH-800N	3P, 4P	150	183	53	108	112	10	70	243	
EH-250H	3P, 4P	104	125	39	90	78	10	35	126.5	

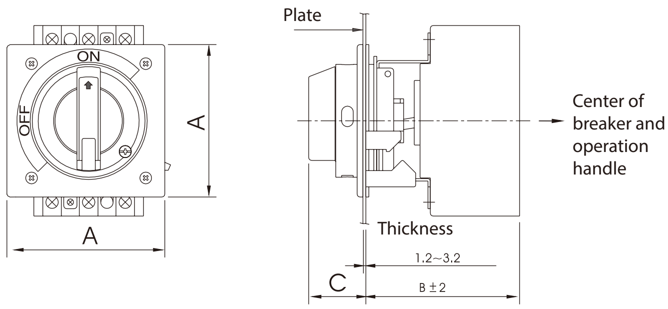
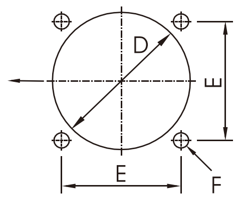
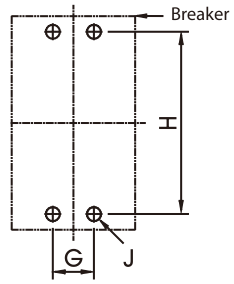


Fig. 1



Panel Dimension
Fig. 2



Breaker Dimension
Fig. 3

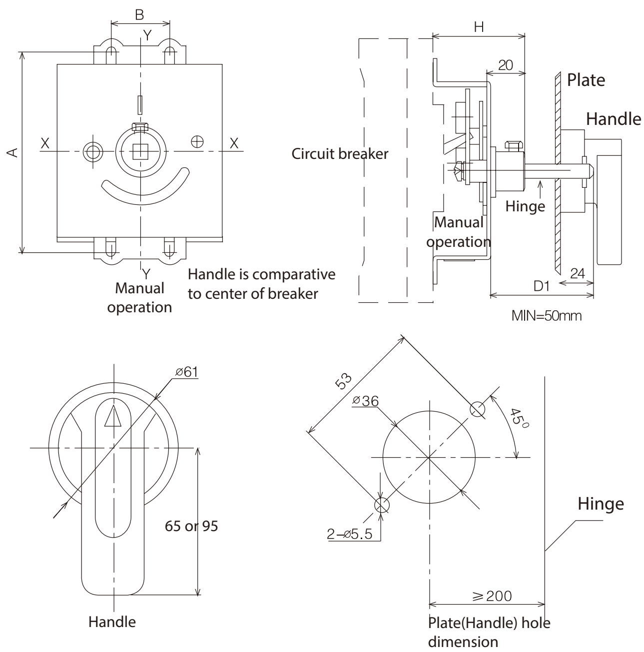
Note: 1. Standard: White, optional: Black.
2. Optional for dust and water protection.
3. L: long type, EH100NL & EH125NL can not install to 2P.
4. * indicates the value is not applied to 2P model.

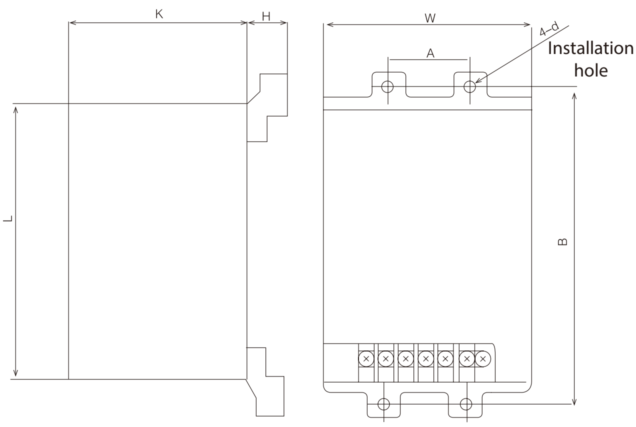
Extended Rotary Handle

Type	Dimensions (mm)			
	A	B	H	Y
MA-100N	111	25	53.5	+8
MA-125N	132	30	54	+8
MA-250N	146	35	56	0
MA-250T	146	35	55	0
MA-400N	221	45	85	+10
MA-800N	242	70	85	+10

Motor Operation Device

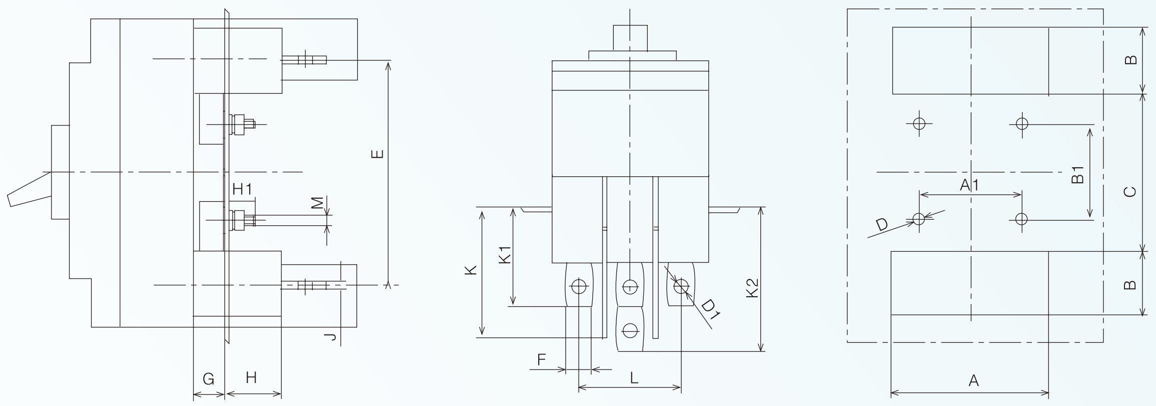
Type	Dimensions (mm)						
	A	B	d	H	K	L	W
MT-100N	25	111	ø4.5	16.5	79	102	74
MT-125N	30	132	ø4.5	15	77	116	90
MT-250N	30	126	ø4.5	15	77	116	90
MT-400N	44	194	ø4.5	36	115	176	130
MT-800N	70	234	ø4.5	36	115	176	130
MT-250E	30	126	ø4.5	15	77	116	90





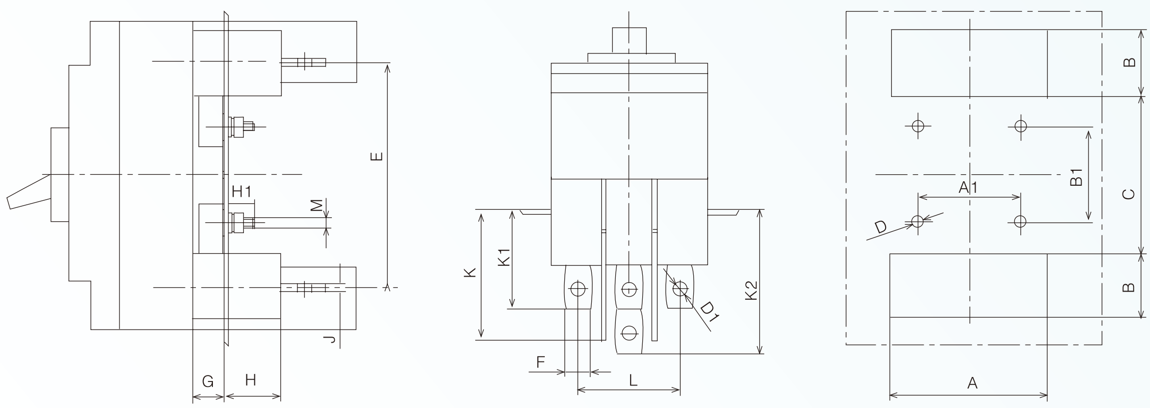
Rear Connection

Type	Poles	Dimensions (mm)																		Connect Direction	
		A	A1	B	B1	C	D	D1	E	F	G	H	H1	J	K	K1	K2	L	M	Horizontal	Vertical
PGI-100N	3	74	50	24	58	90	ø5	/	116	M10	9.5	28	12	M10	/	62	122	50	M4	◎	◎
	4	99	75															75			
PGI-125N	3	92	60	30	70	104	ø6	/	134	M10	13	26	16	M10	/	62	122	60	M5	◎	◎
	4	122	90															90			
PGI-250N	3	107	70	38	76	106	ø6	ø10	144	25	13	34	15	6	/	79	134	70	M5	◎	◎
	4	142	105															105			
PGI-400N	3	137	44	50	135	175	ø10	ø13	225	28	18	40	24	8	120	79	/	44	M8	◎	◎
	4	181	88															88			
PGI-800N	3	212	140	57	143	185	ø10	ø13	243	44	17	53	20	11	/	146	/	140	M8	◎	◎
	4	282	210															210			



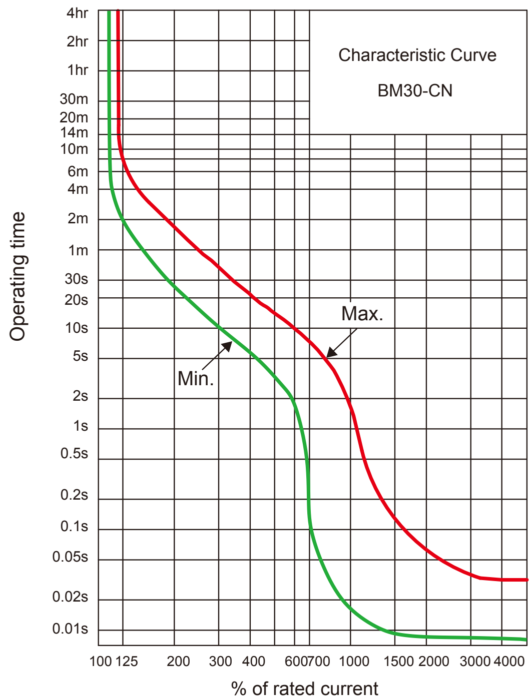
Rear Connection

Type	Poles	Dimensions (mm)																		Connect Direction	
		A	A1	B	B1	C	D	D1	E	F	G	H	H1	J	K	K1	K2	L	M	Horizontal	Vertical
PGI-BM250	3	107	70	38	76	106	ø6	ø10	144	25	13	34	15	6	/	79	134	70	M5	◎	◎

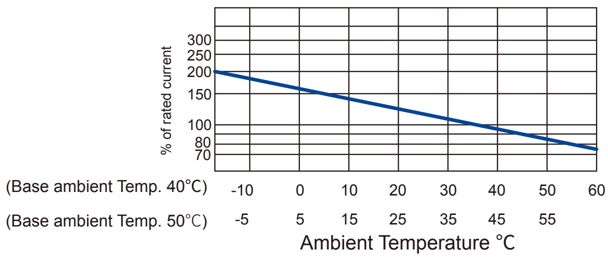


Tripping Characteristic Curve

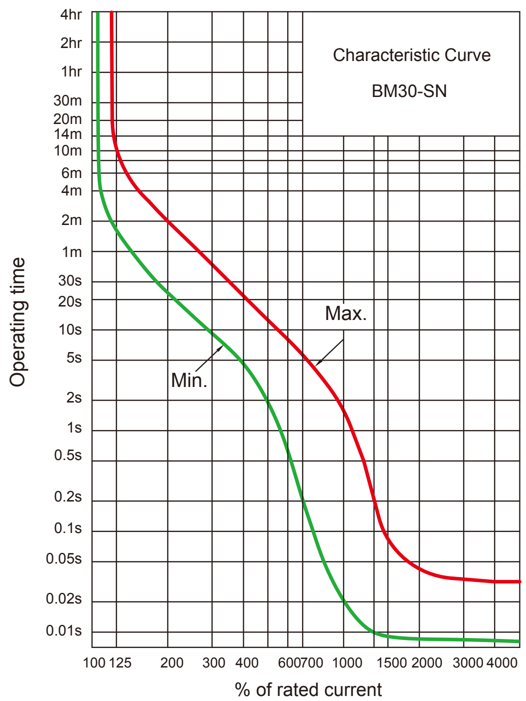
BM30-CN



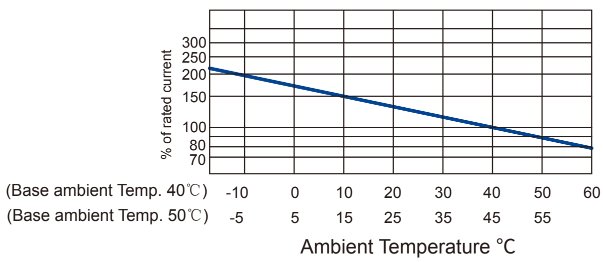
Compensation Curve



BM30-SN

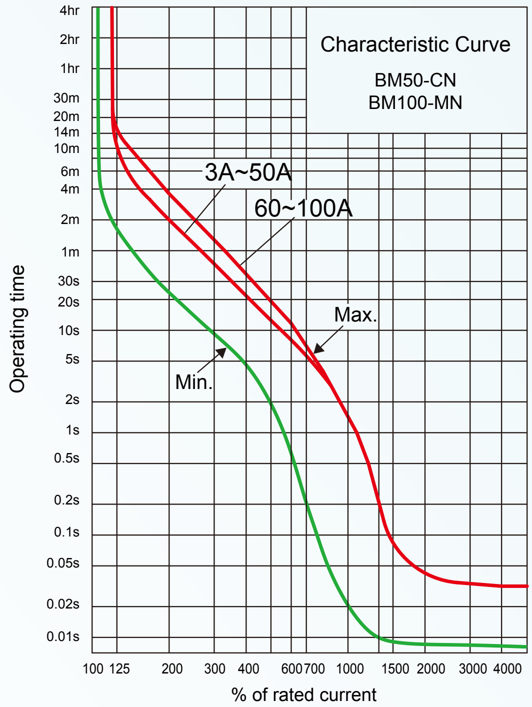


Compensation Curve

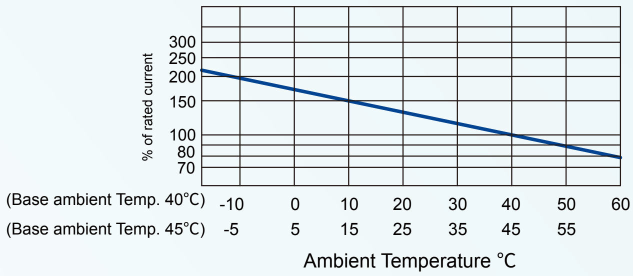


Tripping Characteristic Curve

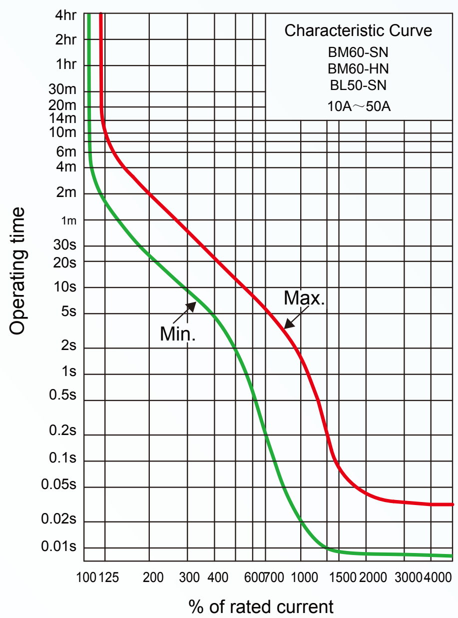
BM50-CN BM100-MN

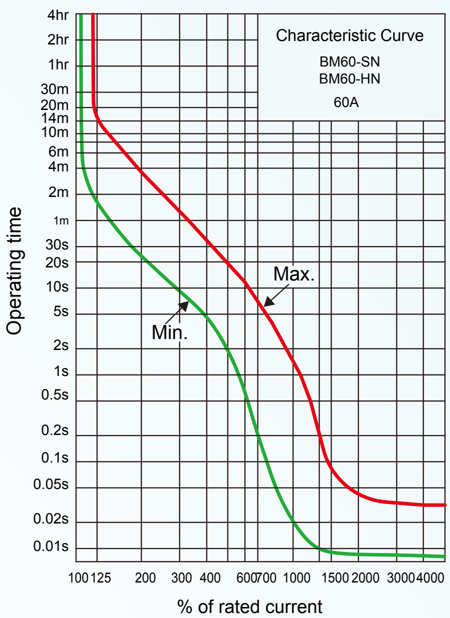


Compensation Curve

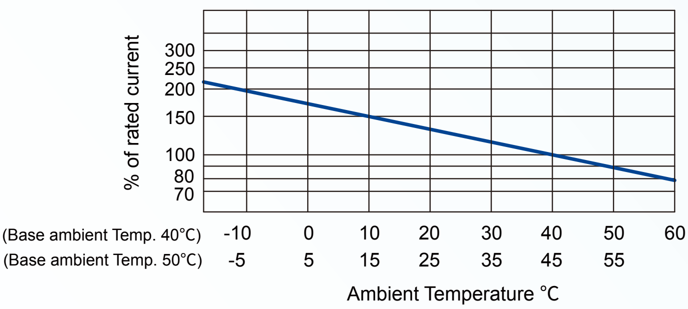


BM60-SN、BM60-HN、BL50-SN



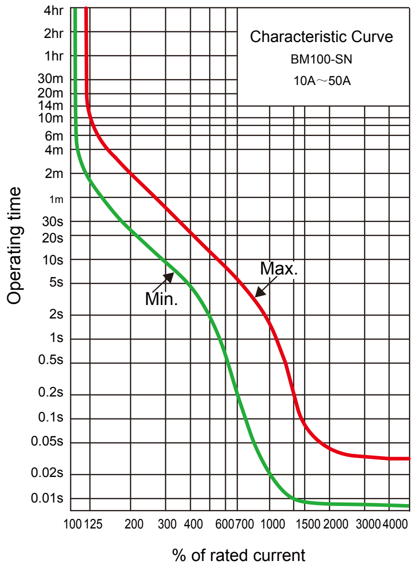


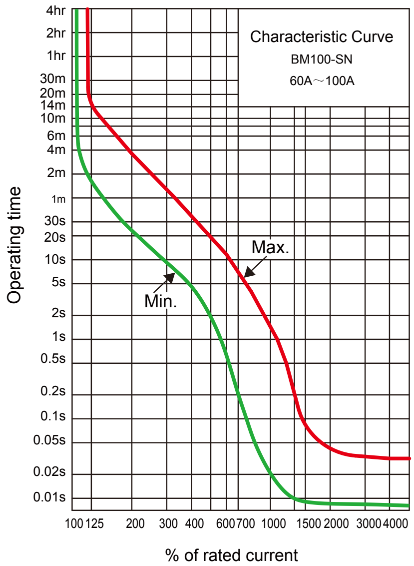
Compensation Curve



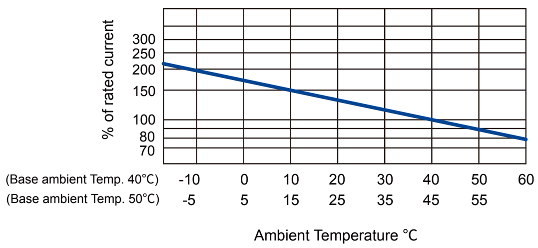
Tripping Characteristic Curve

BM100-SN

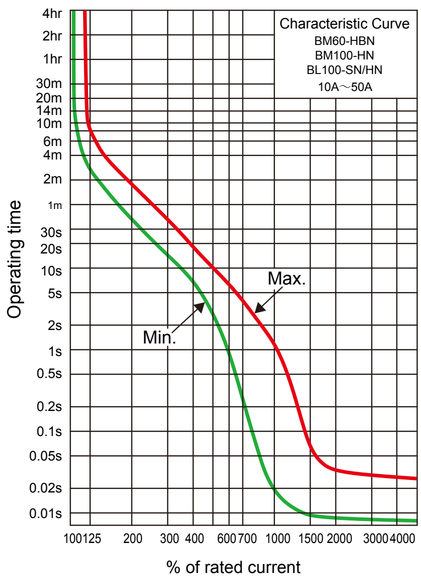


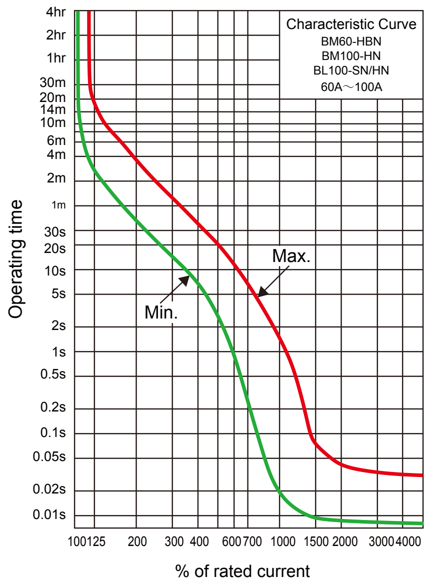


Compensation Curve

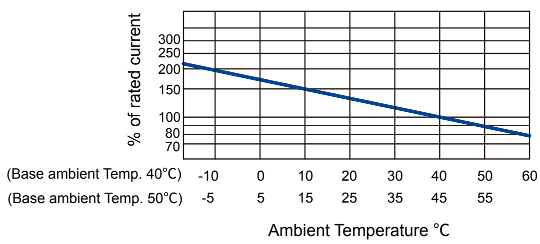


BM60-HBN、BM100-HN、BL100-SN/HN



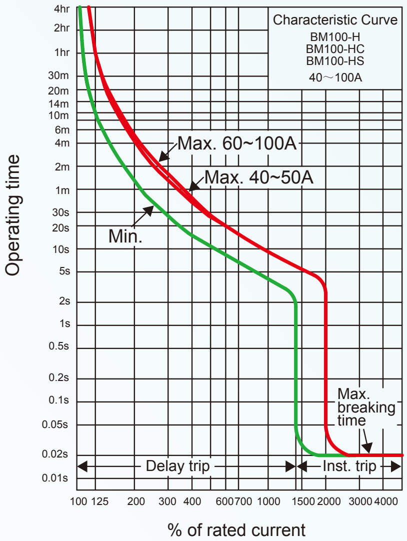


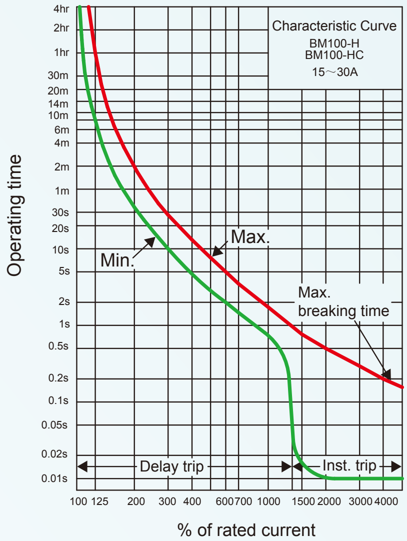
Compensation Curve



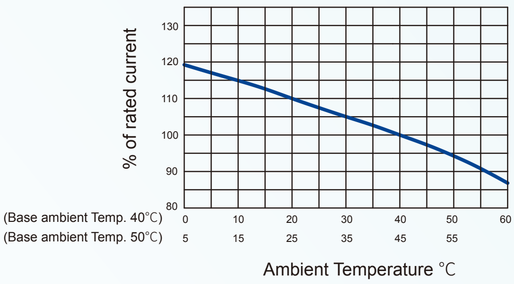
Tripping Characteristic Curve

BM100-H、BM100-HC、BM100-HS

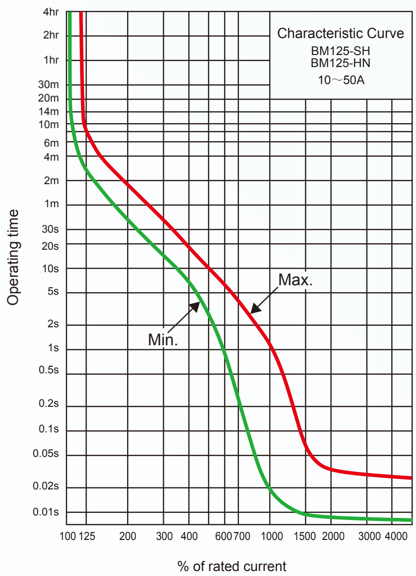


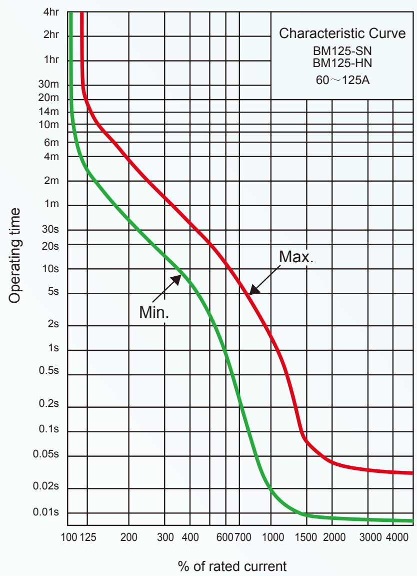


Compensation Curve

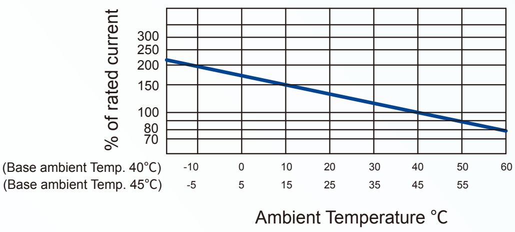


BM125-SN/HN



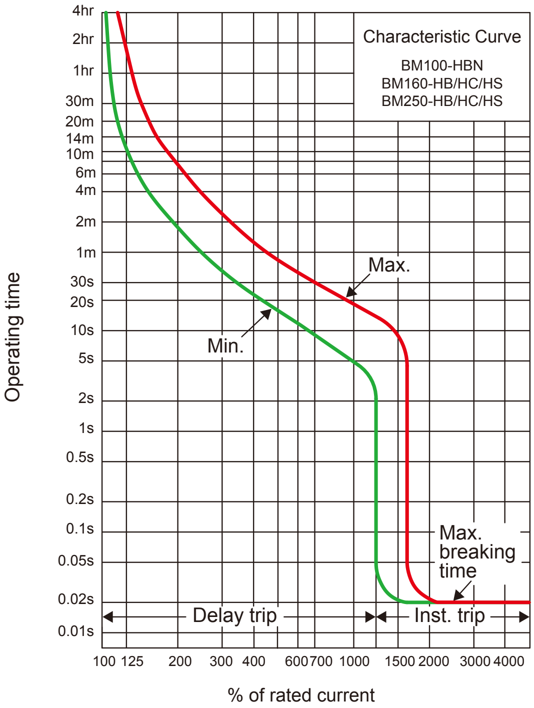


Compensation Curve

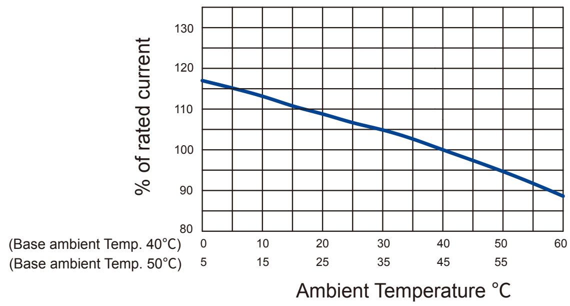


Tripping Characteristic Curve

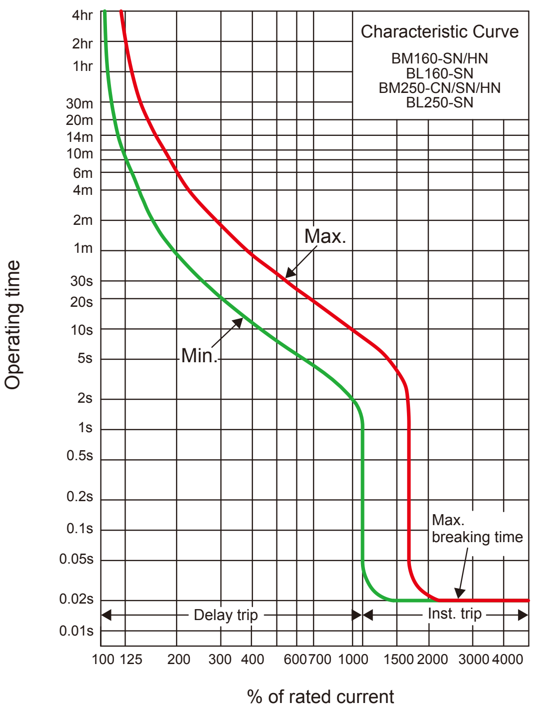
BM100-HBN BM160-HB/HC/HS、BM250-HB/HC/HS



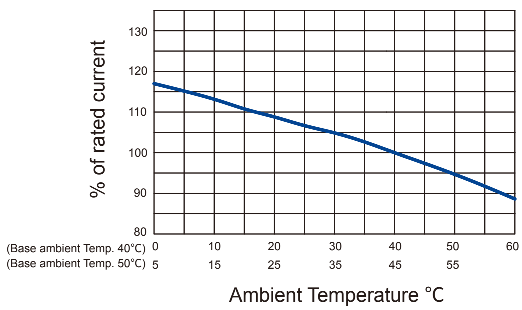
Compensation Curve



BM(BL)160-SN/HN、BM(BL)250-CN/SN/HN

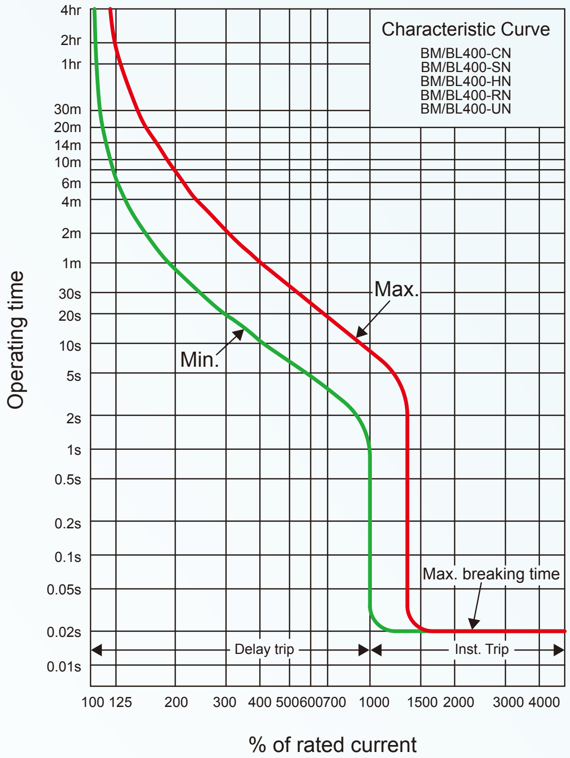


Compensation Curve

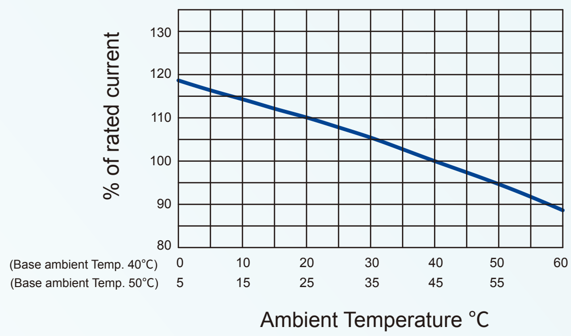


Tripping Characteristic Curve

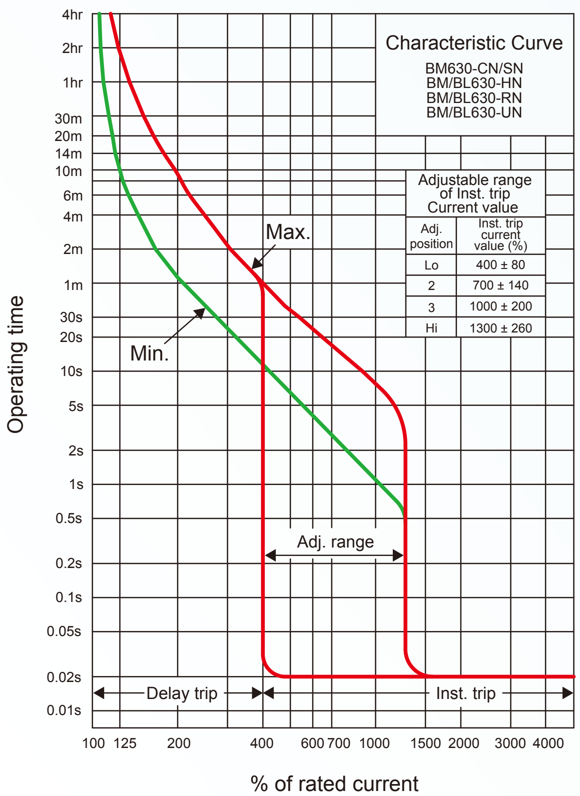
BM(BL)400-CN/SN/HN/RN/UN



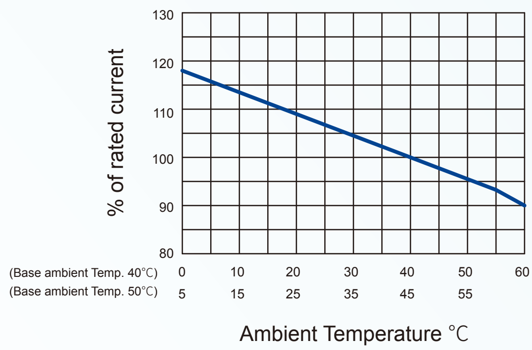
Compensation Curve



BM(BL)630-CN/SN/HN/RN/UN



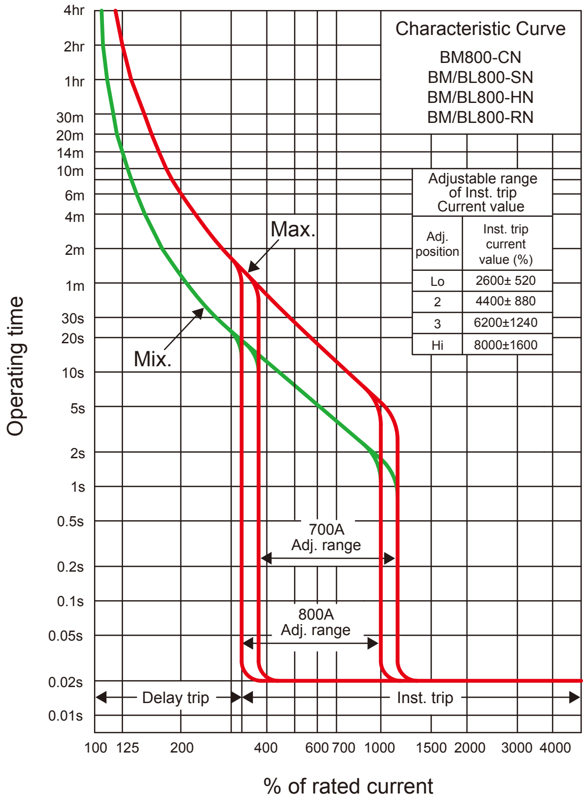
Compensation Curve



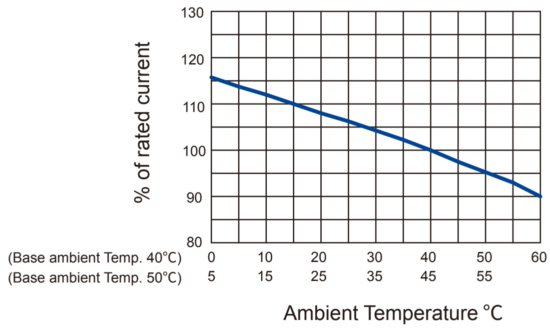
BM Series
BL Series
ACC.
DIM.
Curve.
Other

Tripping Characteristic Curve

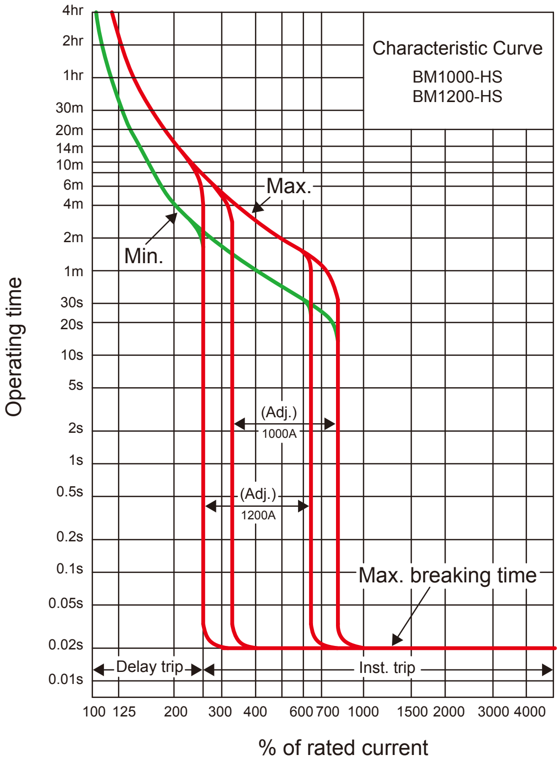
BM(BL)800-CN/SN/HN/RN



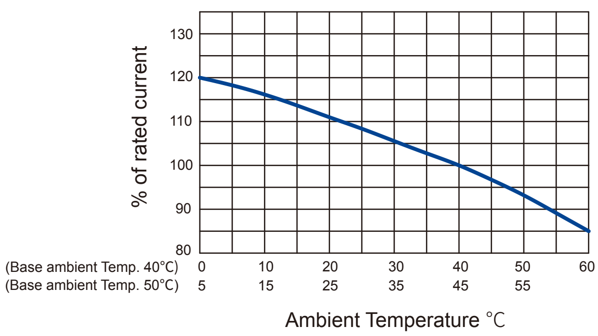
Compensation Curve



BM1000-HS、BM1200-HS

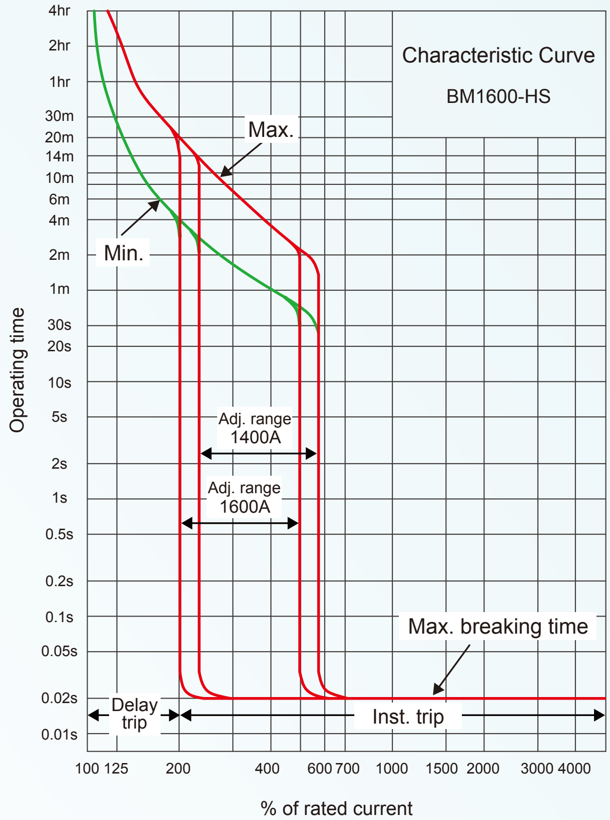


Compensation Curve

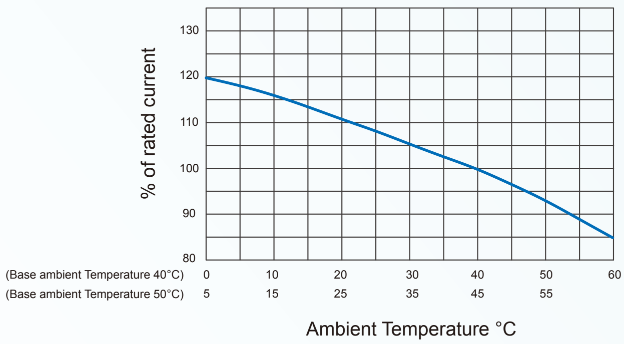


Tripping Characteristic Curve

BM1600-HS

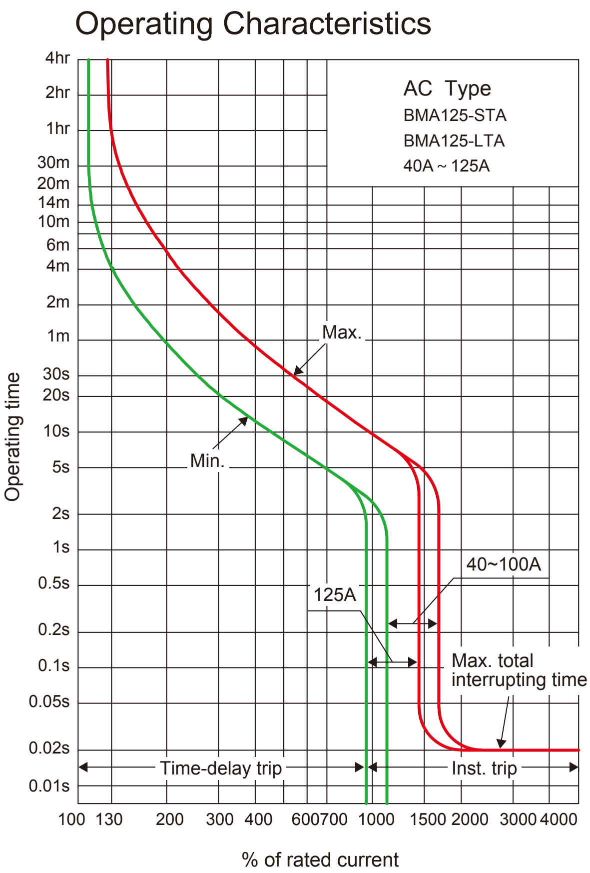


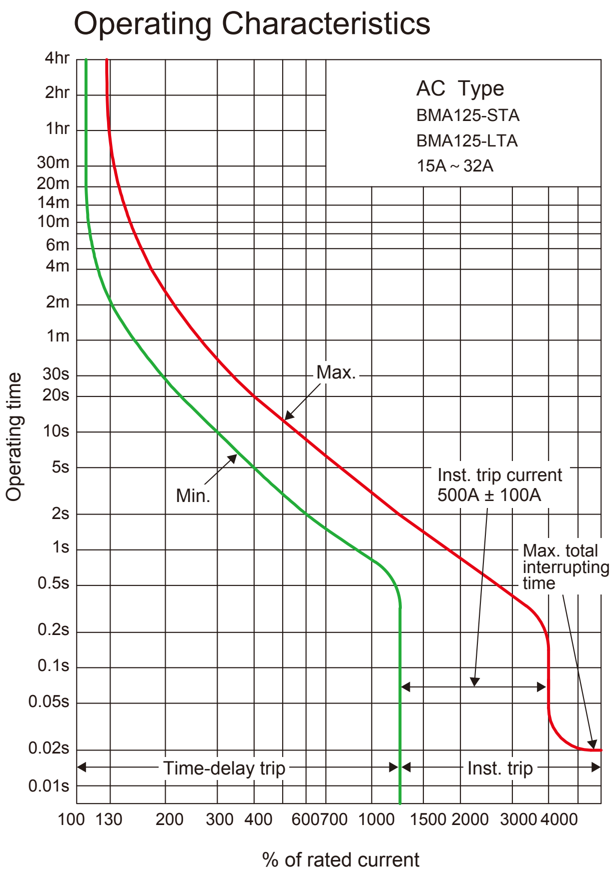
Compensation Curve

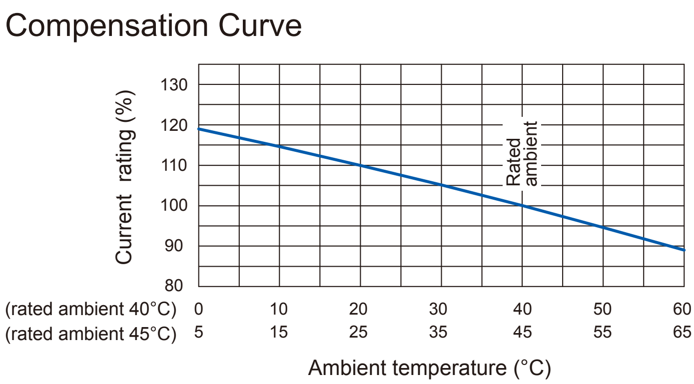


Tripping Characteristic Curve

BMA125-STA / LTA / HTA





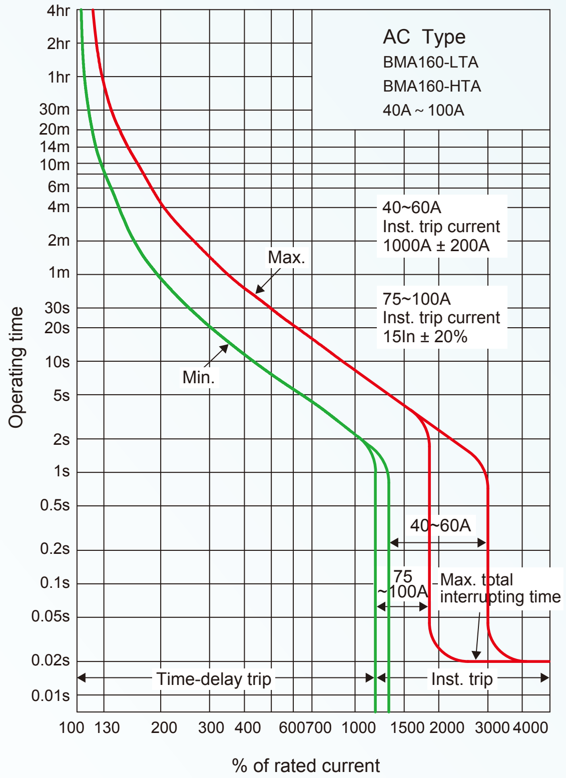


BM Series
BL Series
ACC.
DIM.
Curve.
Other

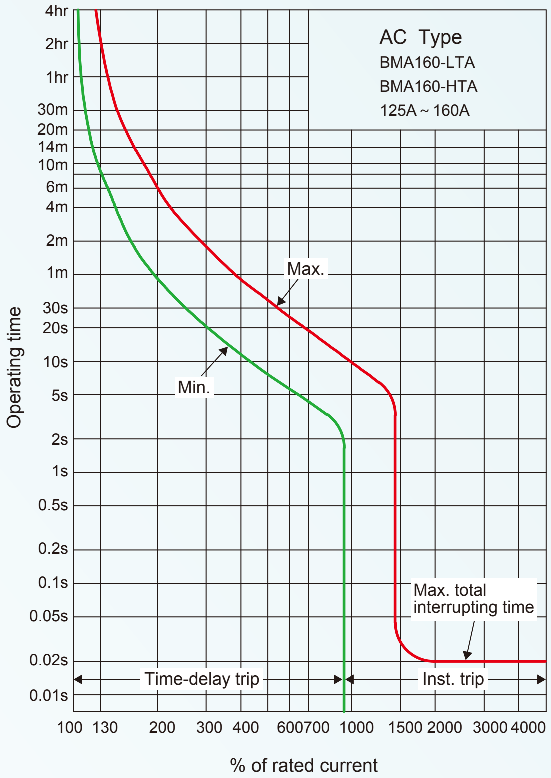
Tripping Characteristic Curve

BMA160-STA / LTA / HTA, BMA250-STA / LTA / HTA

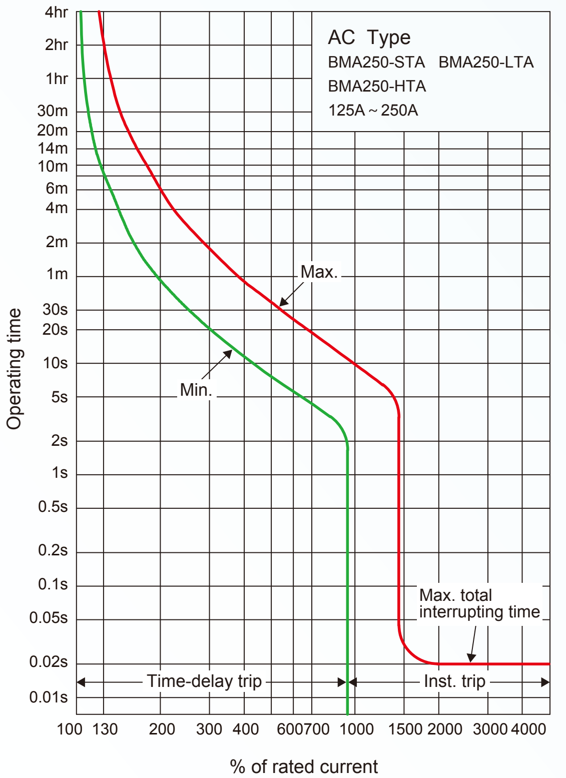
Operating Characteristics



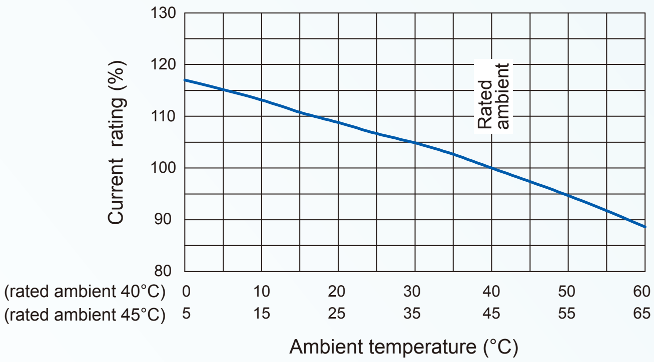
Operating Characteristics



Operating Characteristics



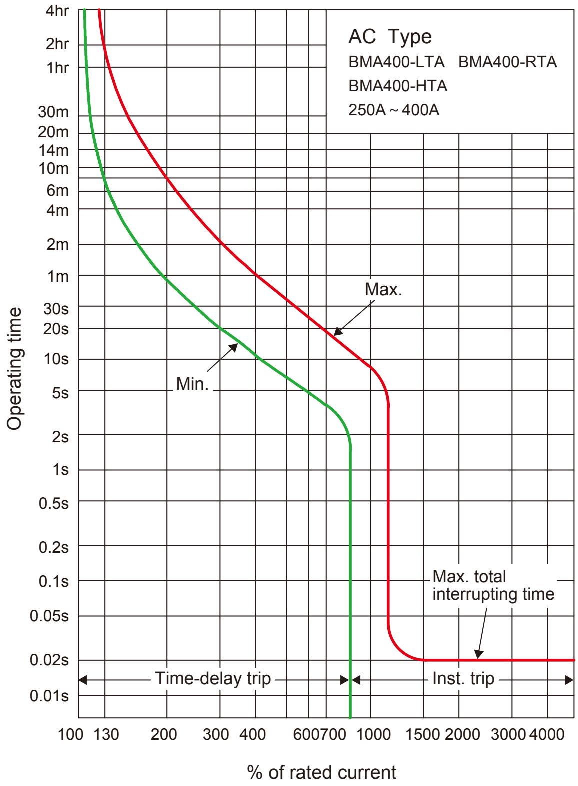
Compensation Curve



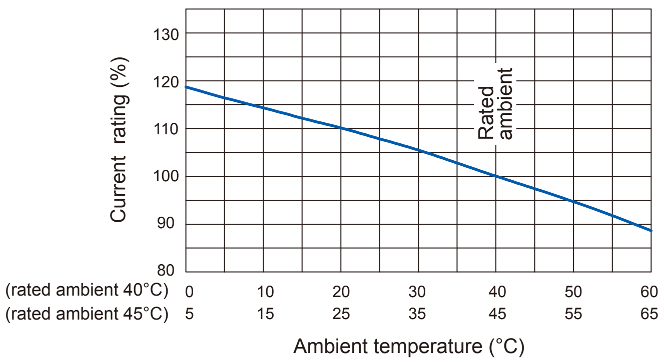
Tripping Characteristic Curve

BMA400-LTA / HTA / RTA

Operating Characteristics

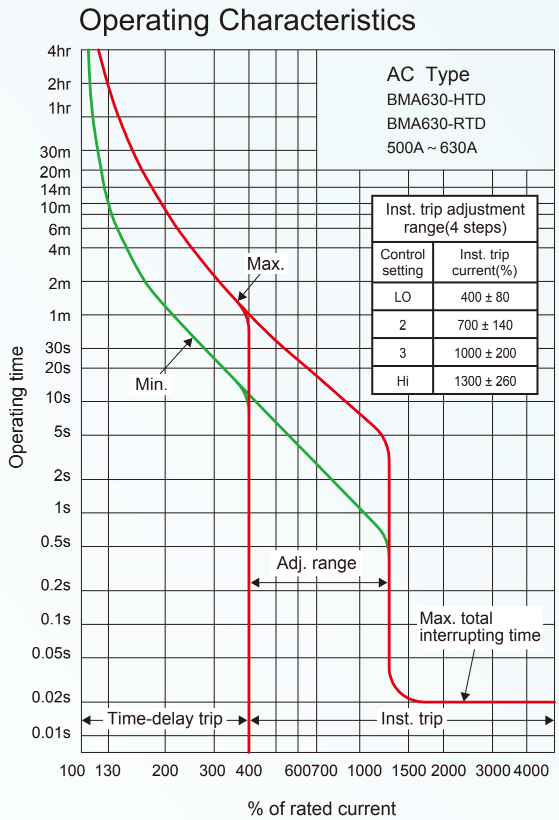


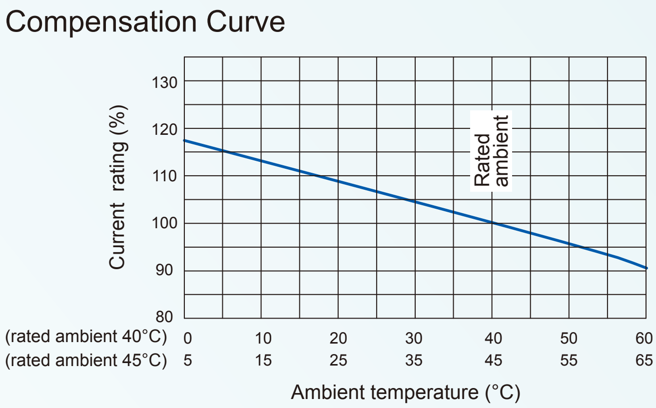
Compensation Curve



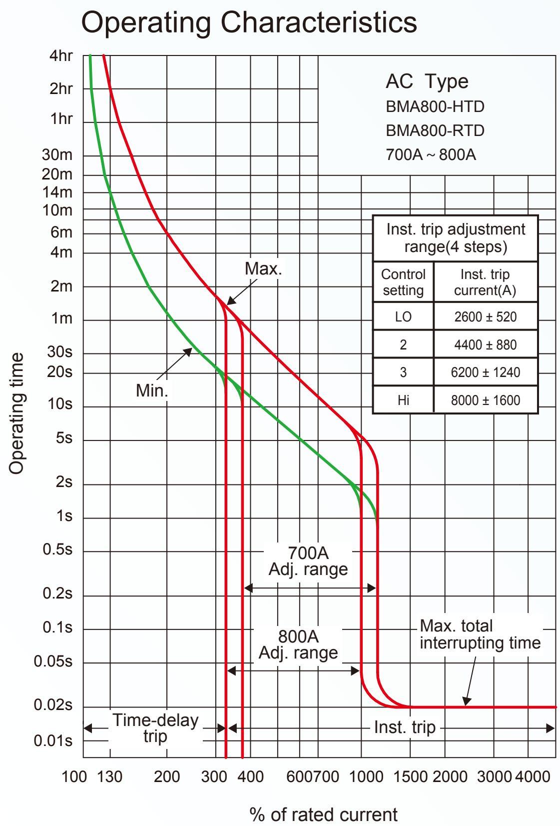
Tripping Characteristic Curve

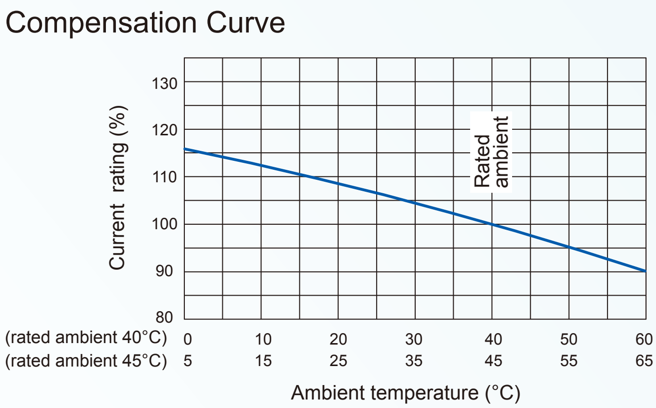
BMA630-HTD / RTD





BMA800-HTD / RTD



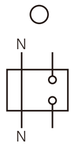


Wiring Example

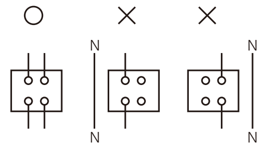
■ ELCB Wiring Diagram

O Correct ✕ Incorrect

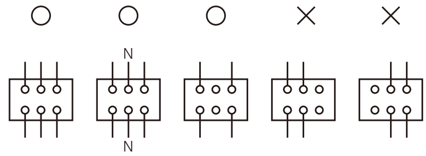
1P



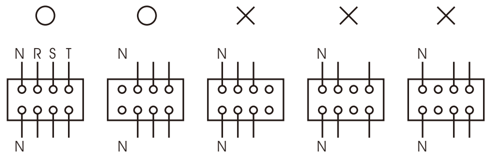
2P



3P



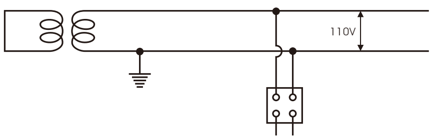
4P



■ Power Circuit System

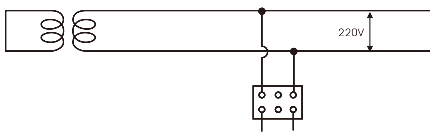
1 Phase 2 Wire
110V、220V

2P



(1P 110V)

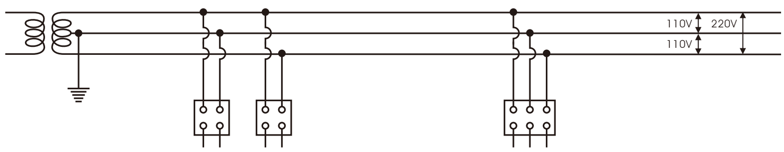
3P



(3P 220V)

I Phase 3 Wire
110V、220V

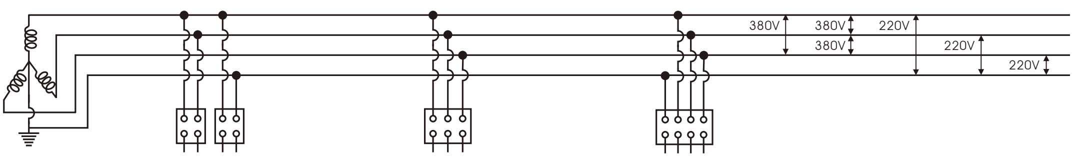
2P **3P**



(1P 110V)(1P 220V) (3P 110V/220V)

3 Phase 4 Wire
220V、380V

2P **3P** **4P**



(1P 380V)(1P 220V) (3P 380V) (3 Phase 4 220V/380V)

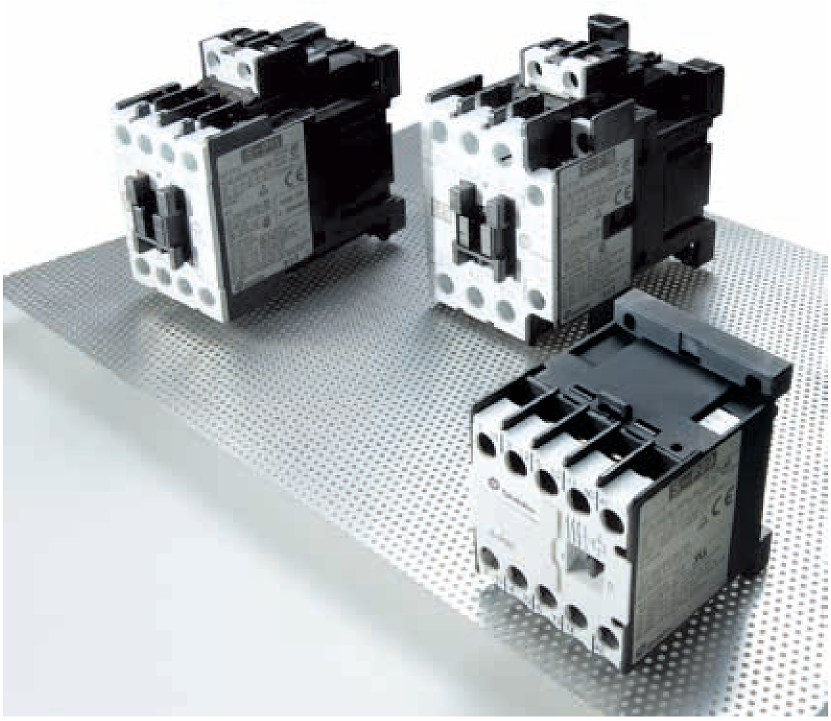
Shihlin Electric

CIRCUIT BREAKER (MCCB / ELCB / EMCCB / MCB)

Breaker & Switchgear System

AIR CIRCUIT BREAKER

AUTOMATIC TRANSFER SWITCHES



MAGNETIC CONTACTOR / SWITCH (CONTACTOR / MS / MMS)

SURGE PROTECTIVE DEVICE

SMART METER

INVERTER

LOW VOLTAGE POWER CAPACITORS

SHIHLIN ELECTRIC & ENGINEERING

MOTOR CONTROL (CONTACTOR/ MS/ MMS), CIRCUIT BREAKER (MCCB/ ELCB/ EMCCB/ MCB), AIR CIRCUIT BREAKER, AUTOMATIC TRANSFER SWITCHES (Panel Board Type/ Residential Unit Use), SURGE PROTECTIVE DEVICE, LOW VOLTAGE POWER CAPACITORS, SMART METER, INVERTER

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