

Molded Case Circuit Breakers

List of products

B

■ G-TWIN Standard Series (IEC/EN/GB/JIS conformed)

Line protection

AC415V Icu	BW32	BW50	BW63	BW100	BW125	BW160	BW250	BW400	BW630	BW800
1.5kA	AAG	AAG		AAG						
2.5kA	SAG	EAG	EAG							
7.5kA		SAG	SAG							
10kA		RAG	RAG	EAG						
18kA						EAG	EAG			
30kA					JAG	JAG	JAG	EAG		
36kA					SAG	SAG	SAG	SAG	EAG	EAG
50kA					RAG	RAG	RAG	RAG	RAG	RAG
65kA		HAG*			HAG*		HAG*			
70kA								HAG	HAG	HAG

Note: * There are no performance indications for GB standards for the BW50HAG, BW125HAG, and BW250HAG.

Motor protection

AC415V Icu	BW32	BW50	BW63	BW100	BW125	BW250
1.5kA	AAM					
2.5kA	SAM	EAM	EAM			
7.5kA		SAM	SAM			
10kA		RAM		EAM		
18kA						EAM
30kA					JAM	JAM
50kA					RAM	RAM

B1

■ G-TWIN Global Series (IEC/EN/GB/JIS/UL/CSA conformed)

Line protection

AC415V Icu	BW50	BW100	BW125	BW250	BW400	BW630	BW800
10kA	RAGU	EAGU					
18kA				EAGU			
30kA			JAGU	JAGU	EAGU		
36kA					SAGU		
50kA			RAGU	RAGU	RAGU	RAGU	RAGU
70kA					HAGU	HAGU	HAGU

Molded Case Circuit Breakers

G-TWIN series Type number nomenclature

■ Type number nomenclature

Series _____ **BW** **250** **EA** **G** **□** **-** **3P** **225** **X**

BW: G-TWIN series MCCB

Frame size _____

32: 32AF 63: 63AF 125: 125AF 250: 250AF 630: 630AF
50: 50AF 100: 100AF 160: 160AF 400: 400AF 800: 800AF

Breaking capacity _____

	Rated breaking capacity Icu (440V AC)									
	32AF	50AF	63AF	100AF	125AF	160AF	250AF	400AF	630AF	800AF
AA	1.5kA	1.5kA	—	1.5kA	—	—	—	—	—	—
EA	1.5kA	2.5kA	2.5kA	10kA	—	18kA	18kA	30kA	36kA	36kA
JA	—	—	—	—	30kA	30kA	30kA	—	—	—
SA	2.5kA	7.5kA	7.5kA	—	36kA	36kA	36kA	36kA	—	—
RA	—	10kA	10kA	—	50kA	50kA	50kA	50kA	50kA	50kA
HA	—	65kA	—	—	65kA	—	65kA	70kA	70kA	70kA

Model _____

G: Line protection M: Motor protection

G-TWIN series _____

Blank: Standard U: UL489 Listed

No. of poles _____

2P: 2-pole 3P: 3-pole 4P: 4-pole

Rated current _____

See page B1-29.

Terminal combination (UL489 Listed type)

Code	Terminal position		Applicable breaker type		
	Line	Load	BW50	BW100, 125, 250	BW400, 630, 800
Blank	Screw	Screw	●	●	—
Blank	Flat terminal	Flat terminal	—	—	●
SB	Block terminal	Block terminal	—	●	●
SF	Flat terminal	Flat terminal	●	●	—
S3	Screw	Flat terminal	●	●	—
S4	Flat terminal	Screw	●	●	—
S5	Screw	Block terminal	—	●	—
S6	Block terminal	Screw	—	●	—
S7	Flat terminal	Block terminal	—	●	●
S8	Block terminal	Flat terminal	—	●	●

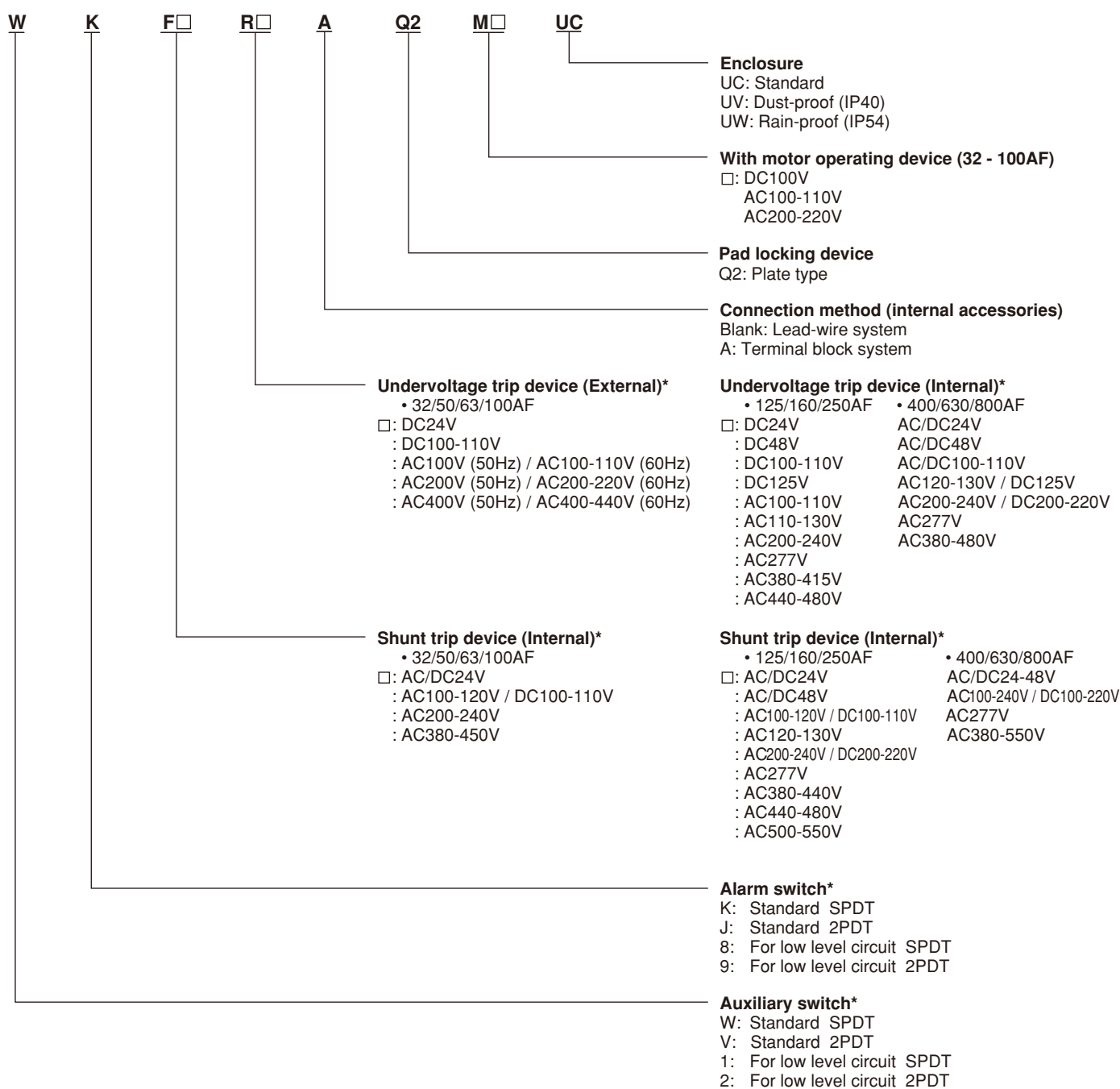
Mounting and connection

• Standard type

Blank: Front mounting front connection
X: Front mounting rear connection
E: Flush mounting rear connection
Y: Flush mounting , top & bottom connection
P: Plug-in mounting

Molded Case Circuit Breakers

G-TWIN series Type number nomenclature

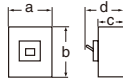


* For the available configuration of accessory,
see page B1-68.

Molded Case Circuit Breakers

G-TWIN series Quick reference guide

■ G-TWIN Standard Series

Ampere frame			32A				
Type			BW32AAG		BW32SAG		
Pole			2	3	2	3	
Rated current Reference amb. temp. (40°C)		In(A)	3, 5, 10, 15, 20, 30, 32				
Rated impulse withstand voltage		Uimp(kV)	6		6		
Isolation compliant			●		●		
Rated insulation voltage Ui (V)		AC	500		690		
		DC	—		250* ¹		
Rated breaking capacity Icu/Ics (kA)	IEC 60947-2 EN 60947-2 JIS C 8201-2-1	AC	500V	—		1.5/1	
			440V	1.5/1		2.5/2	
			415V	1.5/1		2.5/2	
			400V	1.5/1		2.5/2	
			380V	1.5/1		2.5/2	
			240V	2.5/2		5/3	
			230V	2.5/2		5/3	
			DC	250V	—		2.5/2* ¹
	GB14048.2	AC	400V	1.5/1		2.5/2	
	230V		2.5/2		5/3		
Conforming to standards	CE Marking		● (TÜV)		● (TÜV)		
	CCC certificate		●		●		
	Electrical Appliance and Material Safety Law <PS>E ²		●		●		
Dimensions (mm) 			a	50	75	50	75
			b	100		100	
			c	60		60	
			d	84		84	
Mass (kg)			0.4	0.5	0.4	0.5	
Tripping device			Hydraulic-magnetic				
Front mounting, front connection		No-mark	○		○	○	
Front mounting, rear connection		X	○		○	○	
Flush mounting, front connection		E	○	○	○	○	
Flush mounting, top & bottom connection		Y	○	○	○	○	
Plug-in mounting		P	○	○	○	○	
IEC 35mm wide rail mounting		No-mark	○	○	○	○	
Internal accessories		Page B1-63					
Alarm switch		K	○	○	○	○	
Auxiliary switch		W	○	○	○	○	
Undervoltage trip		R	○	○	○	○	
Shunt trip		F	○	○	○	○	
External accessories		Page B1-66					
Handle padlocking device Cap type		Q1	○	○	○	○	
Handle padlocking device Plate type		Q2	▲	▲	▲	▲	
Operating handle N-type		N	○	○	○	○	
Operating handle V-type		V	○	○	○	○	
Terminal cover Short		BT□S	○	○	○	○	
Terminal cover Long		BT□L	○	○	○	○	
Insulation barrier Interphase		BP	○	○	○	○	
Earth		BL	○	○	○	○	
Handle locking cover		L1	○	○	○	○	
Flat terminal		SS	○	○	○	○	
Block terminal		SL	—	—	—	—	

●: Approved ○: Available —: Not available ▲: Factory-mounted accessory

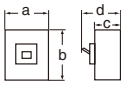
Note: ^{*1} Specify DC only when ordering circuit breakers for DC circuit.

^{*2} Electrical Appliance and Material Safety Law of Japan

Molded Case Circuit Breakers

G-TWIN series Quick reference guide

■ G-TWIN Standard Series

Ampere frame			50A											
Type			BW50AAG		BW50EAG		BW50SAG		BW50RAG		BW50HAG			
Pole			2	3	2	3	2	3	2	3	2	3		
Rated current Reference amb. temp. (40°C)		In(A)	5, 10, 15, 20, 30, 32, 40, 50							10, 15, 20, 30, 32, 40, 50		15, 20, 30, 40, 50		
Rated impulse withstand voltage		Uimp(kV)	6		6		6		6		6			
Isolation compliant			●		●		●		●		●			
Rated insulation voltage Ui (V)		AC	500		690		690		690		690			
		DC	–		250* ¹		250* ¹		250* ¹		250			
Rated breaking capacity Icu/Ics (kA)	IEC 60947-2 EN 60947-2 JIS C 8201-2-1	AC	500V	–		1.5/1		5/3		7.5/4		25/7		
			440V	1.5/1		2.5/2		7.5/4		10/5		65/17		
			415V	1.5/1		2.5/2		7.5/4		10/5		65/17		
			400V	1.5/1		2.5/2		7.5/4		10/5		65/17		
			380V	1.5/1		2.5/2		7.5/4		10/5		65/17		
			240V	2.5/2		5/3		10/5		25/13		125/63		
			230V	2.5/2		5/3		10/5		25/13		125/63		
			DC	250V	–		2.5/2* ¹		5/3* ¹		5/3* ¹		40/20	
	GB14048.2	AC	400V	1.5/1		2.5/2		7.5/4		10/5		–		
			230V	2.5/2		5/3		10/5		25/13		–		
Conforming to standards	CE Marking		● (TÜV)		● (TÜV)		● (TÜV)		● (TÜV)		●			
	CCC certificate		●		●		●		●		–			
	Electrical Appliance and Material Safety Law <PS>E ²		●		●		●		●		●			
Dimensions (mm) 			a	50	75	50	75	50	75	50	75	90		
			b	100		100		100		100		155		
			c	60		60		60		60		68		
			d	84		84		84		84		95		
Mass (kg)			0.4	0.5	0.4	0.5	0.4	0.5	0.4	0.5	1.0	1.2		
Tripping device			Hydraulic-magnetic										Thermal-magnetic	
Front mounting, front connection		No-mark	○	○	○	○	○	○	○	○	○	○		
Front mounting, rear connection		X	○	○	○	○	○	○	○	○	○	○		
Flush mounting, front connection		E	○	○	○	○	○	○	○	○	○	○		
Flush mounting, top & bottom connection		Y	○	○	○	○	○	○	○	○	–	–		
Plug-in mounting		P	○	○	○	○	○	○	○	○	○	○		
IEC 35mm wide rail mounting		No-mark	○	○	○	○	○	○	○	○	–	–		
Internal accessories			Page B1-63											
Alarm switch		K	○	○	○	○	○	○	○	○	○	○		
Auxiliary switch		W	○	○	○	○	○	○	○	○	○	○		
Undervoltage trip		R	○	○	○	○	○	○	○	○	○	○		
Shunt trip		F	○	○	○	○	○	○	○	○	○	○		
External accessories			Page B1-66											
Handle padlocking device Cap type		Q1/QN	○	○	○	○	○	○	○	○	○	○		
Handle padlocking device Plate type		Q2	▲	▲	▲	▲	▲	▲	▲	▲	○	○		
Operating handle N-type		N	○	○	○	○	○	○	○	○	○	○		
Operating handle V-type		V	○	○	○	○	○	○	○	○	○	○		
Terminal cover Short		BT□S	○	○	○	○	○	○	○	○	○	○		
Terminal cover Long		BT□L	○	○	○	○	○	○	○	○	○	○		
Insulation barrier Interphase		BP	○	○	○	○	○	○	○	○	○	○		
Insulation barrier Earth		BL	○	○	○	○	○	○	○	○	–	–		
Handle locking cover		L1	○	○	○	○	○	○	○	○	○	○		
Flat terminal		SS	○	○	○	○	○	○	○	○	○	○		
Block terminal		SL	–	–	–	–	–	–	–	–	○	○		

●: Approved ○: Available –: Not available ▲: Factory-mounted accessory

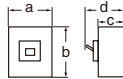
Note: ^{*1} Specify DC only when ordering circuit breakers for DC circuit.

^{*2} Electrical Appliance and Material Safety Law of Japan

Molded Case Circuit Breakers

G-TWIN series Quick reference guide

■ G-TWIN Standard Series

Ampere frame				63A								
Type				BW63EAG		BW63SAG		BW63RAG				
Pole				2	3	2	3	2	3			
Rated current		Reference amb. temp. (40°C)		In(A)		60, 63						
Rated impulse withstand voltage				Uimp(kV)		6		6				
Isolation compliant				●		●		●				
Rated insulation voltage Ui (V)				AC		690		690				
				DC		250* ¹		250* ¹				
Rated breaking capacity Icu/Ics (kA)	IEC 60947-2 EN 60947-2 JIS C 8201-2-1	AC	500V	1.5/1		5/3		7.5/4				
			440V	2.5/2		7.5/4		10/5				
			415V	2.5/2		7.5/4		10/5				
			400V	2.5/2		7.5/4		10/5				
			380V	2.5/2		7.5/4		10/5				
			240V	5/3		10/5		25/13				
			230V	5/3		10/5		25/13				
			DC	250V 2.5/2* ¹		5/3* ¹		5/3* ¹				
	GB14048.2	AC	400V	2.5/2		7.5/4		10/5				
	230V		5/3		10/5		25/13					
Conforming to standards	CE Marking			● (TÜV)		● (TÜV)		● (TÜV)				
	CCC certificate			●		●		●				
	Electrical Appliance and Material Safety Law <PS>E ²			●		●		●				
Dimensions (mm) 				a	50	75	50	75	50	75		
				b	100		100		100		100	
				c	60		60		60		60	
				d	84		84		84		84	
				Mass (kg)		0.4	0.5	0.4	0.5	0.4	0.5	
Tripping device				Hydraulic-magnetic								
Front mounting, front connection		No-mark		○	○	○	○	○	○			
Front mounting, rear connection		X		○	○	○	○	○	○			
Flush mounting, front connection		E		○	○	○	○	○	○			
Flush mounting, top & bottom connection		Y		○	○	○	○	○	○			
Plug-in mounting		P		○	○	○	○	○	○			
IEC 35mm wide rail mounting		No-mark		○	○	○	○	○	○			
Internal accessories				Page B1-63								
Alarm switch		K		○	○	○	○	○	○			
Auxiliary switch		W		○	○	○	○	○	○			
Undervoltage trip		R		○	○	○	○	○	○			
Shunt trip		F		○	○	○	○	○	○			
External accessories				Page B1-66								
Handle padlocking device		Cap type		Q1	○	○	○	○	○			
Handle padlocking device		Plate type		Q2	▲	▲	▲	▲	▲			
Operating handle		N-type		N	○	○	○	○	○			
Operating handle		V-type		V	○	○	○	○	○			
Terminal cover		Short		BT□S	○	○	○	○	○			
Terminal cover		Long		BT□L	○	○	○	○	○			
Insulation barrier		Interphase		BP	○	○	○	○	○			
Insulation barrier		Earth		BL	○	○	○	○	○			
Handle locking cover				L1	○	○	○	○	○			
Flat terminal				SS	○	○	○	○	○			
Block terminal				SL	—	—	—	—	—			

●: Approved ○: Available —: Not available ▲: Factory-mounted accessory

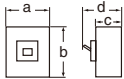
Note: *¹ Specify DC only when ordering circuit breakers for DC circuit.

*² Electrical Appliance and Material Safety Law of Japan

Molded Case Circuit Breakers

G-TWIN series Quick reference guide

■ G-TWIN Standard Series

Ampere frame			100A			
Type			BW100AAG		BW100EAG	
Pole			2	3	2	3
Rated current Reference amb. temp. (40°C)		In(A)	60, 63, 75, 100		50, 60, 63, 75, 100	
Rated impulse withstand voltage		Uimp(kV)	6		6	
Isolation compliant			●		●	
Rated insulation voltage Ui (V)		AC	500		690	
		DC	—		250* ¹	
Rated breaking capacity Icu/Ics (kA)	IEC 60947-2 EN 60947-2 JIS C 8201-2-1	AC	500V	—		7.5/4
			440V	—		10/5
			415V	—		10/5
			400V	1.5/1		10/5
			380V	1.5/1		10/5
			240V	5/3		25/13
			230V	5/3		25/13
			DC	250V	—	
	GB14048.2	AC	400V	1.5/1		10/5
			230V	5/3		25/13
Conforming to standards	CE Marking		● (TÜV)		● (TÜV)	
	CCC certificate		●		●	
	Electrical Appliance and Material Safety Law <PS>E ²		●		●	
Dimensions (mm) 		a	50	75	50	75
		b	100		100	
		c	60		60	
		d	84		84	
		Mass (kg)	0.4	0.5	0.4	0.5
Tripping device			Thermal -magnetic			
Front mounting, front connection		No-mark	○	○	○	○
Front mounting, rear connection		X	○	○	○	○
Flush mounting, front connection		E	○	○	○	○
Flush mounting, top & bottom connection		Y	○	○	○	○
Plug-in mounting		P	○	○	○	○
IEC 35mm wide rail mounting		No-mark	○	○	○	○
Internal accessories		Page B1-63				
Alarm switch		K	○	○	○	○
Auxiliary switch		W	○	○	○	○
Undervoltage trip		R	○	○	○	○
Shunt trip		F	○	○	○	○
External accessories		Page B1-66				
Handle padlocking device Cap type		Q1	○	○	○	○
Handle padlocking device Plate type		Q2	▲	▲	▲	▲
Operating handle N-type		N	○	○	○	○
Operating handle V-type		V	○	○	○	○
Terminal cover Short		BT□S	○	○	○	○
Terminal cover Long		BT□L	○	○	○	○
Insulation barrier Interphase		BP	○	○	○	○
Earth		BL	○	○	○	○
Handle locking cover		L1	○	○	○	○
Flat terminal		SS	○	○	○	○
Block terminal		SL	—	—	—	—

●: Approved ○: Available —: Not available ▲: Factory-mounted accessory

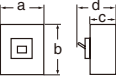
Note: *¹ Specify DC only when ordering circuit breakers for DC circuit.

*² Electrical Appliance and Material Safety Law of Japan

Molded Case Circuit Breakers

G-TWIN series Quick reference guide

■ G-TWIN Standard Series

Ampere frame				125A											
Type				BW125JAG			BW125SAG			BW125RAG			BW125HAG		
Pole				2	3	4	2	3	4	2	3	4	2	3	
Rated current		Reference amb. temp. (40°C)		In(A)		15, 20, 30, 40, 50, 60, 75, 100, 125									
Rated impulse withstand voltage				Uimp(kV)		6			6			6		6	
Isolation compliant				●			●			●			●		
Rated insulation voltage Ui (V)				AC		690			690			690		690	
				DC		250			250			250		250	
Rated breaking capacity Icu/Ics (kA)	IEC 60947-2 EN 60947-2 JIS C 8201-2-1	AC	690V	—	—	—			—			—			
			500V	5/3	8/4	10/5			10/5			25/7			
			440V	30/15	30/15	36/18			50/25			65/17			
			415V	30/15	30/15	36/18			50/25			65/17			
			400V	30/15	30/15	36/18			50/25			65/17			
			380V	30/15	30/15	36/18			50/25			65/17			
			240V	50/25	50/25	85/43			100/50			125/63			
			230V	50/25	50/25	85/43			100/50			125/63			
			GB14048.2	DC	250V	15/8	15/8	30/15			40/20			40/20	
	AC	400V			30/15	30/15	36/18			50/25			—		
				230V	50/25	50/25	85/43			100/50			—		
Conforming to standards	CE Marking			● (TÜV)			● (TÜV)			● (TÜV)			●		
	CCC certificate			●			●			●			—		
	Electrical Appliance and Material Safety Law <PS>E ²			● (except for 125A)			● (except for 125A)			● (except for 125A)			● (except for 125A)		
Dimensions (mm) 				a	60	90	120	90	90	120	90	90	120	90	
				b	155			155			155			155	
				c	68			68			68			68	
				d	95			95			95			95	
				Mass (kg)	0.8			1.2	1.6	1.0	1.2	1.6	1.0	1.2	1.6
Tripping device				Thermal-magnetic											
Front mounting, front connection		No-mark		○	○	○	○	○	○	○	○	○	○	○	
Front mounting, rear connection		X		○	○	○	○	○	○	○	○	○	○	○	
Flush mounting, front connection		E		○	○	○	○	○	○	○	○	○	○	○	
Plug-in mounting		P		○	○	—	○	○	—	○	○	—	○	○	
Internal accessories		Page B1-64													
Alarm switch		K		○	○	○	○	○	○	○	○	○	○	○	
Auxiliary switch		W		○	○	○	○	○	○	○	○	○	○	○	
Undervoltage trip		R		—	○	○	○	○	○	○	○	○	○	○	
Shunt trip		F		○	○	○	○	○	○	○	○	○	○	○	
External accessories		Page B1-66													
Handle padlocking device Cap type		Q1		○	○	○	○	○	○	○	○	○	○	○	
Handle padlocking device Plate type		Q2		—	○	○	○	○	○	○	○	○	○	○	
Operating handle N-type		N		○	○	○	○	○	○	○	○	○	○	○	
Operating handle V-type		V		○	○	○	○	○	○	○	○	○	○	○	
Terminal cover Short		BT□S		○	○	○	○	○	○	○	○	○	○	○	
Terminal cover Long		BT□L		○	○	○	○	○	○	○	○	○	○	○	
Insulation barrier Interphase		BP		○	○	○	○	○	○	○	○	○	○	○	
Handle locking cover		L1		○	○	○	○	○	○	○	○	○	○	○	
Flat terminal		SS		○	○	○	○	○	○	○	○	○	○	○	
Block terminal		SL		○	○	○	○	○	○	○	○	○	○	○	

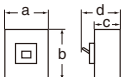
●: Approved ○: Available —: Not available

Note: * Electrical Appliance and Material Safety Law of Japan

Molded Case Circuit Breakers

G-TWIN series Quick reference guide

■ G-TWIN Standard Series

Ampere frame			160A																
Type			BW160EAG				BW160JAG			BW160SAG			BW160RAG						
Pole			2		3		2		3		4		2		3		4		
Rated current Reference amb. temp. (40°C)		In(A)		125, 150, 160															
Rated impulse withstand voltage		Uimp(kV)		6				6				6				6			
Isolation compliant				●				●				●				●			
Rated insulation voltage Ui (V)		AC		690				690				690				690			
		DC		250				250				250				250			
Rated breaking capacity Icu/Ics (kA)	IEC 60947-2 EN 60947-2 JIS C 8201-2-1	AC	690V	—				—				—				—			
			500V	5/3				8/4				10/5				10/5			
			440V	18/9				30/15				36/18				50/25			
			415V	18/9				30/15				36/18				50/25			
			400V	18/9				30/15				36/18				50/25			
			380V	18/9				30/15				36/18				50/25			
			240V	36/18				50/25				85/43				100/50			
			230V	36/18				50/25				85/43				100/50			
			DC	250V 10/5				20/10				30/15				30/15			
	GB14048.2	AC	400V	18/9				30/15				36/18				50/25			
			230V	36/18				50/25				85/43				100/50			
Conforming to standards	CE Marking		● (TÜV)				● (TÜV)				● (TÜV)				● (TÜV)				
	CCC certificate		●				●				●				●				
	Electrical Appliance and Material Safety Law <PS>E*		—				—				—				—				
Dimensions (mm) 			a	105	105	105	105	140	105	105	140	105	105	140					
			b	165				165				165							
			c	68				68				68							
			d	95				95				95							
			Mass (kg)			1.4		1.6		1.4		1.6		2.2		1.4		1.6	
Tripping device			Thermal-magnetic																
Front mounting, front connection		No-mark	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○		
Front mounting, rear connection		X	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○		
Flush mounting, front connection		E	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○		
Plug-in mounting		P	○	○	○	○	—	○	○	—	○	○	—	○	○	—	○		
Internal accessories		Page B1-64																	
Alarm switch		K	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○		
Auxiliary switch		W	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○		
Undervoltage trip		R	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○		
Shunt trip		F	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○		
External accessories		Page B1-66																	
Handle padlocking device Cap type		Q1	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○		
Handle padlocking device Plate type		Q2	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○		
Operating handle N-type		N	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○		
Operating handle V-type		V	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○		
Terminal cover Short		BT□S	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○		
Terminal cover Long		BT□L	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○		
Insulation barrier Interphase		BP	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○		
Handle locking cover		L1	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○		
Flat terminal		SS	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○		
Block terminal		SL	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○		

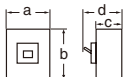
●: Approved ○: Available —: Not available

Note: * Electrical Appliance and Material Safety Law of Japan

Molded Case Circuit Breakers

G-TWIN series Quick reference guide

■ G-TWIN Standard Series

Ampere frame				250A													
Type				BW250EAG		BW250JAG			BW250SAG			BW250RAG			BW250HAG		
Pole				2	3	2	3	4	2	3	4	2	3	4	2	3	
Rated current		Reference amb. temp. (40°C)	In(A)	175, 200, 225, 250												125,150,160,175 200,225,250	
Rated impulse withstand voltage			Uimp(kV)	6			6			6			6			6	
Isolation compliant				●		●			●			●			●		
Rated insulation voltage Ui (V)			AC	690		690			690			690			690		
			DC	250		250			250			250			250		
Rated breaking capacity Icu/Ics (kA)	IEC 60947-2 EN 60947-2 JIS C 8201-2-1	AC	690V	—		—			—			—			—		
			500V	5/3		8/4			10/5			10/5			25/7		
			440V	18/9		30/15			36/18			50/25			65/17		
			415V	18/9		30/15			36/18			50/25			65/17		
			400V	18/9		30/15			36/18			50/25			65/17		
			380V	18/9		30/15			36/18			50/25			65/17		
			240V	36/18		50/25			85/43			100/50			125/63		
			230V	36/18		50/25			85/43			100/50			125/63		
		DC	250V		10/5			20/10			30/15			40/20			
	GB14048.2	AC	400V	18/9		30/15			36/18			50/25			—		
			230V	36/18		50/25			85/43			100/50			—		
Conforming to standards	CE Marking			● (TÜV)		● (TÜV)			● (TÜV)			● (TÜV)			●		
	CCC certificate			●		●			●			●			—		
	Electrical Appliance and Material Safety Law <PSE>E'			—		—			—			—			—		
Dimensions (mm) 				a	105	105	105	105	140	105	105	140	105	105	140	105	
				b	165		165			165			165			165	
				c	68		68			68			68			68	
				d	95		95			95			95			95	
				Mass (kg)	1.4		1.6	1.4	1.6	2.2	1.4	1.6	2.2	1.4	1.6	2.2	1.4
Tripping device				Thermal-magnetic													
Front mounting, front connection			No-mark	○	○	○	○	○	○	○	○	○	○	○	○	○	
Front mounting, rear connection			X	○	○	○	○	○	○	○	○	○	○	○	○	○	
Flush mounting, front connection			E	○	○	○	○	○	○	○	○	○	○	○	○	○	
Plug-in mounting			P	○	○	○	○	—	○	○	—	○	○	—	○	○	
Internal accessories			Page B1-64														
Alarm switch			K	○	○	○	○	○	○	○	○	○	○	○	○	○	
Auxiliary switch			W	○	○	○	○	○	○	○	○	○	○	○	○	○	
Undervoltage trip			R	○	○	○	○	○	○	○	○	○	○	○	○	○	
Shunt trip			F	○	○	○	○	○	○	○	○	○	○	○	○	○	
External accessories			Page B1-66														
Handle padlocking device Cap type			Q1	○	○	○	○	○	○	○	○	○	○	○	○	○	
Handle padlocking device Plate type			Q2	○	○	○	○	○	○	○	○	○	○	○	○	○	
Operating handle N-type			N	○	○	○	○	○	○	○	○	○	○	○	○	○	
Operating handle V-type			V	○	○	○	○	○	○	○	○	○	○	○	○	○	
Terminal cover Short			BT□S	○	○	○	○	○	○	○	○	○	○	○	○	○	
Terminal cover Long			BT□L	○	○	○	○	○	○	○	○	○	○	○	○	○	
Insulation barrier Interphase			BP	○	○	○	○	○	○	○	○	○	○	○	○	○	
Handle locking cover			L1	○	○	○	○	○	○	○	○	○	○	○	○	○	
Flat terminal			SS	○	○	○	○	○	○	○	○	○	○	○	○	○	
Block terminal			SL	○	○	○	○	○	○	○	○	○	○	○	○	○	

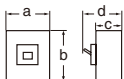
●: Approved ○: Available —: Not available

Note: * Electrical Appliance and Material Safety Law of Japan

Molded Case Circuit Breakers

G-TWIN series Quick reference guide

■ G-TWIN Standard Series

Ampere frame				400A																				
Type				BW400EAG				BW400SAG				BW400RAG				BW400HAG								
Pole				2		3		2		3		2		3		4		2		3		4		
Rated current		Reference amb. temp. (40°C)		In(A)		250, 300, 350, 400																		
Rated impulse withstand voltage				Uimp(kV)		8				8				8				8						
Isolation compliant				●		●				●				●										
Rated insulation voltage Ui (V)				AC		690				690				690				690						
				DC		250				250				250				250						
Rated breaking capacity Icu/lcs (kA)	IEC 60947-2 EN 60947-2 JIS C 8201-2-1		AC	690V	—				10/5				15/8				15/8							
				500V	18/9				20/10				36/18				42/21							
				440V	30/15				36/18				50/25				70/35							
				415V	30/15				36/18				50/25				70/35							
				400V	30/15				36/18				50/25				70/35							
				380V	30/15				36/18				50/25				70/35							
				240V	50/25				85/43				100/50				125/63							
				230V	50/25				85/43				100/50				125/63							
				DC	250V	20/10				20/10				40/20				40/20						
	GB14048.2	AC	400V	30/15				36/18				50/25				70/35								
			230V	50/25				85/43				100/50				125/63								
Conforming to standards		CE Marking		● (TÜV)				● (TÜV)				● (TÜV)				● (TÜV)								
		CCC certificate		●				●				●				●								
		Electrical Appliance and Material Safety Law <PS-E'>		—				—				—				—								
Dimensions (mm) 				a	140		140		140		140		140		140		185		140		140		185	
				b	257				257				257				257							
				c	103				103				103				103							
				d	146				146				146				146							
				Mass (kg)				4.6		5.6		4.6		5.6		4.6		5.6		7.4		4.6		5.6
Tripping device				Thermal-magnetic																				
Front mounting, front connection		No-mark		○	○		○		○		○		○		○		○		○		○			
Front mounting, rear connection		X		○	○		○		○		○		○		○		○		○		○			
Flush mounting, front connection		E		○	○		○		○		○		○		○		○		○		○			
Plug-in mounting		P		○	○		○		○		○		○		—		○		○		—			
Internal accessories		Page B1-65																						
Alarm switch		K		○	○		○		○		○		○		○		○		○		○			
Auxiliary switch		W		○	○		○		○		○		○		○		○		○		○			
Undervoltage trip		R		○	○		○		○		○		○		○		○		○		○			
Shunt trip		F		○	○		○		○		○		○		○		○		○		○			
External accessories		Page B1-66																						
Handle padlocking device Cap type		QN		○	○		○		○		○		○		○		○		○		○			
Handle padlocking device Plate type		Q2		○	○		○		○		○		○		○		○		○		○			
Operating handle N-type		N		○	○		○		○		○		○		○		○		○		○			
Operating handle V-type		V		○	○		○		○		○		○		○		○		○		○			
Terminal cover Short		BT□S		○	○		○		○		○		○		○		○		○		○			
Terminal cover Long		BT□L		○	○		○		○		○		○		○		○		○		○			
Insulation barrier Interphase		BP		○	○		○		○		○		○		○		○		○		○			
Handle locking cover		L1		○	○		○		○		○		○		○		○		○		○			
Flat terminal		SS		○*2	○*2		○*2		○*2		○*2		○*2		○*2		○*2		○*2		○*2			
Block terminal		SL		○	○		○		○		○		○		○		○		○		○			

●: Approved ○: Available —: Not available

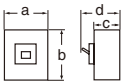
Note: ^{*1} Electrical Appliance and Material Safety Law of Japan

^{*2} Standard provided

Molded Case Circuit Breakers

G-TWIN series Quick reference guide

■ G-TWIN Standard Series

Ampere frame				630A				800A								
Type				BW630EAG		BW630RAG		BW630HAG		BW800EAG		BW800RAG		BW800HAG		
Pole				3		3		4		3		3		4		
Rated current Reference amb. temp. (40°C) In(A)				500, 600, 630						700, 800						
Rated impulse withstand voltage				Uimp(kV)		8		8		8		8		8		
Isolation compliant				●		●		●		●		●		●		
Rated insulation voltage Ui (V)				AC		690		690		690		690		690		
				DC		250		250		250		250		250		
Rated breaking capacity Icu/Ics (kA)	IEC 60947-2 EN 60947-2 JIS C 8201-2-1	AC	690V	—	15/8	15/8	—	15/8	15/8	—	15/8	15/8	—	15/8		
			600V	—	—	—	—	—	—	—	—	—	—			
			500V	18/9	36/18	42/21	18/9	36/18	42/21	18/9	36/18	42/21				
			440V	36/18	50/25	70/35	36/18	50/25	70/35	36/18	50/25	70/35				
			415V	36/18	50/25	70/35	36/18	50/25	70/35	36/18	50/25	70/35				
			400V	36/18	50/25	70/35	36/18	50/25	70/35	36/18	50/25	70/35				
			380V	36/18	50/25	70/35	36/18	50/25	70/35	36/18	50/25	70/35				
			240V	50/25	100/50	125/63	50/25	100/50	125/63	50/25	100/50	125/63				
			230V	50/25	100/50	125/63	50/25	100/50	125/63	50/25	100/50	125/63				
			DC	250V	20/10	40/20	40/20	20/10	40/20	40/20	20/10	40/20				
	GB14048.2	AC	400V	36/18	50/25	70/35	36/18	50/25	70/35	36/18	50/25	70/35				
			230V	50/25	100/50	125/63	50/25	100/50	125/63	50/25	100/50	125/63				
Conforming to standards	CE Marking			● (TÜV)		● (TÜV)		● (TÜV)		● (TÜV)		● (TÜV)		● (TÜV)		
	CCC certificate			●		●		●		●		●		●		
	Electrical Appliance and Material Safety Law <PS>E ¹			—		—		—		—		—		—		
Dimensions (mm) 				a	210	210	280	210	280	210	210	280	210	280		
				b	275	275		275		275	275		275			
				c	103	103		103		103	103		103			
				d	146	146		146		146	146		146			
Mass (kg)				7.8		7.8		10.3		7.8		10.3		8.3		
Tripping device				Thermal-magnetic												
Front mounting, front connection				No-mark	○	○	○	○	○	○	○	○	○	○	○	
Front mounting, rear connection				X	○	○	○	○	○	○	○	○	○	○	○	
Flush mounting, front connection				E	○	○	○	○	○	○	○	○	○	○	○	
Plug-in mounting				P	○	○	—	○	—	○	○	—	○	—		
Internal accessories				Page B1-65												
Alarm switch				K	○	○		○		○		○		○		
Auxiliary switch				W	○	○		○		○		○		○		
Undervoltage trip				R	○	○		○		○		○		○		
Shunt trip				F	○	○		○		○		○		○		
External accessories				Page B1-66												
Handle padlocking device Cap type				QN	○	○		○		○		○		○		
Handle padlocking device Plate type				Q2	○	○		○		○		○		○		
Operating handle N-type				N	○	○		○		○		○		○		
Operating handle V-type				V	○	○		○		○		○		○		
Terminal cover Long				BTCL	○	○		○		○		○		○		
Insulation barrier Interphase				BP	○	○		○		○		○		○		
Handle locking cover				L1	○	○		○		○		○		○		
Flat terminal				SS	○ ^{*2}	○ ^{*2}		○ ^{*2}		○ ^{*2}		○ ^{*2}		○ ^{*2}		
Block terminal				SL	○	○		○		○		○		○		

●: Approved ○: Available —: Not available

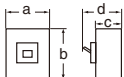
Note: ^{*1} Electrical Appliance and Material Safety Law of Japan

^{*2} Standard provided

Molded Case Circuit Breakers

G-TWIN series Quick reference guide

■ G-TWIN Global Series

Ampere frame			50A				100A							
Type			BW50RAGU				BW100EAGU							
Pole			2		3		2		3					
Rated current		Reference amb. temp. (40°C)	In(A)		3, 5		10, 15, 20, 30, 32, 40, 50		3, 5		10, 15, 20, 30, 32, 40, 50		60, 63, 70, 75, 80, 90, 100	
Rated impulse withstand voltage			Uimp(kV)		6				6					
Isolation compliant			●				●							
Rated insulation voltage Ui (V)			AC		690				690					
Rated breaking capacity	IEC 60947-2 EN 60947-2 JIS C 8201-2-1 Icu/Ics (kA)	AC	500V	7.5/4				7.5/4						
			440V	10/5				10/5						
			415V	10/5				10/5						
			400V	10/5				10/5						
			380V	10/5				10/5						
			240V	25/13				25/13						
			230V	25/13				25/13						
	GB14048.2 Icu/Ics(kA)	AC	400V	7/4	10/5		7/4	10/5		10/5				
			230V	14/7	25/13		14/7	25/13		25/13				
	UL489 CAN/CSA C22.2 NO.5 (kA)	AC	240V	14		—		14		14				
Conforming to standards	CE Marking		● (TÜV)				● (TÜV)							
	CCC certificate		●				●							
	UL Listed (NEMA AB1)		●				●							
	Electrical Appliance and Material Safety Law <PS>E'1		●				●							
Dimensions (inch(mm))					a		1.969 (50)		2.953 (75)		1.969 (50)		2.953 (75)	
					b		4.724 (120)				4.724 (120)			
					c		2.362 (60)				2.362 (60)			
					d		3.307 (84)				3.307 (84)			
Mass (kg)			0.5		0.6		0.5		0.6					
Tripping device			Hydraulic-magnetic											
Connecting terminal			Page B1-26											
Screw			S□		○				○					
Flat					○				○					
Block			—		—				○					
Internal accessories			Page B1-63											
Alarm switch			K		○				○					
Auxiliary switch			W		○				○					
Undervoltage trip			R		○				○					
Shunt trip			F		○				○					
External accessories			Page B1-66											
Handle padlocking device Cap type			Q1		○				○					
Operating handle N-type			N		○				○					
Operating handle V-type			V		○				○					
Terminal cover Short			BT□S		○*2				○					
Terminal cover Long			BT□L		○				○					
Insulation barrier Interphase			BP		○				○					
Handle locking cover			L1		○				○					

●: Approved ○: Available —: Not available

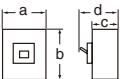
Note: *1 Electrical Appliance and Material Safety Law of Japan

*2 Standard provided

Molded Case Circuit Breakers

G-TWIN series Quick reference guide

■ G-TWIN Global Series

Ampere frame			125A							
Type			BW125JAGU			BW125RAGU				
Pole			2		3		2		3	
Rated current		Reference amb. temp. (40°C)	In(A)		15, 20, 30, 40, 50, 60, 70, 75, 80, 90, 100, 125					
Rated impulse withstand voltage			Uimp(kV)		6			6		
Isolation compliant			●			●				
Rated insulation voltage Ui (V)			AC		690			690		
			DC		250			250		
Rated breaking capacity	IEC 60947-2 EN 60947-2 JIS C 8201-2-1 Icu/Ics (kA)	AC	690V	—				5/3		
			500V	15/8				36/18		
			440V	30/15				50/25		
			415V	30/15				50/25		
			400V	30/15				50/25		
			380V	30/15				50/25		
			240V	50/25				100/50		
			230V	50/25				100/50		
			250V	15/8				40/20		
	GB14048.2 Icu/Ics(kA)	AC	400V	30/15				50/25		
			230V	50/25				100/50		
	UL489 CAN/CSA C22.2 NO.5 (kA)	AC	600V/Y	10	10		18			
			480V/Δ	—	30		50			
			480V/Y	30	30		50			
			240V	50	50		100			
		DC	125/250V	10	10		10			
			Conforming to standards		CE Marking		● (TÜV)			● (TÜV)
		CCC certificate		●			●			
		UL Listed (NEMA AB1)		●			●			
		Electrical Appliance and Material Safety Law <PS>E*		● (except for 125A)			● (except for 125A)			
Dimensions (inch(mm)) 			a	2.362 (60)		3.543 (90)		3.543 (90)		
			b	6.732 (171)				6.732 (171)		
			c	2.677 (68)				2.677 (68)		
			d	3.740 (95)				3.740 (95)		
			Mass (kg)			0.8		1.2		1.0
Tripping device			Thermal-magnetic							
Connecting terminal			Page B1-26							
Screw			S□	○	○		○		○	
Flat				○	○		○		○	
Block				○	○		○		○	
Internal accessories			Page B1-64							
Alarm switch			K	○	○		○		○	
Auxiliary switch			W	○	○		○		○	
Undervoltage trip			R	—	○		○		○	
Shunt trip			F	○	○		○		○	
External accessories			Page B1-66							
Handle padlocking device Cap type			Q1	○	○		○		○	
Handle padlocking device Plate type			Q2	○	○		○		○	
Operating handle N-type			N	—	○		○		○	
Operating handle V-type			V	—	○		○		○	
Operating handle F-type			F	—	○		○		○	
Terminal cover Short			BT□S	○	○		○		○	
Terminal cover Long			BT□L	○	○		○		○	
Insulation barrier Interphase			BP	○	○		○		○	
Handle locking cover			L1	○	○		○		○	

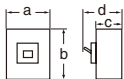
●: Approved ○: Available —: Not available

Note: * Electrical Appliance and Material Safety Law of Japan

Molded Case Circuit Breakers

G-TWIN series Quick reference guide

■ G-TWIN Global Series

Ampere frame				250A							
Type				BW250EAGU		BW250JAGU		BW250RAGU			
Pole				2		3		2		3	
Rated current Reference amb. temp. (40°C)				In(A)		125, 150, 160, 175, 200, 225, 250					
Rated impulse withstand voltage				Uimp(kV)		6		6		6	
Isolation compliant						●		●		●	
Rated insulation voltage Ui (V)				AC		690		690		690	
				DC		250		250		250	
Rated breaking capacity	IEC 60947-2 EN 60947-2 JIS C 8201-2-1 Icu/Ics (kA)	AC	690V	—		—		5/3			
			500V	10/5		18/9		36/18			
			440V	18/9		30/15		50/25			
			415V	18/9		30/15		50/25			
			400V	18/9		30/15		50/25			
			380V	18/9		30/15		50/25			
			240V	36/18		50/25		100/50			
			230V	36/18		50/25		100/50			
	GB14048.2 Icu/Ics(kA)	AC	250V	10/5		20/10		40/20			
			400V	18/9		30/15		50/25			
	UL489 CAN/CSA C22.2 NO.5 (kA)	AC	230V	36/18		50/25		100/50			
			600V/Y	—		10		25			
			480V/Δ	—		30		50			
			480V/Y	—		30		50			
			240V	22		50		100			
		DC	125/250V	10		10		10			
Conforming to standards	CE Marking			● (TÜV)		● (TÜV)		● (TÜV)			
	CCC certificate			●		●		●			
	UL Listed (NEMA AB1)			●		●		●			
	Electrical Appliance and Material Safety Law <PS>E*			—		—		—			
Dimensions (inch(mm)) 				a	4.134 (105)		4.134 (105)		4.134 (105)		
				b	7.126 (181)		7.126 (181)		7.126 (181)		
				c	2.677 (68)		2.677 (68)		2.677 (68)		
				d	3.740 (95)		3.740 (95)		3.740 (95)		
Mass (kg)				1.4		1.6		1.4		1.6	
Tripping device				Thermal-magnetic							
Connecting terminal				Page B1-26							
Screw				○	○	○	○	○	○	○	
Flat				○	○	○	○	○	○	○	
Block				○	○	○	○	○	○	○	
Internal accessories				Page B1-64							
Alarm switch				K	○	○	○	○	○	○	
Auxiliary switch				W	○	○	○	○	○	○	
Undervoltage trip				R	○	○	○	○	○	○	
Shunt trip				F	○	○	○	○	○	○	
External accessories				Page B1-66							
Handle padlocking device Cap type				Q1	○	○	○	○	○	○	
Handle padlocking device Plate type				Q2	○	○	○	○	○	○	
Operating handle N-type				N	○	○	○	○	○	○	
Operating handle V-type				V	○	○	○	○	○	○	
Operating handle F-type				F	○	○	○	○	○	○	
Terminal cover Short				BT□S	○	○	○	○	○	○	
Terminal cover Long				BT□L	○	○	○	○	○	○	
Insulation barrier Interphase				BP	○	○	○	○	○	○	
Handle locking cover				L1	○	○	○	○	○	○	

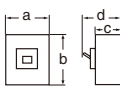
●: Approved ○: Available —: Not available

Note: * Electrical Appliance and Material Safety Law of Japan

Molded Case Circuit Breakers

G-TWIN series Quick reference guide

■ G-TWIN Global Series

Ampere frame				400A								
Type				BW400EAGU		BW400SAGU		BW400RAGU		BW400HAGU		
Pole				2	3	2	3	2	3	2	3	
Rated current		Reference amb. temp. (40°C)		In(A)		250, 300, 350, 400						
Rated impulse withstand voltage		Uimp(kV)		8		8		8		8		
Isolation compliant				●		●		●		●		
Rated insulation voltage Ui (V)		AC		690		690		690		690		
		DC		250		250		250		250		
Rated breaking capacity	IEC 60947-2 EN 60947-2 JIS C 8201-2-1 Icu/Ics (kA)	AC	690V	—		10/5		15/8		15/8		
			500V	18/9		20/10		36/18		42/21		
			440V	30/15		36/18		50/25		70/35		
			415V	30/15		36/18		50/25		70/35		
			400V	30/15		36/18		50/25		70/35		
			380V	30/15		36/18		50/25		70/35		
			240V	50/25		85/43		100/50		125/63		
			230V	50/25		85/43		100/50		125/63		
	GB14048.2 Icu/Ics(kA)	AC	250V	20/10		20/10		40/20		40/20		
			400V	30/15		36/18		50/25		70/35		
	UL489 CAN/CSA C22.2 NO.5 (kA)	AC	230V	50/25		85/43		100/50		125/63		
			600V/Δ	—		—		—		25		
			600V/Y	—		—		—		25		
			480V/Δ	—		35		50		65 (With block terminal:50)		
			480V/Y	—		35		50		65 (With block terminal:50)		
			240V	22		50		100		125		
			DC	125/250V	10		10		10		10	
Conforming to standards	CE Marking			● (TÜV)		● (TÜV)		● (TÜV)		● (TÜV)		
	CCC certificate			●		●		●		●		
	UL Listed (NEMA AB1)			●		●		●		●		
	Electrical Appliance and Material Safety Law <PS>E*			—		—		—		—		
Dimensions (inch(mm)) 				a	5.512 (140)		5.512 (140)		5.512 (140)		5.512 (140)	
				b	10.12 (257)		10.12 (257)		10.12 (257)		10.12 (257)	
				c	4.055 (103)		4.055 (103)		4.055 (103)		4.055 (103)	
				d	5.748 (146)		5.748 (146)		5.748 (146)		5.748 (146)	
				Mass (kg)		4.6	5.6	4.6	5.6	4.6	5.6	4.6
Tripping device				Thermal-magnetic								
Connecting terminal		Page B1-26		○	○	○	○	○	○	○	○	
Flat				○	○	○	○	○	○	○	○	
Block				○	○	○	○	○	○	○	○	
Internal accessories		Page B1-65		K	○	○	○	○	○	○	○	
Alarm switch				W	○	○	○	○	○	○	○	
Auxiliary switch				R	○	○	○	○	○	○	○	
Undervoltage trip				F	○	○	○	○	○	○	○	
Shunt trip												
External accessories		Page B1-66		QN	○	○	○	○	○	○	○	
Handle padlocking device Cap type				Q2	○	○	○	○	○	○	○	
Handle padlocking device Plate type				N	○	○	○	○	○	○	○	
Operating handle N-type				V	○	○	○	○	○	○	○	
Operating handle V-type				F	○	○	○	○	○	○	○	
Operating handle F-type				BTQS	○	○	○	○	○	○	○	
Terminal cover Short				BTQL	○	○	○	○	○	○	○	
Terminal cover Long				BP	○	○	○	○	○	○	○	
Insulation barrier Interphase				L1	○	○	○	○	○	○	○	
Handle locking cover												

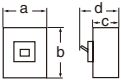
●: Approved ○: Available —: Not available

Note: * Electrical Appliance and Material Safety Law of Japan

Molded Case Circuit Breakers

G-TWIN series Quick reference guide

■ G-TWIN Global Series

Ampere frame			630A		800A			
Type			BW630RAGU		BW800HAGU			
Pole			3		3			
Rated current Reference amb. temp. (40°C)			In(A)		700, 800* ²			
Rated impulse withstand voltage			Uimp(kV)		8			
Isolation compliant			●		●			
Rated insulation voltage Ui (V)			AC		690			
			DC		250			
Rated breaking capacity	IEC 60947-2 EN 60947-2 JIS C 8201-2-1 Icu/Ics (kA)	AC	690V	15/8	15/8	15/8		
			500V	36/18	42/21	36/18		
			440V	50/25	70/35	50/25		
			415V	50/25	70/35	50/25		
			400V	50/25	70/35	50/25		
			380V	50/25	70/35	50/25		
			240V	100/50	125/63	100/50		
			230V	100/50	125/63	100/50		
	GB14048.2 Icu/Ics(kA)	AC	400V	50/25	70/35	50/25		
			230V	100/50	125/63	100/50		
	UL489 CAN/CSA C22.2 NO.5 (kA)	AC	600V/Δ	—	25	—		
			600V/Y	—	25	—		
			480V/Δ	50	65 (With block terminal:50)	50		
			480V/Y	—	65 (With block terminal:50)	50		
			240V	100	125	100		
			DC		125/250V	10	10	
			Conforming to standards	CE Marking		● (TÜV)		● (TÜV)
	CCC certificate			●		●		
UL Listed (NEMA AB1)		●		●				
Electrical Appliance and Material Safety Law <PS>E ³		—		—				
Dimensions (inch(mm))				a	8.268 (210)	8.268 (210)	8.268 (210)	8.268 (210)
			b	10.83 (275)	10.83 (275)	10.83 (275)	10.83 (275)	
			c	4.055 (103)	4.055 (103)	4.055 (103)	4.055 (103)	
			d	5.748 (146)	5.748 (146)	5.748 (146)	5.748 (146)	
Mass (kg)			8.9		8.9		9.4	
Tripping device			Thermal-magnetic					
Connecting terminal			Page B1-26					
Flat			○		○		○	
Block			○		○		○	
Internal accessories			Page B1-65					
Alarm switch			K		○		○	
Auxiliary switch			W		○		○	
Undervoltage trip			R		○		○	
Shunt trip			F		○		○	
External accessories			Page B1-66					
Handle padlocking device Cap type			QN		○		○	
Handle padlocking device Plate type			Q2		○		○	
Operating handle N-type			N		○		○	
Operating handle V-type			V		○		○	
Terminal cover			BT□L		○		○	
Insulation barrier Interphase			BP		○		○	
Handle locking cover			L1		○		○	

●: Approved ○: Available —: Not available

Note: *1 Breakers for 630A cannot be manufactured with block terminals.

*2 Block terminals are standard for Breakers for 800A.

*3 Electrical Appliance and Material Safety Law of Japan

Molded Case Circuit Breakers

G-TWIN series Quick reference guide

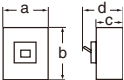
Motor protection breakers

Motors are normally controlled by MCCBs and magnetic starters. In this case the MCCB carries out overcurrent or short-circuit current protection while the starter deals with ON-OFF switching of the motor and

offers protection against sustained overload currents. These are the motor breakers which combine the two functions. FUJI motor breakers are designed to eliminate erroneous operations due to the

rush current produced at the time of starting the motor. They will trip in the face of sustained overcurrent when the integrated bimetal relay has operated.

■ G-TWIN Standard Series / Motor protection

Ampere frame			32A				
Type			BW32AAM		BW32SAM		
Pole			3		2	3	
Rated current		Reference amb. temp. (40°C)	In(A)	1.4, 2.6, 4, 8, 10, 16, 24, 32		(2), (4), 5, 8, 10, 16	0.7, 1.4, 2, 2.6, 4, 5, 8, 10, 12, 16, 24, 32
Rated impulse withstand voltage			Uimp(kV)	6		6	6
Isolation compliant				●		●	●
Rated insulation voltage Ui (V)			AC	500		690	690
Rated breaking capacity Icu/Ics (kA)	IEC 60947-2 EN 60947-2 JIS C 8201-2-1	AC	690V	—		—	—
			500V	—		1.5/1	1.5/1
			440V	1.5/1		2.5/2	2.5/2
			415V	1.5/1		2.5/2	2.5/2
			400V	1.5/1		2.5/2	2.5/2
			380V	1.5/1		2.5/2	2.5/2
			240V	2.5/2		5/3	5/3
			230V	2.5/2		5/3	5/3
			GB14048.2	AC	400V	1.5/1	
	230V	2.5/2			5/3	5/3	
Conforming to standards	CE Marking		●		●	●	
	CCC certificate		●		●	●	
	Electrical Appliance and Material Safety Law <PS>E ²		●		●	●	
Dimensions (mm) 			a	75		50	75
			b	100		100	100
			c	60		60	60
			d	84		84	84
				0.5		0.4	0.5
Mass (kg)			0.5		0.4	0.5	
Tripping device			Hydraulic-magnetic		Hydraulic-magnetic	Hydraulic-magnetic	
Front mounting, front connection		No-mark	○		○	○	
Front mounting, rear connection		X	○		○	○	
Flush mounting, front connection		E	○		○	○	
Flush mounting, top & bottom connection		Y	○		○	○	
Plug-in mounting		P	○		○	○	
IEC 35mm wide rail mounting			○		○	○	
Internal accessories			Page B1-63				
Alarm switch		K	○		○	○	
Auxiliary switch		W	○		○	○	
Undervoltage trip		R	○		○	○	
Shunt trip		F	○		○	○	
External accessories			Page B1-66				
Handle padlocking device		Cap type	Q1	○		○	
Handle padlocking device		Plate type	Q2	▲		▲	
Operating handle		N-type	N	○		○	
Operating handle		V-type	V	○		○	
Terminal cover		Short	BT□S	○		○	
Terminal cover		Long	BT□L	○		○	
Insulation barrier		Interphase	BP	○		○	
Insulation barrier		Earth	BL	○		○	
Handle locking cover			L1	○		○	
Flat terminal			SS	○		○	
Block terminal			SL	—		—	

●: Approved ○: Available —: Not available ▲: Factory-mounted accessory

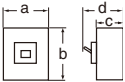
Note: *1 Specify DC only when ordering circuit breakers for DC circuit.

*2 Electrical Appliance and Material Safety Law of Japan

Molded Case Circuit Breakers

G-TWIN series Quick reference guide

■ G-TWIN Standard Series / Motor protection

Ampere frame			50A			
Type			BW50EAM		BW50SAM	BW50RAM
Pole			3		3	3
Rated current	Reference amb. temp. (40°C)	In(A)	24, 32, 40, 45		0.7, 1.4, 2, 2.6, 4, 5, 8, 10, 12, 16, 24, 32, 40, 45	10, 12, 16, 24, 32, 40, 45
Rated impulse withstand voltage		Uimp(kV)	6		6	6
Isolation compliant			●		●	●
Rated insulation voltage Ui (V)		AC	500		690	690
Rated breaking capacity Icu/Ics (kA)	IEC 60947-2 EN 60947-2 JIS C 8201-2-1	AC	690V	—	—	—
			500V	1.5/1	5/3	7.5/4
			440V	2.5/2	7.5/4	10/5
			415V	2.5/2	7.5/4	10/5
			400V	2.5/2	7.5/4	10/5
			380V	2.5/2	7.5/4	10/5
			240V	5/3	10/5	25/13
			230V	5/3	10/5	25/13
			GB14048.2	AC	400V	2.5/2
	230V	5/3	10/5		25/13	
Conforming to standards	CE Marking		●		●	●
	CCC certificate		●		●	●
	Electrical Appliance and Material Safety Law <PS>E ²		●		●	●
Dimensions (mm) 			a	75	75	75
			b	100	100	100
			c	60	60	60
			d	84	84	84
Mass (kg)			0.5		0.5	0.5
Tripping device			Hydraulic-magnetic		Hydraulic-magnetic	Hydraulic-magnetic
Front mounting, front connection	No-mark	○	○		○	○
Front mounting, rear connection	X	○	○		○	○
Flush mounting, front connection	E	○	○		○	○
Flush mounting, top & bottom connection	Y	○	○		○	○
Plug-in mounting	P	○	○		○	○
IEC 35mm wide rail mounting		○	○		○	○
Internal accessories			Page B1-63			
Alarm switch	K	○	○		○	○
Auxiliary switch	W	○	○		○	○
Undervoltage trip	R	○	○		○	○
Shunt trip	F	○	○		○	○
External accessories			Page B1-66			
Handle padlocking device	Cap type	Q1	○		○	○
Handle padlocking device	Plate type	Q2	▲		▲	▲
Operating handle	N-type	N	○		○	○
Operating handle	V-type	V	○		○	○
Terminal cover	Short	BT□S	○		○	○
Terminal cover	Long	BT□L	○		○	○
Insulation barrier	Interphase	BP	○		○	○
Insulation barrier	Earth	BL	○		○	○
Handle locking cover		L1	○		○	○
Flat terminal		SS	○		○	○
Block terminal		SL	—		—	—

●: Approved ○: Available —: Not available ▲: Factory-mounted accessory

Note: *1 Specify DC only when ordering circuit breakers for DC circuit.

*2 Electrical Appliance and Material Safety Law of Japan

Molded Case Circuit Breakers

G-TWIN series Quick reference guide

■ G-TWIN Standard Series / Motor protection

Ampere frame		63A		100A
Type		BW63EAM		BW63SAM
Pole		3		3
Rated current	Reference amb. temp. (40°C)	In(A)	63	63
Rated impulse withstand voltage		Uimp(kV)	6	6
Isolation compliant			●	●
Rated insulation voltage Ui (V)		AC	690	690
Rated breaking capacity Icu/Ics (kA)	IEC 60947-2 EN 60947-2 JIS C 8201-2-1	AC	690V	—
			500V	1.5/1
			440V	2.5/2
			415V	2.5/2
			400V	2.5/2
			380V	2.5/2
			240V	5/3
			230V	5/3
			230V	5/3
	GB14048.2	AC	400V	2.5/2
			230V	5/3
Conforming to standards	CE Marking		●	●
	CCC certificate		●	●
	Electrical Appliance and Material Safety Law <PS>E ²		●	●
Dimensions (mm)		a	75	75
		b	100	100
		c	60	60
		d	84	84
			0.6	0.6
Mass (kg)			0.6	0.6
Tripping device			Hydraulic-magnetic	Hydraulic-magnetic
Front mounting, front connection	No-mark	○	○	○
Front mounting, rear connection	X	○	○	○
Flush mounting, front connection	E	○	○	○
Flush mounting, top & bottom connection	Y	○	○	○
Plug-in mounting	P	○	○	○
IEC 35mm wide rail mounting		○	○	○
Internal accessories		Page B1-63		
Alarm switch	K	○	○	○
Auxiliary switch	W	○	○	○
Undervoltage trip	R	○	○	○
Shunt trip	F	○	○	○
External accessories		Page B1-66		
Handle padlocking device	Cap type	Q1	○	○
Handle padlocking device	Plate type	Q2	▲	▲
Operating handle	N-type	N	○	○
Operating handle	V-type	V	○	○
Terminal cover	Short	BT□S	○	○
Terminal cover	Long	BT□L	○	○
Insulation barrier	Interphase	BP	○	○
Insulation barrier	Earth	BL		
Handle locking cover		L1	○	○
Flat terminal		SS	○	○
Block terminal		SL	○	○

●: Approved ○: Available —: Not available ▲: Factory-mounted accessory

Note: *1 Specify DC only when ordering circuit breakers for DC circuit.

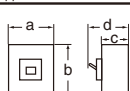
*2 Electrical Appliance and Material Safety Law of Japan

Molded Case Circuit Breakers

G-TWIN series Quick reference guide

B

■ G-TWIN Standard Series / Motor protection

Ampere frame			125A		250A			
Type			BW125JAM	BW125RAM	BW250EAM	BW250JAM	BW250RAM	
Pole			3	3	3	3	3	
Rated current	Reference amb. temp. (40°C)	In(A)	16, 24, 32, 40, 45, 60, 75, 90		125, 150, 175, 225			
Rated impulse withstand voltage		Uimp(kV)	6	6	6	6	6	
Isolation compliant			●	●	●	●	●	
Rated insulation voltage Ui (V)		AC	690	690	690	690	690	
Rated breaking capacity Icu/Ics (kA)	IEC 60947-2 EN 60947-2 JIS C 8201-2-1	AC	690V	—	—	—	—	
			500V	8/4	10/5	5/3	8/4	10/5
			440V	30/15	50/25	18/9	30/15	50/25
			415V	30/15	50/25	18/9	30/15	50/25
			400V	30/15	50/25	18/9	30/15	50/25
			380V	30/15	50/25	18/9	30/15	50/25
			240V	50/25	100/50	36/18	50/25	100/50
			230V	50/25	100/50	36/18	50/25	100/50
	GB14048.2	AC	400V	30/15	50/25	18/9	30/15	50/25
			230V	50/25	100/50	36/18	50/25	100/50
Conforming to standards	CE Marking		●	●	●	●	●	
	CCC certificate		●	●	●	●	●	
	Electrical Appliance and Material Safety Law <PS>E ²		●	●	—	—	—	
Dimensions (mm) 			a	90	90	105	105	105
			b	155	155	165	165	165
			c	68	68	68	68	68
			d	95	95	95	95	95
			Mass (kg)	1.2	1.2	1.6	1.6	1.6
Tripping device			Thermal-magnetic	Thermal-magnetic	Thermal-magnetic	Thermal-magnetic	Thermal-magnetic	
Front mounting, front connection		No-mark	○	○	○	○	○	
Front mounting, rear connection		X	○	○	○	○	○	
Flush mounting, front connection		E	○	○	○	○	○	
Flush mounting, top & bottom connection		Y	○	○	○	○	○	
Plug-in mounting		P	○	○	○	○	○	
IEC 35mm wide rail mounting			○	○	○	○	○	
Internal accessories			Page B1-64					
Alarm switch		K	○	○	○	○	○	
Auxiliary switch		W	○	○	○	○	○	
Undervoltage trip		R	○	○	○	○	○	
Shunt trip		F	○	○	○	○	○	
External accessories			Page B1-66					
Handle padlocking device Cap type		Q1	○	○	○	○	○	
Handle padlocking device Plate type		Q2	○	○	○	○	○	
Operating handle N-type		N	○	○	○	○	○	
Operating handle V-type		V	○	○	○	○	○	
Terminal cover Short		BTCS	○	○	○	○	○	
Terminal cover Long		BTCL	○	○	○	○	○	
Insulation barrier Interphase		BP	○	○	○	○	○	
Handle locking cover		L1	○	○	○	○	○	
Flat terminal		SS	○	○	○	○	○	
Block terminal		SL	○	○	○	○	○	

●: Approved ○: Available —: Not available ▲: Factory-mounted accessory

Note: *¹ Specify DC only when ordering circuit breakers for DC circuit.

*² Electrical Appliance and Material Safety Law of Japan

B1

Molded Case Circuit Breakers

G-TWIN series Mounting modifications

■ Mounting modifications

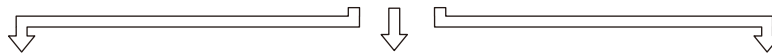
● Standard series

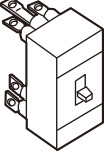
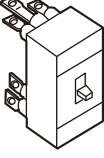
Standard type FUJI breakers are front mounting with front connections. The standard breaker can easily be modified to become front mounting rear connection type, flush mounting type and plug-in type. The additional parts such as insulation bases, barriers, covers and similar parts are added as required.

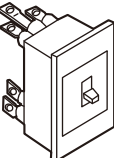
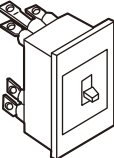
Front mounting
Front connection

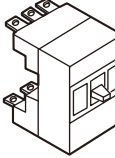
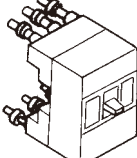
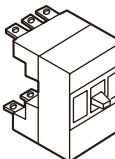


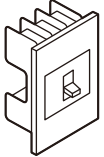
BASIC DESIGN



Additional main parts	Front mounting Rear connection (X type)
Bar stud terminal 	BW32 BW50(A,E,S,R)AG BW63 BW100
Bar stud terminal 	BW50HAG BW125 BW160 BW250 BW400 BW630 BW800 Each stud can be turned by 90°

Additional main parts	Flush mounting Rear connection (E type)
Bar stud terminal 	BW32 BW50(A,E,S,R)AG BW63 BW100
Bar stud terminal 	BW50HAG BW125 BW160 BW250 BW400 BW630 BW800 Each stud can be turned by 90°

Additional main parts	Plug-in mounting (P type)
Bar stud terminal 	BW32 BW50(A,E,S,R)AG BW63 BW100
Round stud terminal 	BW50HAG BW125
Bar stud terminal 	BW160 BW250 BW400 BW630 BW800 Each stud can be turned by 90°

Additional main parts	Flush mounting Top and bottom connection (Y type)
Decorative flush plate 	BW32 BW50(A,E,S,R)AG BW63 BW100

Molded Case Circuit Breakers

G-TWIN series Mounting modifications

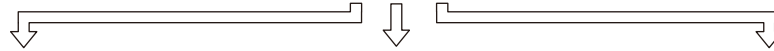
B

● UL489 Listed series

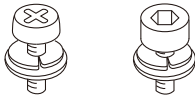
Front mounting
Front connection



BASIC DESIGN



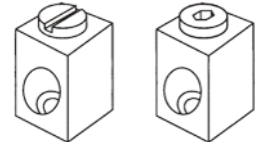
Screw



Flat terminal



Block terminal



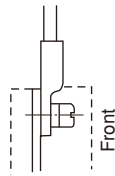
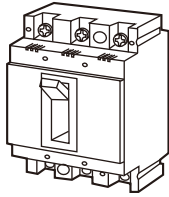
B1

Molded Case Circuit Breakers

G-TWIN series Terminal connection

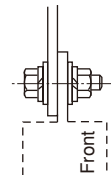
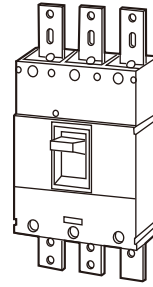
■ Terminal connection/Front mounting, front connection

● 32AF to 100AF

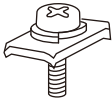


Flat terminal

● 400AF to 800AF



Flat terminal

Self lifting screw	Breaker type	Tightening torque (N•m)	Size
	BW32 BW50(A,E,S,R)AG BW100*	2.3 to 2.8	M5 × 14
Pan-head screw	BW63 BW100	5.5 to 7.5	M8 × 15
			

* Breaker of rated current : 50A

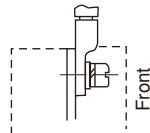
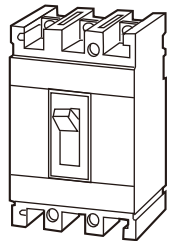
Hexagonal head bolt	Breaker type	Tightening torque (N•m)	Size (mm)
	BW400	40 to 50	M12 × 35
	BW630 BW800	40 to 50	M12 × 40

Type of connection/up to 250AF

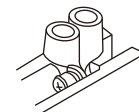
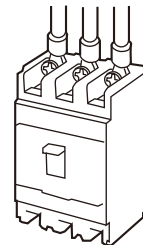
Front mounting front connection

Direct connection

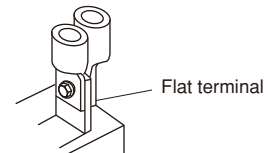
● 125AF to 250AF



Front



Flat terminal connection Flat terminals are required.



Flat terminal

Pan-head screw	Breaker type	Tightening torque (N•m)	Size (mm)
	BW50HAG BW125	5.5 to 7.5	M8 × 16
Hexagonal socket head bolt	BW160 BW250	8.0 to 13.0	M8 × 16
			

Flat bar studs/1-hole type

Breaker type	Pole	Type of flat terminal
BW32 BW50(A,E,S,R)AG	2 3	BZ6S10C502 BZ6S10C503
BW63 BW100*	2 3	BZ6S10C1002 BZ6S10C1003
BW50HAG BW125	2 3 4	BW9SS0CA-2 BW9SS0CA-3 BW9SS0CA-4
BW160 BW250	2 3 4	BZ-S50B-2252 BZ-S50B-2253 BW9SS0GA-4

* BW100 breaker of rated current 50A: BZ6S10C502 or 503.

Molded Case Circuit Breakers

G-TWIN series Wire size and terminal

■ Wire size and crimp terminal

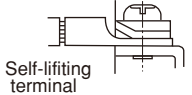
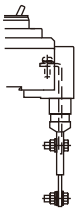
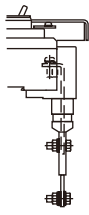
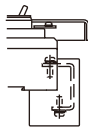
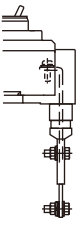
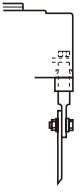
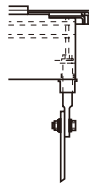
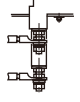
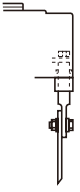
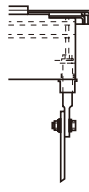
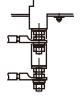
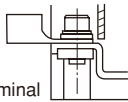
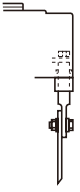
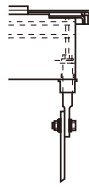
The following is the size recommendations for crimp terminals.

Crimp terminal R : JIS C2805
 CB : JEM-1399
 JST : Product of Japan Crimp Terminal Co., Ltd.

Ampere frame	Breaker	Wire size(mm ²)										
		1.04 2.63	2.63 6.64	6.64 10.52	10.52 16.78	16.78 26.66	26.66 42.42	42.42 60.57	96.3 117.2	117.2 152.05	192.6 242.27	242.27 325
32	BW32	R2-5	R5.5-5	R8-5	R14-5							
50	BW50AAG,EAG,SAG,RAG	R2-5	R5.5-5	R8-5	R14-5							
	BW50HAG	R2-8	R5.5-8	R8-8	R14-8	R22-8	JST38-S8	CB60-8				
63	BW63	R2-8	R5.5-8	R8-8	R14-8	JST22-S8						
100	BW100	R2-8	R5.5-8	R8-8	R14-8	JST22-S8	JST38-S8					
125	BW125	R2-8	R5.5-8	R8-8	R14-8	R22-8	JST38-S8	CB60-8				
160 250	BW160 BW250					R22-8	R38-8	R60-8	CB100-8			
400	BW400						R38-12	R60-12	R100-12	R150-12	R200-12	JST325-12
630	BW630								R100-12	R150-12	R200-12	JST325-12
800	BW800								R100-12	R150-12	R200-12	JST325-12

■ Breaker termination

● Standard

MCCB type	Front connection	Rear connection X	Flush mounting E	Y	Plug-in mounting P
BW32 BW50(A,E,S,R)AG	 Self-lifting terminal				
BW63 BW100					
BW50HAG BW125	 Flat terminal				
BW160 BW250	 Flat terminal				
BW400 BW630 BW800	 Flat terminal	90° rotational stud	90° rotational stud		90° rotational stud

Molded Case Circuit Breakers

G-TWIN series Wire size and terminal

■ Notes on wiring (UL489 Listed series)

Notes on connecting wires (conductors)

- Connect wires to the UL breaker according to NEC (National Electric Code) or CEC (Canadian Electrical Code) Part 1.
- Use 75°C copper wires for wiring. UL-certified or CSA-certified wires are recommended.
- If a large current (for example, a short-circuit current) flows, it causes a huge electromagnetic force between wires. Therefore, be sure to secure the wires sufficiently.
- Re-tighten terminal screws periodically.

Block terminal connection

- Choose from the stranded wires shown in Table.

Wire size: AWG or MCM [mm ²]	No. of wires stranded
14 to 2 [2.1 to 33.6]	7
1 to 4/0 [42.4 to 107.2]	19
250 to 500 [127 to 250]	37

Values in [] are those converted from AWG or MCM sizes to mm².

- * See the instruction manual that comes with the breaker for more details.

Precautions

- Two wires of different sizes cannot be connected to the same block terminal.
- Be sure to use stranded wires according to Table "Number of wires stranded."
- Multi-conductor wires cannot be connected.
- Do not solder wires together.

Code	Terminal position		Applicable breaker type		
	Line	Load	BW50	BW100, 125, 250	BW400, 630, 800
Blank	Screw	Screw	●	●	—
Blank	Flat terminal	Flat terminal	—	—	●
SB	Block terminal	Block terminal	—	●	●
SF	Flat terminal	Flat terminal	●	●	—
S3	Screw	Flat terminal	●	●	—
S4	Flat terminal	Screw	●	●	—
S5	Screw	Block terminal	—	●	—
S6	Block terminal	Screw	—	●	—
S7	Flat terminal	Block terminal	—	●	●
S8	Block terminal	Flat terminal	—	●	●

Wire size and crimp terminal

● Crimp terminal connection

MCCB	Rated current (A)	Applicable crimp terminal			Connectable wire size (AWG)	Tightening torque (N•m)	Type of screw head and size (mm)
		75°C wire					
		J.S.T Mfg. Co., Ltd.	Nichifu Co., Ltd.	Daido Solderless Terminal Mfg. Co., Ltd.	75°C wire		
BW50RAGU	3	R2-5	R2-5M	2-S5, 2-5	14AWG	2.3-2.8	Cross/straight slotted pan-head screw M5 x 14
	5		R2-5				
	10						
	15						
	20	R5.5-5	R3.5-5S, R3.5-5L, 5.5-6N, R5.5-5S, R5.5-5	3.5-5, 5.5-S5, 5.5-5, 5.5-L5	12AWG		
	30				10AWG		
BW100EAGU	40	R8-5	R8-5S, R8-5	8-S5, 8-5	8AWG	5.5-7.5	Cross/straight slotted pan-head screw M8 x 15
	50						
	60	R14-8	R14-8S, R14-8	R14-S8, R14-8	6AWG		
	75	22-S8	R22-8S, R22-8	R22-S8, 22-8	4AWG		
	100	38-S8	R38-8S	38-S8	3AWG		
BW125JAGU BW125RAGU	15	R2-8	R2-8	2-8, 2-B8	14AWG	5.8 (5.3-6.4)	Cross/straight slotted pan-head screw M8 x 16
	20	5.5-S8, R5.5-8	R3.5-8, R5.5-8	3.5-8, 5.5-8	12AWG		
	30		R5.5-8	5.5-8	10AWG		
	40	8-8NS, R8-8	R8-8	8-8	8AWG		
	50						
	60	14-8NS, 14-S8, R14-8	R14-8S, R14-8	14-S8, 14-8	6AWG		
	70	22-S8, R22-8, CB22-S8	R22-8S, R22-8, CB22-8S	22-S8, 22-8, CB22-8	4AWG		
	75						
	80						
	90	38-S8	R38-8S	38-S8	3AWG		
	100						
	125				1AWG		
BW250EAGU BW250JAGU BW250RAGU	125	38-S8, R38-8	R38-8S, R38-8	38-S8, 38-8	1AWG	10.5 (8-13)	Hexagon socket head bolt M8 x 16
	150	60-S8, R60-8	R60-8, CB60-8, CB60-8S	60-8, CB60-8	1/0AWG		
	175	70-8	R70-8	70-8	2/0AWG		
	200	CB80-S8		CB80-8	3/0AWG		
	225	CB100-S8		CB100-8	4/0AWG		
	250	CB150-S8	CB150-8	CB150-8	250MCM		

- Notes:
- AWG/MCM is the UL approved wire unit.
 - The allowable temperature of wire is 75°C. (UL CSA approved)
 - Be sure to use UL-certified or CSA-certified crimp tools commercially available.

Molded Case Circuit Breakers

G-TWIN series Wire size and terminal

● Flat terminal connection

MCCB	Rated current (A)	Applicable crimp terminal 75°C wire			Connectable wire size (AWG)	Tightening torque (N•m)		Type of screw head and size (mm)
		J.S.T Mfg. Co., Ltd.	Nichifu Co., Ltd.	Daido Solderless Terminal Mfg. Co., Ltd.		Wire side	MCCB side	
BW50RAGU	3	R2-5	R2-5M	2-S5, 2-5	14AWG	3.5 to 4.5	2.3 to 2.8	Hexagon socket head bolt M5 x 16
	5		R2-5					
	10							
	15							
	20	R5.5-5	R3.5-5S, R3.5-5L, 5.5-6N.	3.5-5, 5.5-S5	12AWG			
	30		R5.5-5S, R5.5-5	5.5-5, 5.5-L5	10AWG			
BW100EAGU	40	R8-5	R8-5S, R8-5	8-S5, 8-5	8AWG	8 to 10	5.5 to 7.5	Hexagon socket head bolt M8 x 22
	50							
	60	R14-8	R14-8S, R14-8	R14-S8, R14-8	6AWG			
	75	22-S8	R22-8S, R22-8	R22-S8, 22-8	4AWG			
BW125JAGU BW125RAGU	100	38-S8	R38-8S	38-S8	3AWG	9 (8 to 10)	5.8 (5.3 to 6.4)	Cross/straight slotted pan-head screw M8 x 16
	15	R2-8	R2-8	2-8, 2-B8	14AWG			
	20	5.5-S8, R5.5-8	R3.5-8, R5.5-8	3.5-8, 5.5-8	12AWG			
	30		R5.5-8	5.5-8	10AWG			
	40	8-8NS, R8-8	R8-8	8-8	8AWG			
	50							
	60	14-8NS, 14-S8, R14-8	R14-8S, R14-8	14-S8, 14-8	6AWG			
	70	22-S8, R22-8, CB22-S8	R22-8S, R22-8, CB22-8S	22-S8, 22-8, CB22-8	4AWG			
	75							
	80							
	90	38-S8	R38-8S	38-S8	3AWG			
	100							
BW250EAGU BW250JAGU BW250RAGU	125	38-S8, R38-8	R38-8S, R38-8	38-S8, 38-8	1AWG	9 (8 to 10)	10.5 (8 to 13)	Hexagon socket head bolt M8 x 16
	150	60-S8, R60-8	R60-8, CB60-8, CB60-8S	60-8, CB60-8	1/0AWG			
	175	70-8	R70-8	70-8	2/0AWG			
	200	CB80-S8		CB80-8	3/0AWG			
	225	CB100-S8		CB100-8	4/0AWG			
	250	CB150-S8	CB150-8	CB150-8	250MCM			
BW400EAGU BW400SAGU BW400RAGU BW400HAGU	250	150-12	R150-12		250MCM	45 (40 to 50)	43.5 (39.2 to 48)	Hexagon head bolt M12 x 35
	300	180-12	R180-12		350MCM			
	350	325-12	R325-12N		500MCM			
	400	325-12	R325-12N		500MCM			
BW630RAGU BW630HAGU		R80-12	R80-12		3/0AWG(x2)	47.04 (42.4 to 51.7)	47.04 (42.4 to 51.7)	Hexagon head bolt M12 x 40
	500	R150-12		R150-12	250MCM(x2)			
	600	180-12		R180-12	350MCM(x2)			
BW800RAGU BW800HAGU	630	325-12	R325-12N	R325-12 □	500MCM(x2)	47.04 (42.4 to 51.7)	47.04 (42.4 to 51.7)	Hexagon head bolt M12 x 40
	700	325-12		R325-12 □	500MCM(x2)			

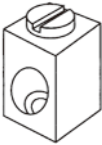
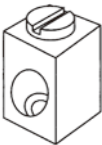
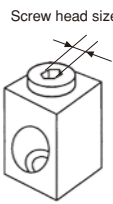
Notes: • AWG/MCM is the UL approved wire unit.

• The allowable temperature of wire is 75°C. (UL CSA approved)

Molded Case Circuit Breakers

G-TWIN series Wire size and terminal

● Block terminal connection

MCCB	Rated current (A)	Connectable wire size (AWG)	Tightening torque (N•m)	Type of screw head and size (mm)	Figure	
BW100EAGU	60	6AWG	5.8 (5.5 to 6.5)	Slotted set screw		
	70	4AWG				
	75					
	80					
	90	3AWG				
	100					
BW125JAGU BW125RAGU	15	14AWG	5.8 (5.8 to 6.4)	Slotted set screw		
	20	12AWG				
	30	10AWG				
	40	8AWG				
	50					
	60	6AWG				
	70	4AWG				
	75					
	80					
	90	3AWG				
	100					
	125	1AWG				
BW250EAGU BW250JAGU BW250RAGU	125	1AWG	23 (23 to 25.3)	Hexagon socket head setscrew: 8 mm (5/16 inch)		
	150	1/0AWG				
	175	2/0AWG				
	200	3/0AWG				
	225	4/0AWG				
	250	250MCM				
BW400EAGU BW400SAGU BW400RAGU BW400HAGU	250	250MCM	43.5 (43.5 to 48)	Hexagon socket head setscrew: 9.53 mm (3/8 inch)		
	300	350MCM				
	350	500MCM	31.9 (31.9 to 35.1)	Hexagon socket head setscrew: 8 mm (5/16 inch)		
	400	3/0AWG(x2)				
BW630RAGU BW630HAGU	500	250MCM(x2)	31.1 (31.1 to 34.2)	Hexagon socket head setscrew: 8 mm (5/16 inch)		
	600	350MCM(x2)				
BW800RAGU BW800HAGU	700	500MCM(x2)	31.1 (31.1 to 34.2)	Hexagon socket head setscrew: 8 mm (5/16 inch)		
	800	300MCM(x3)				

Notes: • AWG/MCM is the UL approved wire unit.

• The allowable temperature of wire is 75°C. (UL CSA approved)

Molded Case Circuit Breakers

G-TWIN series Type number/Line protection

■ Type number, Standard series (Line protection)

● AAG series, 2-pole IEC/EN/GB/JIS conformed

Breaker ampere frame	Rated current (A)	Type	☐ : Available mounting and connection
32	3	BW32AAG-2P003 ☐	Blank, X, E, Y, P
	5	BW32AAG-2P005 ☐	
	10	BW32AAG-2P010 ☐	
	15	BW32AAG-2P015 ☐	
	20	BW32AAG-2P020 ☐	
	30	BW32AAG-2P030 ☐	
	32	BW32AAG-2P032 ☐	
50	5	BW50AAG-2P005 ☐	Blank, X, E, Y, P
	10	BW50AAG-2P010 ☐	
	15	BW50AAG-2P015 ☐	
	20	BW50AAG-2P020 ☐	
	30	BW50AAG-2P030 ☐	
	32	BW50AAG-2P032 ☐	
	40	BW50AAG-2P040 ☐	
	50	BW50AAG-2P050 ☐	

Mounting	Connection	☐
Front	Front	Blank
Front	Rear	X
Flush	Rear	E
Flush	Top and bottom	Y
Plug-in		P

● EAG series, 2-pole IEC/EN/GB/JIS conformed

Breaker ampere frame	Rated current (A)	Type	☐ : Available mounting and connection
50	5	BW50EAG-2P005 ☐	Blank, X, E, Y, P
	10	BW50EAG-2P010 ☐	
	15	BW50EAG-2P015 ☐	
	20	BW50EAG-2P020 ☐	
	30	BW50EAG-2P030 ☐	
	32	BW50EAG-2P032 ☐	
	40	BW50EAG-2P040 ☐	
	50	BW50EAG-2P050 ☐	
63	60	BW63EAG-2P060 ☐	Blank, X, E, Y, P
	63	BW63EAG-2P063 ☐	
100	50	BW100EAG-2P050 ☐	Blank, X, E, Y, P
	60	BW100EAG-2P060 ☐	
	63	BW100EAG-2P063 ☐	
	75	BW100EAG-2P075 ☐	
	100	BW100EAG-2P100 ☐	
160	125	BW160EAG-2P125 ☐	Blank, X, E, P
	150	BW160EAG-2P150 ☐	
	160	BW160EAG-2P160 ☐	
250	175	BW250EAG-2P175 ☐	Blank, X, E, P
	200	BW250EAG-2P200 ☐	
	225	BW250EAG-2P225 ☐	
	250	BW250EAG-2P250 ☐	
400	250	BW400EAG-2P250 ☐	Blank, X, E, P
	300	BW400EAG-2P300 ☐	
	350	BW400EAG-2P350 ☐	
	400	BW400EAG-2P400 ☐	

● JAG series, 2-pole IEC/EN/GB/JIS conformed

Breaker ampere frame	Rated current (A)	Type	☐ : Available mounting and connection
125	15	BW125JAG-2P015 ☐	Blank, X, E, P
	20	BW125JAG-2P020 ☐	
	30	BW125JAG-2P030 ☐	
	40	BW125JAG-2P040 ☐	
	50	BW125JAG-2P050 ☐	
	60	BW125JAG-2P060 ☐	
	75	BW125JAG-2P075 ☐	
	100	BW125JAG-2P100 ☐	
	125	BW125JAG-2P125 ☐	
160	125	BW160JAG-2P125 ☐	Blank, X, E, P
	150	BW160JAG-2P150 ☐	
	160	BW160JAG-2P160 ☐	
250	175	BW250JAG-2P175 ☐	Blank, X, E, P
	200	BW250JAG-2P200 ☐	
	225	BW250JAG-2P225 ☐	
	250	BW250JAG-2P250 ☐	

Molded Case Circuit Breakers

G-TWIN series Type number/Line protection

● SAG series, 2-pole IEC/EN/GB/JIS conformed

Breaker ampere frame	Rated current (A)	Type	☐ : Available mounting and connection*
32	3	BW32SAG-2P003□	Blank, X, E, Y, P
	5	BW32SAG-2P005□	
	10	BW32SAG-2P010□	
	15	BW32SAG-2P015□	
	20	BW32SAG-2P020□	
	30	BW32SAG-2P030□	
50	32	BW32SAG-2P032□	
	5	BW50SAG-2P005□	Blank, X, E, Y, P
	10	BW50SAG-2P010□	
	15	BW50SAG-2P015□	
	20	BW50SAG-2P020□	
	30	BW50SAG-2P030□	
63	32	BW50SAG-2P032□	
	40	BW50SAG-2P040□	
	50	BW50SAG-2P050□	
	60	BW63SAG-2P060□	Blank, X, E, Y, P
	63	BW63SAG-2P063□	
125	15	BW125SAG-2P015□	Blank, X, E, P
	20	BW125SAG-2P020□	
	30	BW125SAG-2P030□	
	40	BW125SAG-2P040□	
	50	BW125SAG-2P050□	
	60	BW125SAG-2P060□	
160	75	BW125SAG-2P075□	
	100	BW125SAG-2P100□	
	125	BW125SAG-2P125□	
	125	BW160SAG-2P125□	Blank, X, E, P
	150	BW160SAG-2P150□	
	160	BW160SAG-2P160□	
250	175	BW250SAG-2P175□	Blank, X, E, P
	200	BW250SAG-2P200□	
	225	BW250SAG-2P225□	
	250	BW250SAG-2P250□	
400	250	BW400SAG-2P250□	Blank, X, E, P
	300	BW400SAG-2P300□	
	350	BW400SAG-2P350□	
	400	BW400SAG-2P400□	

● HAG series, 2-pole IEC/EN/GB/JIS conformed

Breaker ampere frame	Rated current (A)	Type	☐ : Available mounting and connection*
400	250	BW400HAG-2P250□	Blank, X, E, P
	300	BW400HAG-2P300□	
	350	BW400HAG-2P350□	
	400	BW400HAG-2P400□	

● RAG series, 2-pole IEC/EN/GB/JIS conformed

Breaker ampere frame	Rated current (A)	Type	☐ : Available mounting and connection*
50	10	BW50RAG-2P010□	Blank, X, E, Y, P
	15	BW50RAG-2P015□	
	20	BW50RAG-2P020□	
	30	BW50RAG-2P030□	
	32	BW50RAG-2P032□	
	40	BW50RAG-2P040□	
63	50	BW50RAG-2P050□	
	60	BW63RAG-2P060□	Blank, X, E, Y, P
	63	BW63RAG-2P063□	
125	15	BW125RAG-2P015□	Blank, X, E, P
	20	BW125RAG-2P020□	
	30	BW125RAG-2P030□	
	40	BW125RAG-2P040□	
	50	BW125RAG-2P050□	
	60	BW125RAG-2P060□	
160	75	BW125RAG-2P075□	
	100	BW125RAG-2P100□	
	125	BW125RAG-2P125□	
	125	BW160RAG-2P125□	Blank, X, E, P
	150	BW160RAG-2P150□	
	160	BW160RAG-2P160□	
250	175	BW250RAG-2P175□	Blank, X, E, P
	200	BW250RAG-2P200□	
	225	BW250RAG-2P225□	
	250	BW250RAG-2P250□	
400	250	BW400RAG-2P250□	Blank, X, E, P
	300	BW400RAG-2P300□	
	350	BW400RAG-2P350□	
	400	BW400RAG-2P400□	

● HAG series, 2-pole IEC/EN/JIS conformed

Breaker ampere frame	Rated current (A)	Type	☐ : Available mounting and connection*
50	15	BW50HAG-2P015□	Blank, X, E, P
	20	BW50HAG-2P020□	
	30	BW50HAG-2P030□	
	40	BW50HAG-2P040□	
	50	BW50HAG-2P050□	
	50	BW50HAG-2P050□	
125	15	BW125HAG-2P015□	Blank, X, E, P
	20	BW125HAG-2P020□	
	30	BW125HAG-2P030□	
	40	BW125HAG-2P040□	
	50	BW125HAG-2P050□	
	60	BW125HAG-2P060□	
160	75	BW125HAG-2P075□	
	100	BW125HAG-2P100□	
	125	BW125HAG-2P125□	
250	125	BW250HAG-2P125□	Blank, X, E, P
	150	BW250HAG-2P150□	
	160	BW250HAG-2P160□	
	175	BW250HAG-2P175□	
	200	BW250HAG-2P200□	
	225	BW250HAG-2P225□	
250	250	BW250HAG-2P250□	

* See page B1-29.

Molded Case Circuit Breakers

G-TWIN series Type number/Line protection

● AAG series, 3-pole IEC/EN/GB/JIS conformed

Breaker ampere frame	Rated current (A)	Type	☐ : Available mounting and connection*
32	3	BW32AAG-3P003	Blank, X, E, Y, P
	5	BW32AAG-3P005	
	10	BW32AAG-3P010	
	15	BW32AAG-3P015	
	20	BW32AAG-3P020	
	30	BW32AAG-3P030	
	32	BW32AAG-3P032	
50	5	BW50AAG-3P005	Blank, X, E, Y, P
	10	BW50AAG-3P010	
	15	BW50AAG-3P015	
	20	BW50AAG-3P020	
	30	BW50AAG-3P030	
	32	BW50AAG-3P032	
	40	BW50AAG-3P040	
100	50	BW50AAG-3P050	Blank, X, E, Y, P
	60	BW100AAG-3P060	
	63	BW100AAG-3P063	
	75	BW100AAG-3P075	
	100	BW100AAG-3P100	

● EAG series, 3-pole IEC/EN/GB/JIS conformed

Breaker ampere frame	Rated current (A)	Type	☐ : Available mounting and connection*
50	5	BW50EAG-3P005	Blank, X, E, Y, P
	10	BW50EAG-3P010	
	15	BW50EAG-3P015	
	20	BW50EAG-3P020	
	30	BW50EAG-3P030	
	32	BW50EAG-3P032	
	40	BW50EAG-3P040	
	50	BW50EAG-3P050	
63	60	BW63EAG-3P060	Blank, X, E, Y, P
	63	BW63EAG-3P063	
100	50	BW100EAG-3P050	Blank, X, E, Y, P
	60	BW100EAG-3P060	
	63	BW100EAG-3P063	
	75	BW100EAG-3P075	
	100	BW100EAG-3P100	
160	125	BW160EAG-3P125	Blank, X, E, P
	150	BW160EAG-3P150	
	160	BW160EAG-3P160	
250	175	BW250EAG-3P175	Blank, X, E, P
	200	BW250EAG-3P200	
	225	BW250EAG-3P225	
	250	BW250EAG-3P250	
400	250	BW400EAG-3P250	Blank, X, E, P
	300	BW400EAG-3P300	
	350	BW400EAG-3P350	
	400	BW400EAG-3P400	
630	500	BW630EAG-3P500	Blank, X, E, P
	600	BW630EAG-3P600	
	630	BW630EAG-3P630	
800	700	BW800EAG-3P700	Blank, X, E, P
	800	BW800EAG-3P800	

● JAG series, 3-pole IEC/EN/GB/JIS conformed

Breaker ampere frame	Rated current (A)	Type	☐ : Available mounting and connection*
125	15	BW125JAG-3P015	Blank, X, E, P
	20	BW125JAG-3P020	
	30	BW125JAG-3P030	
	40	BW125JAG-3P040	
	50	BW125JAG-3P050	
	60	BW125JAG-3P060	
	75	BW125JAG-3P075	
	100	BW125JAG-3P100	
	125	BW125JAG-3P125	
160	125	BW160JAG-3P125	Blank, X, E, P
	150	BW160JAG-3P150	
	160	BW160JAG-3P160	
250	175	BW250JAG-3P175	Blank, X, E, P
	200	BW250JAG-3P200	
	225	BW250JAG-3P225	
	250	BW250JAG-3P250	

* See page B1-29.

Molded Case Circuit Breakers

G-TWIN series Type number/Line protection

● SAG series, 3-pole IEC/EN/GB/JIS conformed

Breaker ampere frame	Rated current (A)	Type	☐ : Available mounting and connection*
32	3	BW32SAG-3P003	Blank, X, E, Y, P
	5	BW32SAG-3P005	
	10	BW32SAG-3P010	
	15	BW32SAG-3P015	
	20	BW32SAG-3P020	
	30	BW32SAG-3P030	
	32	BW32SAG-3P032	
50	5	BW50SAG-3P005	Blank, X, E, Y, P
	10	BW50SAG-3P010	
	15	BW50SAG-3P015	
	20	BW50SAG-3P020	
	30	BW50SAG-3P030	
	32	BW50SAG-3P032	
	40	BW50SAG-3P040	
63	60	BW63SAG-3P060	Blank, X, E, Y, P
	63	BW63SAG-3P063	
125	15	BW125SAG-3P015	Blank, X, E, P
	20	BW125SAG-3P020	
	30	BW125SAG-3P030	
	40	BW125SAG-3P040	
	50	BW125SAG-3P050	
	60	BW125SAG-3P060	
	75	BW125SAG-3P075	
160	100	BW125SAG-3P100	Blank, X, E, P
	125	BW125SAG-3P125	
	125	BW125SAG-3P125	
160	125	BW160SAG-3P125	Blank, X, E, P
	150	BW160SAG-3P150	
	160	BW160SAG-3P160	
250	175	BW250SAG-3P175	Blank, X, E, P
	200	BW250SAG-3P200	
	225	BW250SAG-3P225	
	250	BW250SAG-3P250	
400	250	BW400SAG-3P250	Blank, X, E, P
	300	BW400SAG-3P300	
	350	BW400SAG-3P350	
	400	BW400SAG-3P400	

● RAG series, 3-pole IEC/EN/GB/JIS conformed

Breaker ampere frame	Rated current (A)	Type	☐ : Available mounting and connection*
50	10	BW50RAG-3P010	Blank, X, E, Y, P
	15	BW50RAG-3P015	
	20	BW50RAG-3P020	
	30	BW50RAG-3P030	
	32	BW50RAG-3P032	
	40	BW50RAG-3P040	
	50	BW50RAG-3P050	
63	60	BW63RAG-3P060	Blank, X, E, Y, P
	63	BW63RAG-3P063	
125	15	BW125RAG-3P015	Blank, X, E, P
	20	BW125RAG-3P020	
	30	BW125RAG-3P030	
	40	BW125RAG-3P040	
	50	BW125RAG-3P050	
	60	BW125RAG-3P060	
	75	BW125RAG-3P075	
160	100	BW125RAG-3P100	Blank, X, E, P
	125	BW125RAG-3P125	
	125	BW125RAG-3P125	
160	125	BW160RAG-3P125	Blank, X, E, P
	150	BW160RAG-3P150	
	160	BW160RAG-3P160	
250	175	BW250RAG-3P175	Blank, X, E, P
	200	BW250RAG-3P200	
	225	BW250RAG-3P225	
	250	BW250RAG-3P250	
400	250	BW400RAG-3P250	Blank, X, E, P
	300	BW400RAG-3P300	
	350	BW400RAG-3P350	
	400	BW400RAG-3P400	
630	500	BW630RAG-3P500	Blank, X, E, P
	600	BW630RAG-3P600	
	630	BW630RAG-3P630	
800	700	BW800RAG-3P700	Blank, X, E, P
	800	BW800RAG-3P800	

● HAG series, 3-pole IEC/EN/GB/JIS conformed

Breaker ampere frame	Rated current (A)	Type	☐ : Available mounting and connection*
400	250	BW400HAG-3P250	Blank, X, E, P
	300	BW400HAG-3P300	
	350	BW400HAG-3P350	
	400	BW400HAG-3P400	
630	500	BW630HAG-3P500	Blank, X, E, P
	600	BW630HAG-3P600	
	630	BW630HAG-3P630	
800	700	BW800HAG-3P700	Blank, X, E, P
	800	BW800HAG-3P800	

* See page B1-29.

Molded Case Circuit Breakers

G-TWIN series Type number/Line protection

● JAG series, 4-pole IEC/EN/GB/JIS conformed

Breaker ampere frame	Rated current (A)	Type	☐ : Available mounting and connection*
125	15	BW125JAG-4P015	Blank, X, E
	20	BW125JAG-4P020	
	30	BW125JAG-4P030	
	40	BW125JAG-4P040	
	50	BW125JAG-4P050	
	60	BW125JAG-4P060	
	75	BW125JAG-4P075	
	100	BW125JAG-4P100	
	125	BW125JAG-4P125	
160	125	BW160JAG-4P125	Blank, X, E
	150	BW160JAG-4P150	
	160	BW160JAG-4P160	
250	175	BW250JAG-4P175	Blank, X, E
	200	BW250JAG-4P200	
	225	BW250JAG-4P225	
	250	BW250JAG-4P250	

● SAG series, 4-pole IEC/EN/GB/JIS conformed

Breaker ampere frame	Rated current (A)	Type	☐ : Available mounting and connection*
125	15	BW125SAG-3P015	Blank, X, E
	20	BW125SAG-3P020	
	30	BW125SAG-3P030	
	40	BW125SAG-3P040	
	50	BW125SAG-3P050	
	60	BW125SAG-3P060	
	75	BW125SAG-3P075	
	100	BW125SAG-3P100	
	125	BW125SAG-3P125	
160	125	BW160SAG-3P125	Blank, X, E
	150	BW160SAG-3P150	
	160	BW160SAG-3P160	
250	175	BW250SAG-3P175	Blank, X, E
	200	BW250SAG-3P200	
	225	BW250SAG-3P225	
	250	BW250SAG-3P250	

● RAG series, 4-pole IEC/EN/GB/JIS conformed

Breaker ampere frame	Rated current (A)	Type	☐ : Available mounting and connection*
125	15	BW125RAG-4P015	Blank, X, E
	20	BW125RAG-4P020	
	30	BW125RAG-4P030	
	40	BW125RAG-4P040	
	50	BW125RAG-4P050	
	60	BW125RAG-4P060	
	75	BW125RAG-4P075	
	100	BW125RAG-4P100	
	125	BW125RAG-4P125	
160	125	BW160RAG-4P125	Blank, X, E
	150	BW160RAG-4P150	
	160	BW160RAG-4P160	
250	175	BW250RAG-4P175	Blank, X, E
	200	BW250RAG-4P200	
	225	BW250RAG-4P225	
	250	BW250RAG-4P250	
400	250	BW400RAG-4P250	Blank, X, E
	300	BW400RAG-4P300	
	350	BW400RAG-4P350	
	400	BW400RAG-4P400	
630	500	BW630RAG-4P500	Blank, X, E
	600	BW630RAG-4P600	
	630	BW630RAG-4P630	
800	700	BW800RAG-4P700	Blank, X, E
	800	BW800RAG-4P800	

● HAG series, 4-pole IEC/EN/GB/JIS conformed

Breaker ampere frame	Rated current (A)	Type	☐ : Available mounting and connection*
400	250	BW400HAG-4P250	Blank, X, E
	300	BW400HAG-4P300	
	350	BW400HAG-4P350	
	400	BW400HAG-4P400	
630	500	BW630HAG-4P500	Blank, X, E
	600	BW630HAG-4P600	
	630	BW630HAG-4P630	
	800	BW800HAG-4P800	
800	700	BW800HAG-4P700	Blank, X, E
	800	BW800HAG-4P800	

* See page B1-29.

Molded Case Circuit Breakers

G-TWIN series Type number/Line protection

■ Type number, Global series (Line protection)

● EAGU series, 2-pole UL489 Listed

Breaker ampere frame	Rated current (A)	Type	☐ : Available mounting and connection
100	60	BW100EAGU-2P060	Blank, SB, SF, S3 S4, S5, S6, S7, S8
	63	BW100EAGU-2P063	
	70	BW100EAGU-2P070	
	75	BW100EAGU-2P075	
	80	BW100EAGU-2P080	
	90	BW100EAGU-2P090	
	100	BW100EAGU-2P100	
250	125	BW250EAGU-2P125	Blank, SB, SF, S3 S4, S5, S6, S7, S8
	150	BW250EAGU-2P150	
	160	BW250EAGU-2P160	
	175	BW250EAGU-2P175	
	200	BW250EAGU-2P200	
	225	BW250EAGU-2P225	
400	250	BW400EAGU-2P250	Blank, SB, S7, S8
	300	BW400EAGU-2P300	
	350	BW400EAGU-2P350	
	400	BW400EAGU-2P400	

● JAGU series, 2-pole UL489 Listed

Breaker ampere frame	Rated current (A)	Type	☐ : Available mounting and connection
125	15	BW125JAGU-2P015	Blank, SB, SF, S3 S4, S5, S6, S7, S8
	20	BW125JAGU-2P020	
	30	BW125JAGU-2P030	
	40	BW125JAGU-2P040	
	50	BW125JAGU-2P050	
	60	BW125JAGU-2P060	
	70	BW125JAGU-2P070	
	75	BW125JAGU-2P075	
	80	BW125JAGU-2P080	
	90	BW125JAGU-2P090	
	100	BW125JAGU-2P100	
	125	BW125JAGU-2P125	
250	125	BW250JAGU-2P125	Blank, SB, SF, S3 S4, S5, S6, S7, S8
	150	BW250JAGU-2P150	
	160	BW250JAGU-2P160	
	175	BW250JAGU-2P175	
	200	BW250JAGU-2P200	
	225	BW250JAGU-2P225	
	250	BW250JAGU-2P250	

Terminal combination

☐ : Code	Terminal position		Breaker type		
	Line	Load	BW50	BW100,125,250	BW400,630,800
Blank	Screw	Screw	●	●	—
Blank	Flat terminal	Flat terminal	—	—	●
SB	Block terminal	Block terminal	—	●	●
SF	Flat terminal	Flat terminal	●	●	—
S3	Screw	Flat terminal	●	●	—
S4	Flat terminal	Screw	●	●	—
S5	Screw	Block terminal	—	●	—
S6	Block terminal	Screw	—	●	—
S7	Flat terminal	Block terminal	—	●	●
S8	Block terminal	Flat terminal	—	●	●

● SAGU series, 2-pole UL489 Listed

Breaker ampere frame	Rated current (A)	Type	☐ : Available mounting and connection
400	250	BW400SAGU-2P250	Blank, SB, S7, S8
	300	BW400SAGU-2P300	
	350	BW400SAGU-2P350	
	400	BW400SAGU-2P400	

● RAGU series, 2-pole UL489 Listed

Breaker ampere frame	Rated current (A)	Type	☐ : Available mounting and connection
50	3	BW50RAGU-2P003	Blank, SF, S3, S4
	5	BW50RAGU-2P005	
	10	BW50RAGU-2P010	
	15	BW50RAGU-2P015	
	20	BW50RAGU-2P020	
	30	BW50RAGU-2P030	
	32	BW50RAGU-2P032	
	40	BW50RAGU-2P040	
	50	BW50RAGU-2P050	
125	15	BW125RAGU-2P015	Blank, SB, SF, S3 S4, S5, S6, S7, S8
	20	BW125RAGU-2P020	
	30	BW125RAGU-2P030	
	40	BW125RAGU-2P040	
	50	BW125RAGU-2P050	
	60	BW125RAGU-2P060	
	70	BW125RAGU-2P070	
	75	BW125RAGU-2P075	
	80	BW125RAGU-2P080	
	90	BW125RAGU-2P090	
	100	BW125RAGU-2P100	
	125	BW125RAGU-2P125	
250	125	BW250RAGU-2P125	Blank, SB, SF, S3 S4, S5, S6, S7, S8
	150	BW250RAGU-2P150	
	160	BW250RAGU-2P160	
	175	BW250RAGU-2P175	
	200	BW250RAGU-2P200	
	225	BW250RAGU-2P225	
	250	BW250RAGU-2P250	
400	250	BW400RAGU-2P250	Blank, SB, S7, S8
	300	BW400RAGU-2P300	
	350	BW400RAGU-2P350	
	400	BW400RAGU-2P400	

● HAGU series, 2-pole UL489 Listed

Breaker ampere frame	Rated current (A)	Type	☐ : Available mounting and connection
400	250	BW400HAGU-2P250	Blank, SB, S7, S8
	300	BW400HAGU-2P300	
	350	BW400HAGU-2P350	
	400	BW400HAGU-2P400	

Molded Case Circuit Breakers

G-TWIN series Type number/Line protection

● EAGU series, 3-pole UL489 Listed

Breaker ampere frame	Rated current (A)	Type	☐ : Available mounting and connection*
100	60	BW100EAGU-3P060	Blank, SB, SF, S3 S4, S5, S6, S7, S8
	63	BW100EAGU-3P063	
	70	BW100EAGU-3P070	
	75	BW100EAGU-3P075	
	80	BW100EAGU-3P080	
	90	BW100EAGU-3P090	
250	100	BW100EAGU-3P100	
	125	BW250EAGU-3P125	Blank, SB, SF, S3 S4, S5, S6, S7, S8
	150	BW250EAGU-3P150	
	160	BW250EAGU-3P160	
	175	BW250EAGU-3P175	
	200	BW250EAGU-3P200	
400	225	BW250EAGU-3P225	
	250	BW250EAGU-3P250	
	250	BW400EAGU-3P250	Blank, SB, S7, S8
	300	BW400EAGU-3P300	
	350	BW400EAGU-3P350	
	400	BW400EAGU-3P400	

● JAGU series, 3-pole UL489 Listed

Breaker ampere frame	Rated current (A)	Type	☐ : Available mounting and connection*
125	15	BW125JAGU-3P015	Blank, SB, SF, S3 S4, S5, S6, S7, S8
	20	BW125JAGU-3P020	
	30	BW125JAGU-3P030	
	40	BW125JAGU-3P040	
	50	BW125JAGU-3P050	
	60	BW125JAGU-3P060	
	70	BW125JAGU-3P070	
	75	BW125JAGU-3P075	
	80	BW125JAGU-3P080	
	90	BW125JAGU-3P090	
	100	BW125JAGU-3P100	
	125	BW125JAGU-3P125	
250	125	BW250JAGU-3P125	Blank, SB, SF, S3 S4, S5, S6, S7, S8
	150	BW250JAGU-3P150	
	160	BW250JAGU-3P160	
	175	BW250JAGU-3P175	
	200	BW250JAGU-3P200	
	225	BW250JAGU-3P225	
	250	BW250JAGU-3P250	

● SAGU series, 3-pole UL489 Listed

Breaker ampere frame	Rated current (A)	Type	☐ : Available mounting and connection*
400	250	BW400SAGU-3P250	Blank, SB, S7, S8
	300	BW400SAGU-3P300	
	350	BW400SAGU-3P350	
	400	BW400SAGU-3P400	

● RAGU series, 3-pole UL489 Listed

Breaker ampere frame	Rated current (A)	Type	☐ : Available mounting and connection*
50	3	BW50RAGU-3P003	Blank, SB, S3, S4
	5	BW50RAGU-3P005	
	10	BW50RAGU-3P010	
	15	BW50RAGU-3P015	
	20	BW50RAGU-3P020	
	30	BW50RAGU-3P030	
	32	BW50RAGU-3P032	
	40	BW50RAGU-3P040	
	50	BW50RAGU-3P050	
125	15	BW125RAGU-3P015	Blank, SB, SF, S3 S4, S5, S6, S7, S8
	20	BW125RAGU-3P020	
	30	BW125RAGU-3P030	
	40	BW125RAGU-3P040	
	50	BW125RAGU-3P050	
	60	BW125RAGU-3P060	
	70	BW125RAGU-3P070	
	75	BW125RAGU-3P075	
	80	BW125RAGU-3P080	
	90	BW125RAGU-3P090	
	100	BW125RAGU-3P100	
	125	BW125RAGU-3P125	
250	125	BW250RAGU-3P125	Blank, SB, SF, S3 S4, S5, S6, S7, S8
	150	BW250RAGU-3P150	
	160	BW250RAGU-3P160	
	175	BW250RAGU-3P175	
	200	BW250RAGU-3P200	
	225	BW250RAGU-3P225	
400	250	BW250RAGU-3P250	
	250	BW400RAGU-3P250	Blank, SB, S7, S8
	300	BW400RAGU-3P300	
	350	BW400RAGU-3P350	
630	400	BW400RAGU-3P400	
	500	BW630RAGU-3P500	Blank, SB, S7, S8
	600	BW630RAGU-3P600	
800	630	BW630RAGU-3P630	
	700	BW800RAGU-3P700	Blank, SB, S7, S8
	800	BW800RAGU-3P800	

● HAGU series, 3-pole UL489 Listed

Breaker ampere frame	Rated current (A)	Type	☐ : Available mounting and connection*
400	250	BW400HAGU-3P250	Blank, SB, S7, S8
	300	BW400HAGU-3P300	
	350	BW400HAGU-3P350	
	400	BW400HAGU-3P400	
630	500	BW630HAGU-3P500	Blank, SB, S7, S8
	600	BW630HAGU-3P600	
	630	BW630HAGU-3P630	
800	700	BW800HAGU-3P700	Blank, SB, S7, S8
	800	BW800HAGU-3P800	

* See page B1-34.

Molded Case Circuit Breakers

G-TWIN series Type number/Motor protection

■ Type number, Standard series (Motor protection)

● SAM series, 2-pole IEC/EN/GB/JIS conformed

Breaker ampere frame	Rated current (A)	Type	☐ : Available mounting and connection
32	0.7	BW32SAM-2P0P7 ☐	Blank, X, E, Y, P
	1.4	BW32SAM-2P1P4 ☐	
	2.6	BW32SAM-2P2P6 ☐	
	4	BW32SAM-2P004 ☐	
	8	BW32SAM-2P008 ☐	
	10	BW32SAM-2P010 ☐	
	16	BW32SAM-2P016 ☐	
	24	BW32SAM-2P024 ☐	
	32	BW32SAM-2P032 ☐	

● AAM series, 3-pole IEC/EN/GB/JIS conformed

Breaker ampere frame	Rated current (A)	Type	☐ : Available mounting and connection
32	1.4	BW32AAM-3P1P4 ☐	Blank, X, E, Y, P
	2.6	BW32AAM-3P2P6 ☐	
	4	BW32AAM-3P004 ☐	
	8	BW32AAM-3P008 ☐	
	10	BW32AAM-3P010 ☐	
	16	BW32AAM-3P016 ☐	
	24	BW32AAM-3P024 ☐	
	32	BW32AAM-3P032 ☐	

● EAM series, 3-pole IEC/EN/GB/JIS conformed

Breaker ampere frame	Rated current (A)	Type	☐ : Available mounting and connection
50	24	BW50EAM-3P024 ☐	Blank, X, E, Y, P
	32	BW50EAM-3P032 ☐	
	40	BW50EAM-3P040 ☐	
	45	BW50EAM-3P045 ☐	
63	63	BW63EAM-3P063 ☐	Blank, X, E, Y, P
100	63	BW100EAM-3P063 ☐	Blank, X, E, Y, P
	75	BW100EAM-3P075 ☐	
	90	BW100EAM-3P090 ☐	
250	125	BW250EAM-3P125 ☐	Blank, X, E, P
	150	BW250EAM-3P150 ☐	
	175	BW250EAM-3P175 ☐	
	225	BW250EAM-3P225 ☐	

● JAM series, 3-pole IEC/EN/GB/JIS conformed

Breaker ampere frame	Rated current (A)	Type	☐ : Available mounting and connection
125	16	BW125JAM-3P016 ☐	Blank, X, E, P
	24	BW125JAM-3P024 ☐	
	32	BW125JAM-3P032 ☐	
	40	BW125JAM-3P040 ☐	
	60	BW125JAM-3P060 ☐	
	75	BW125JAM-3P075 ☐	
	90	BW125JAM-3P090 ☐	
250	125	BW250JAM-3P125 ☐	Blank, X, E, P
	150	BW250JAM-3P150 ☐	
	175	BW250JAM-3P175 ☐	
	225	BW250JAM-3P225 ☐	

Mounting	Connection	☐
Front	Front	Blank
Front	Rear	X
Flush	Rear	E
Flush	Top and bottom	Y
Plug-in		P

Molded Case Circuit Breakers

G-TWIN series Type number/Motor protection

● SAM series, 3-pole IEC/EN/GB/JIS conformed

Breaker ampere frame	Rated current (A)	Type	☐ : Available mounting and connection*
32	0.7	BW32SAM-3P0P7 ☐	Blank, X, E, Y, P
	1.4	BW32SAM-3P1P4 ☐	
	2.6	BW32SAM-3P2P6 ☐	
	4	BW32SAM-3P004 ☐	
	8	BW32SAM-3P008 ☐	
	10	BW32SAM-3P010 ☐	
	16	BW32SAM-3P016 ☐	
	24	BW32SAM-3P024 ☐	
50	32	BW32SAM-3P032 ☐	Blank, X, E, Y, P
	0.7	BW50SAM-3P0P7 ☐	
	1.4	BW50SAM-3P1P4 ☐	
	2	BW50SAM-3P002 ☐	
	2.6	BW50SAM-3P2P6 ☐	
	4	BW50SAM-3P004 ☐	
	5	BW50SAM-3P005 ☐	
	8	BW50SAM-3P008 ☐	
	10	BW50SAM-3P010 ☐	
	12	BW50SAM-3P012 ☐	
	16	BW50SAM-3P016 ☐	
	24	BW50SAM-3P024 ☐	
63	32	BW50SAM-3P032 ☐	Blank, X, E, Y, P
	40	BW50SAM-3P040 ☐	
	45	BW50SAM-3P045 ☐	
63	63	BW63SAM-3P063 ☐	Blank, X, E, Y, P

● RAM series, 3-pole IEC/EN/GB/JIS conformed

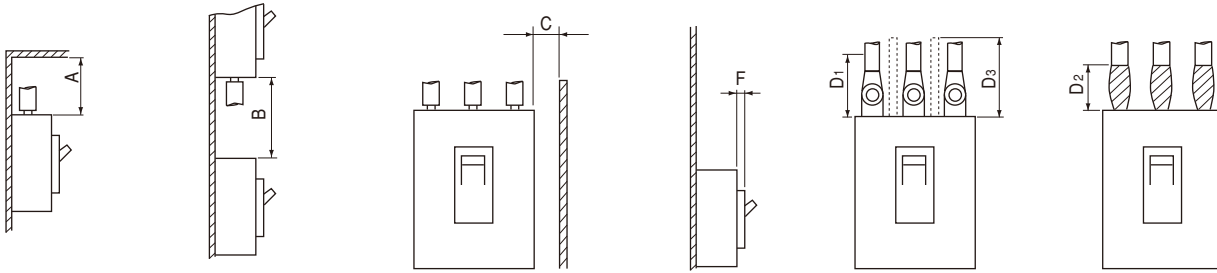
Breaker ampere frame	Rated current (A)	Type	☐ : Available mounting and connection*
50	0.7	BW50RAM-3P0P7 ☐	Blank, X, E, Y, P
	1.4	BW50RAM-3P1P4 ☐	
	2	BW50RAM-3P002 ☐	
	2.6	BW50RAM-3P2P6 ☐	
	4	BW50RAM-3P004 ☐	
	5	BW50RAM-3P005 ☐	
	8	BW50RAM-3P008 ☐	
	10	BW50RAM-3P010 ☐	
	12	BW50RAM-3P012 ☐	
	16	BW50RAM-3P016 ☐	
	24	BW50RAM-3P024 ☐	
	32	BW50RAM-3P032 ☐	
125	40	BW50RAM-3P040 ☐	Blank, X, E, P
	45	BW50RAM-3P045 ☐	
	16	BW125RAM-3P016 ☐	
	24	BW125RAM-3P024 ☐	
	32	BW125RAM-3P032 ☐	
	40	BW125RAM-3P040 ☐	
	60	BW125RAM-3P060 ☐	
250	75	BW125RAM-3P075 ☐	Blank, X, E, P
	90	BW125RAM-3P090 ☐	
	125	BW250RAM-3P125 ☐	
	150	BW250RAM-3P150 ☐	
	175	BW250RAM-3P175 ☐	
	225	BW250RAM-3P225 ☐	

* See page B1-36.

Molded Case Circuit Breakers

G-TWIN series Arc space

Arc space, mm



Frame size	MCCB basic type	Ceiling distance		Vertical distance		Side plate distance		Front plate distance				Taping		Barrier
		A		B		C		Painted F		No painted F		Crimp type terminal lug	Bus-bar	
		440V	230V	440V	230V	440V	230V	440V	230V	440V	230V			
32A	BW32A	—	10	—	10	—	10	—	0	—	0	Exposed live part dimension +20	10	10
	BW32S	10	10	30	30	20	15	0	0	0	0		30	30
50A	BW50A	—	10	—	10	—	10	—	0	—	0		10	10
	BW50E	10	10	30	30	25	15	0	0	0	0		30	30
	BW50S	30	10	40	40	25	15	0	0	0	0		30	30
	BW50R	50	25	50	50	25	15	0	0	10	5		50	50
	BW50H	60	60	80	80	50	20	5	0	10	5		80	80
63A	BW63E	10	10	30	30	25	15	0	0	0	0		30	30
	BW63S	30	10	40	40	25	15	0	0	0	0		30	30
	BW63R	50	25	50	50	25	15	0	0	10	5		50	50
100A	BW100A	—	10	—	20	—	15	—	0	—	0		50	50
	BW100E	50	25	50	50	25	15	0	0	10	5		50	50
125A	BW125J	40	40	50	50	25	20	0	0	10	5		50	50
	BW125S	40	40	60	60	25	20	5	0	10	5		50	50
	BW125R	40	40	60	60	25	20	5	0	10	5		50	50
	BW125H	60	60	80	80	50	20	5	0	10	5		80	80
160A	BW160E	40	40	50	50	50	15	0	0	10	5		80	80
	BW160J	40	40	60	60	50	20	0	0	10	5		80	80
	BW160S	40	40	80	80	50	20	5	0	10	10		80	80
	BW160R	40	40	80	80	50	20	5	0	10	10		80	80
250A	BW250E	40	40	50	50	50	15	0	0	10	5	80	80	
	BW250J	40	40	60	60	50	20	0	0	10	5	80	80	
	BW250S	40	40	80	80	50	20	5	0	10	10	80	80	
	BW250R	40	40	80	80	50	20	5	0	10	10	80	80	
	BW250H	60	60	80	80	60	60	5	0	10	10	80	80	
400A	BW400E	100	80	100	80	50	20	0	0	10	5	100	100	
	BW400S	100	80	100	80	50	20	0	0	10	5	100	100	
	BW400R	100	80	100	80	80	40	5	0	20	10	100	100	
	BW400H	100	80	100	80	80	40	5	0	20	10	100	100	
630A	BW630E	100	80	100	80	80	40	0	0	10	5	100	100	
	BW630R	100	80	100	80	80	40	5	0	20	10	100	100	
	BW630H	120	100	120	100	80	40	5	0	20	10	120	120	
800A	BW800E	100	80	100	80	80	40	0	0	10	5	100	100	
	BW800R	100	80	100	80	80	40	5	0	20	10	100	100	
	BW800H	120	100	120	100	80	40	5	0	20	20	120	120	

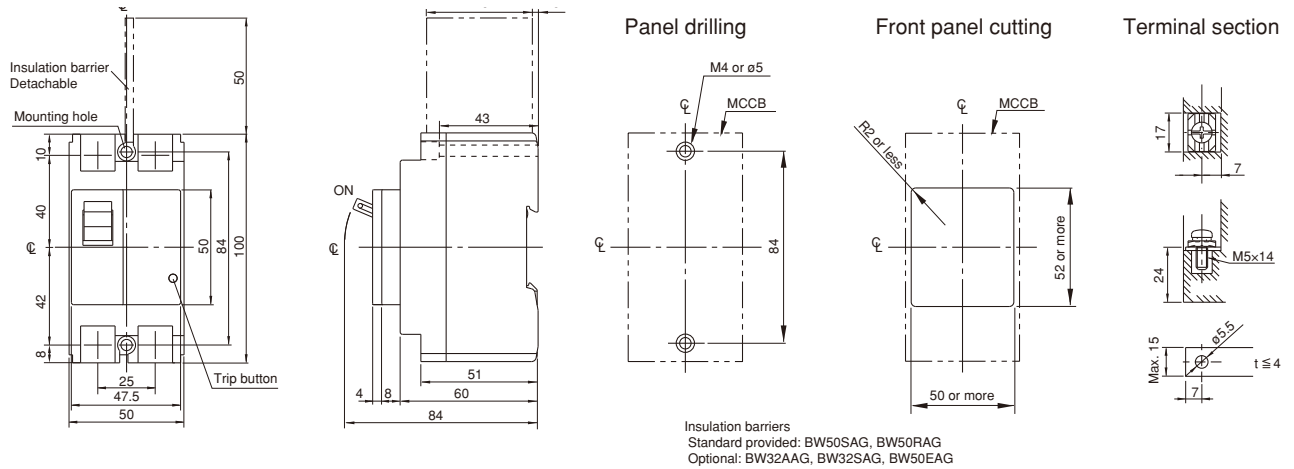
Molded Case Circuit Breakers

G-TWIN series Dimensions / Standard

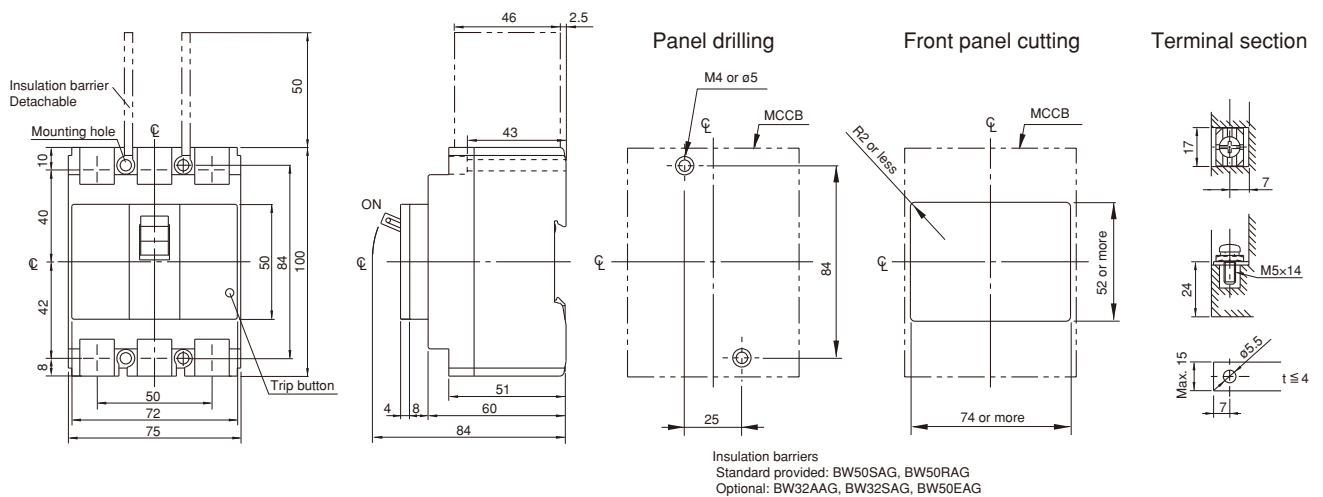
■ Dimensions, mm

● Front mounting, front connection

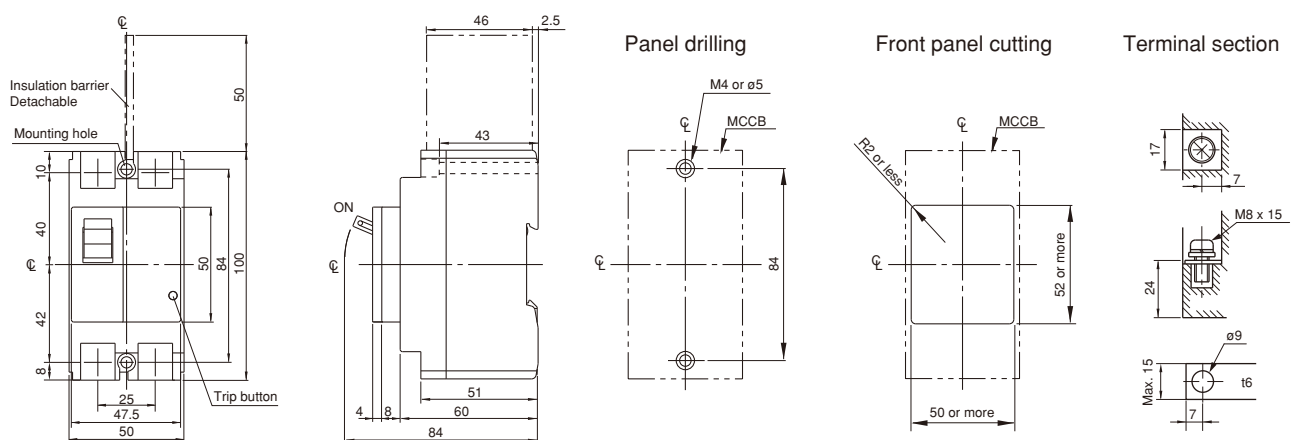
BW32□-2P, BW50□-2P



BW32□-3P, BW50□-3P



BW63□-2P



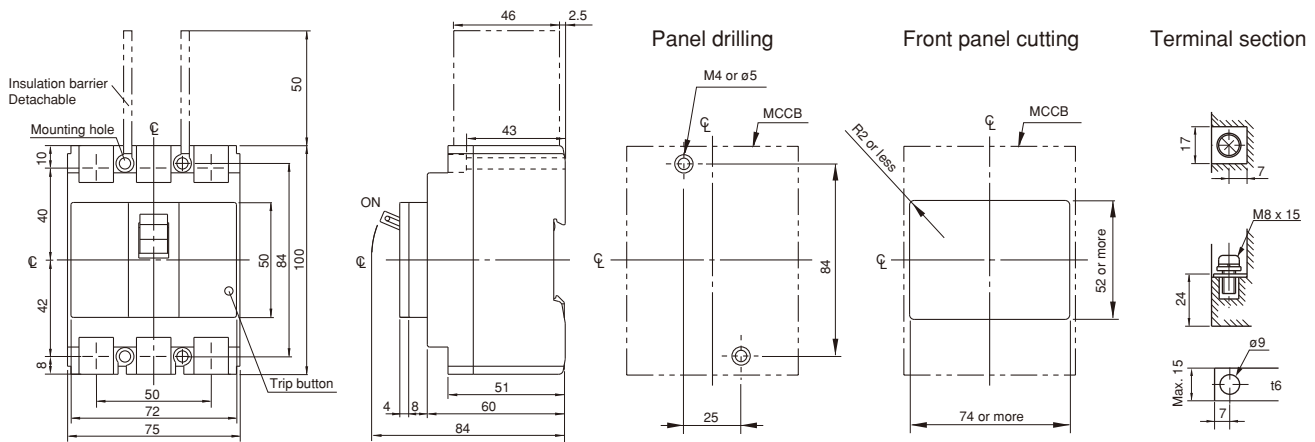
Molded Case Circuit Breakers

G-TWIN series Dimensions / Standard

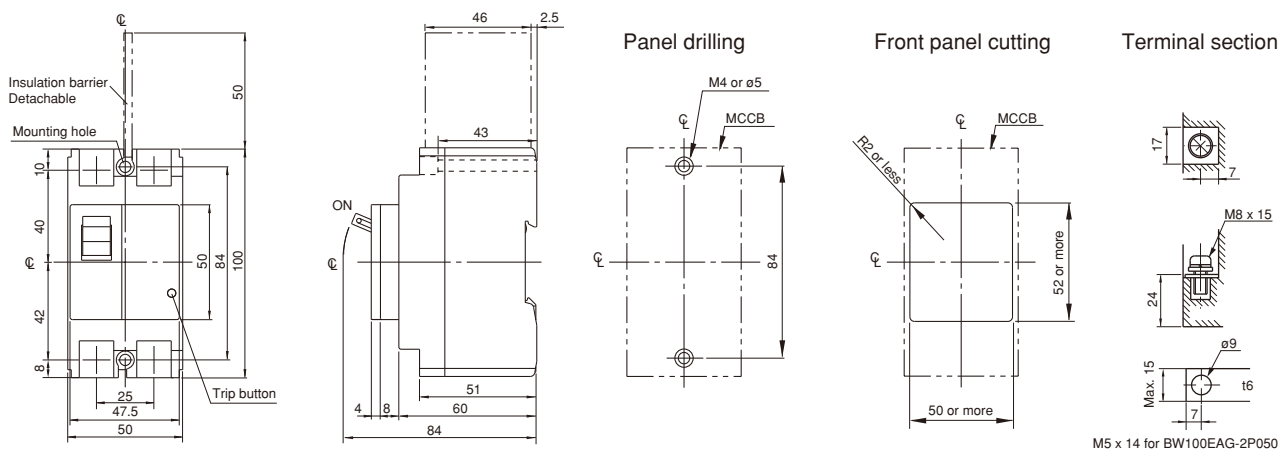
■ Dimensions, mm

● Front mounting, front connection

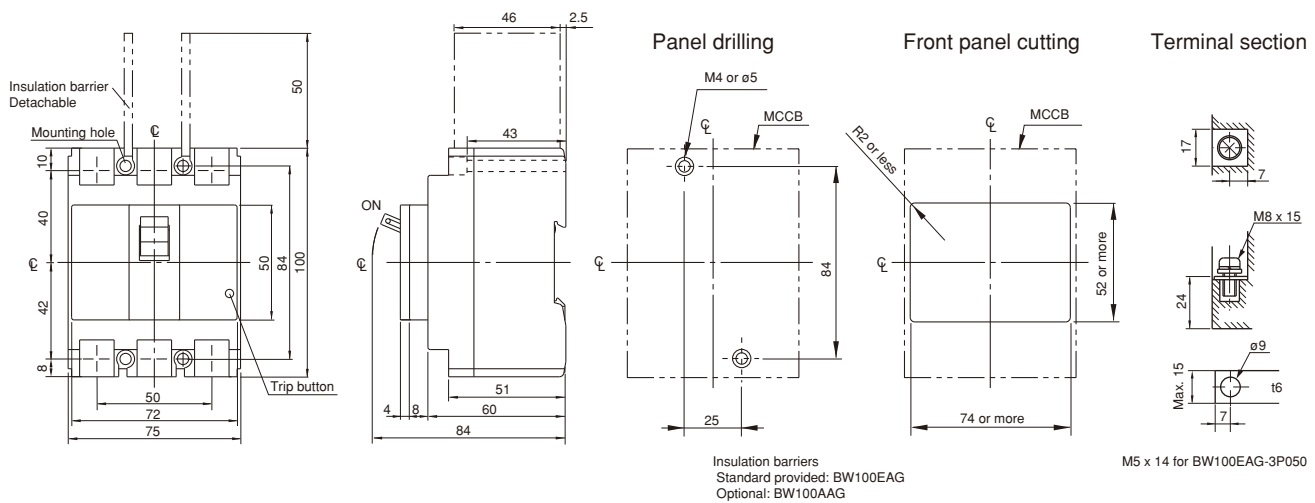
BW63□-3P



BW100□-2P



BW100□-3P



B1

B1-41

Molded Case Circuit Breakers

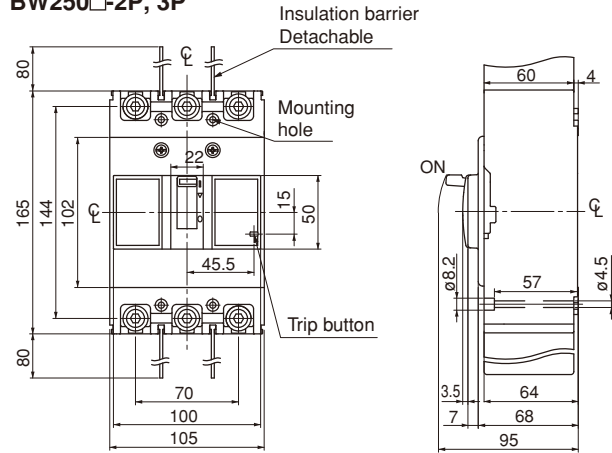
G-TWIN series Dimensions / Standard

■ Dimensions, mm

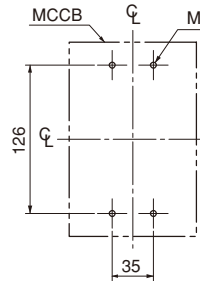
● Front mounting, front connection

BW160□-2P, 3P

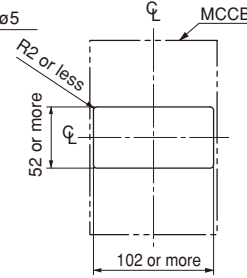
BW250□-2P, 3P



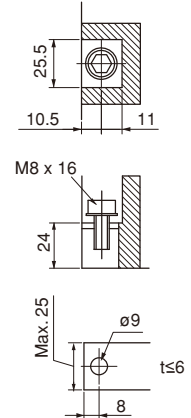
Panel drilling



Front panel cutting



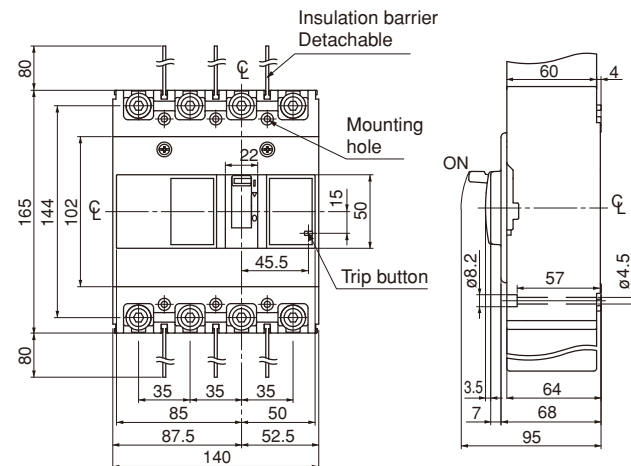
Terminal section



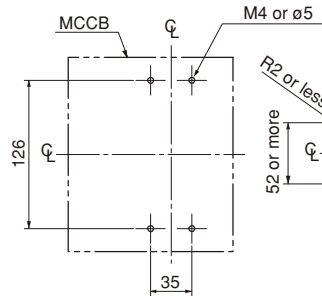
Note: 2-pole breaker is supplied in 3-pole frame with current carrying parts omitted from center pole.

BW160□-4P

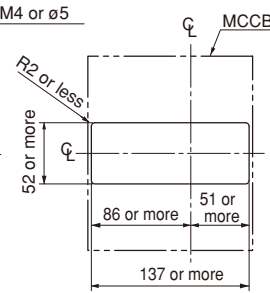
BW250□-4P



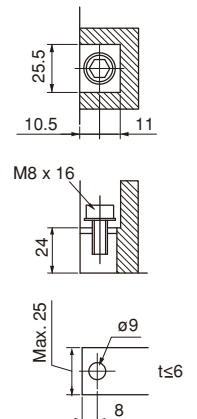
Panel drilling



Front panel cutting



Terminal section

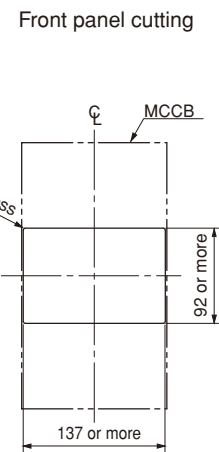
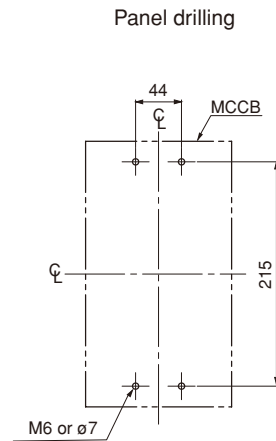
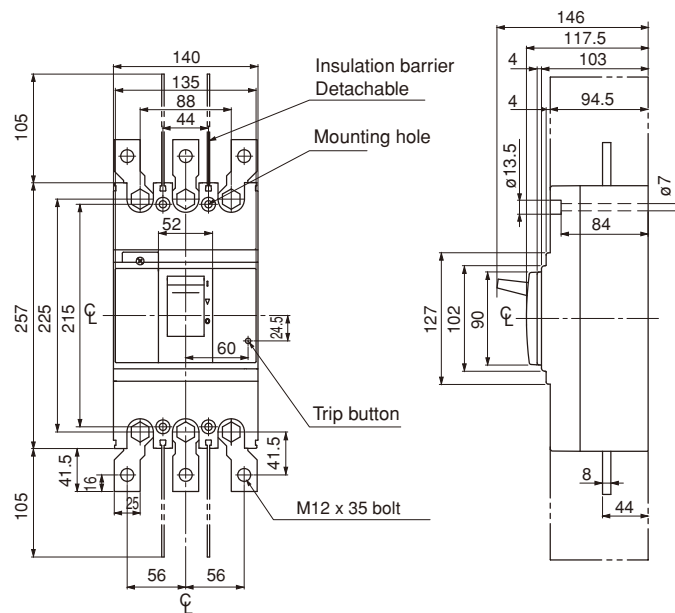


Molded Case Circuit Breakers

G-TWIN series Dimensions / Standard

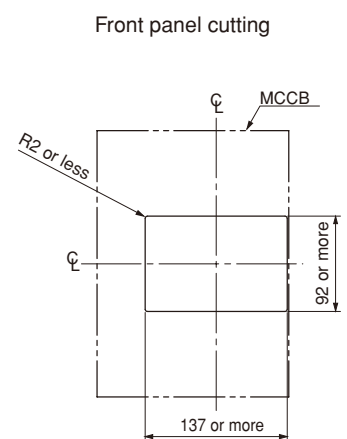
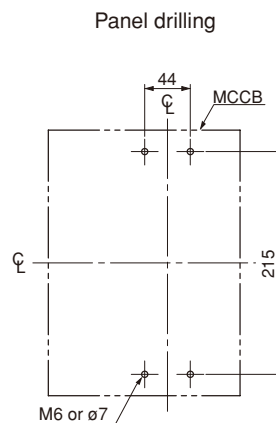
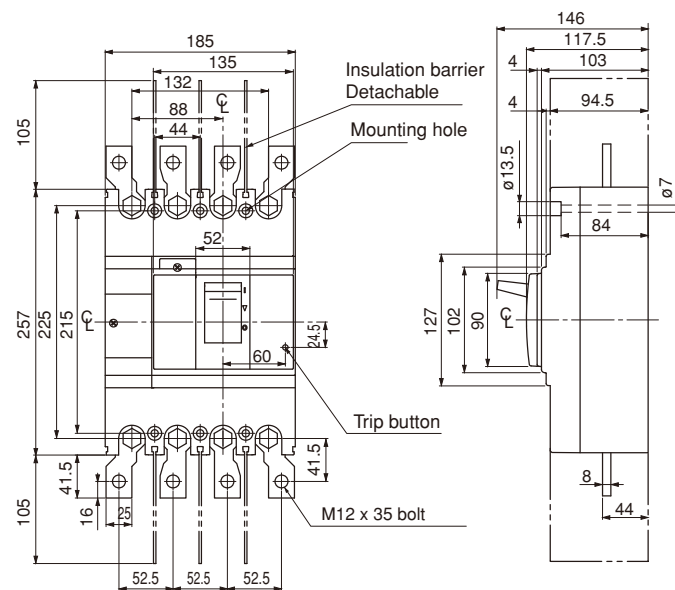
■ Dimensions, mm

● Front mounting, front connection BW400□-2P, 3P



Note: 2-pole breaker is supplied in 3-pole frame with current carrying parts omitted from center pole.

BW400□-4P



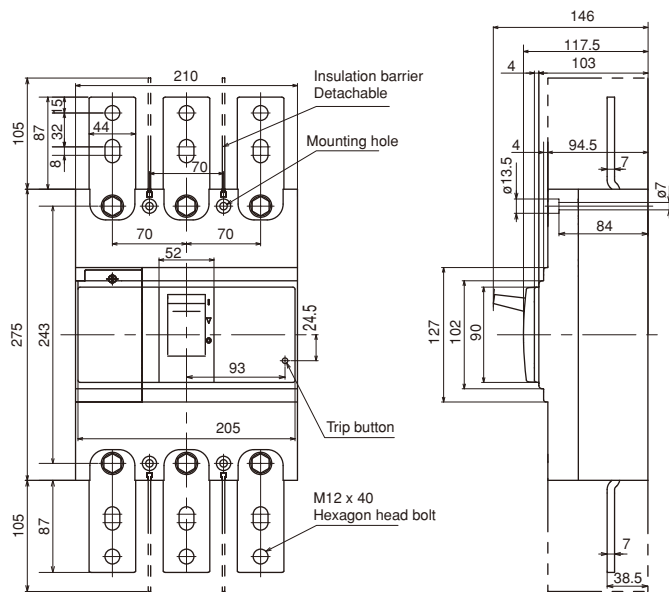
Molded Case Circuit Breakers

G-TWIN series Dimensions / Standard

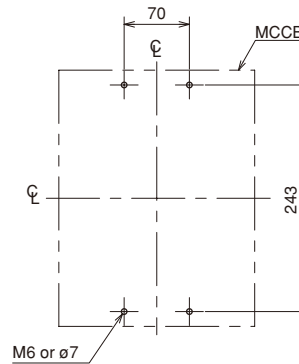
■ Dimensions, mm

● Front mounting, front connection

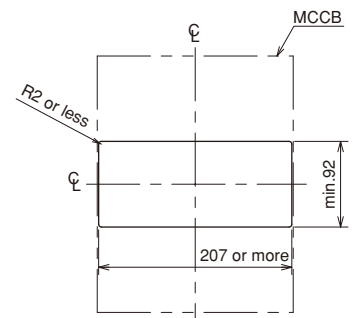
BW630□-3P



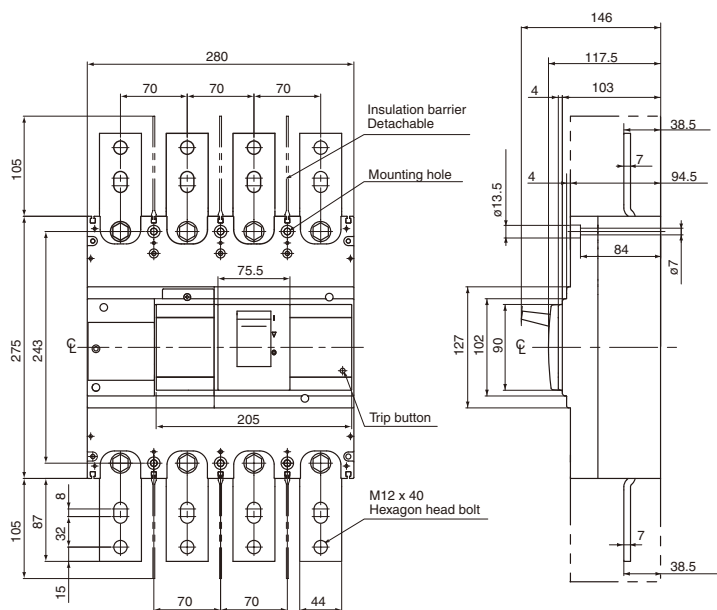
Panel drilling



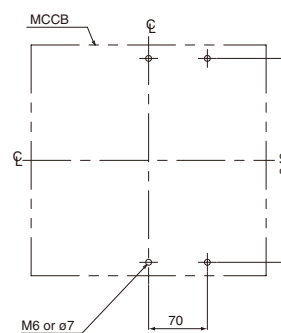
Front panel cutting



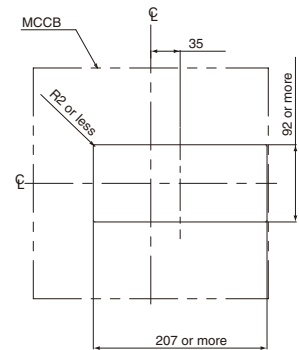
BW630□-4P



Panel drilling



Front panel cutting

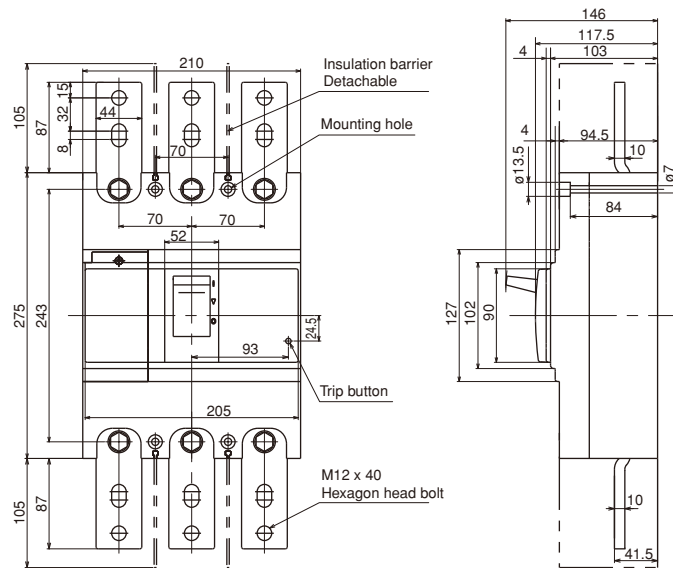


Molded Case Circuit Breakers

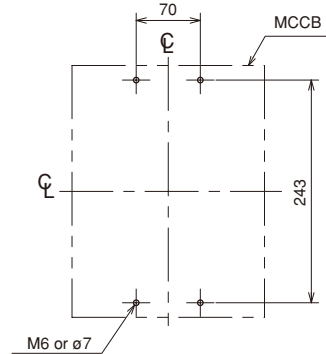
G-TWIN series Dimensions / Standard

■ Dimensions, mm

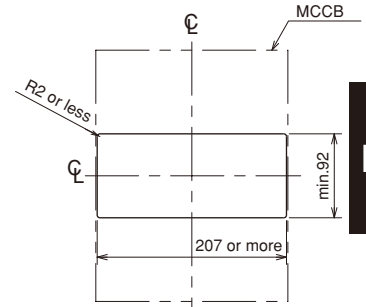
● Front mounting, front connection BW800□-3P



Panel drilling

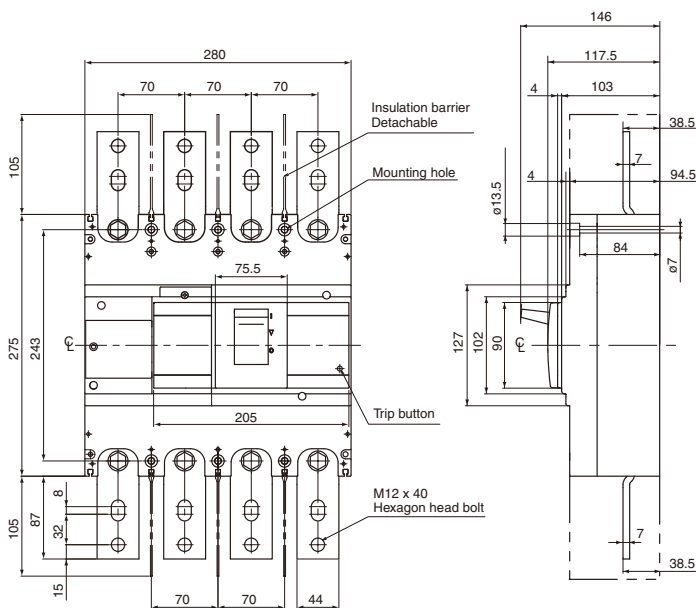


Front panel cutting

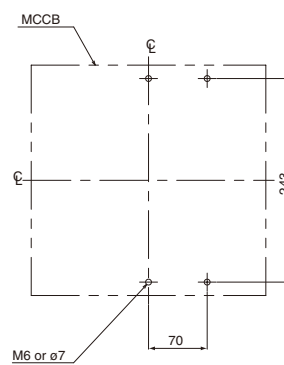


B1

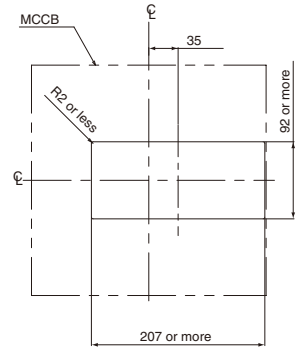
BW800□-4P



Panel drilling



Front panel cutting



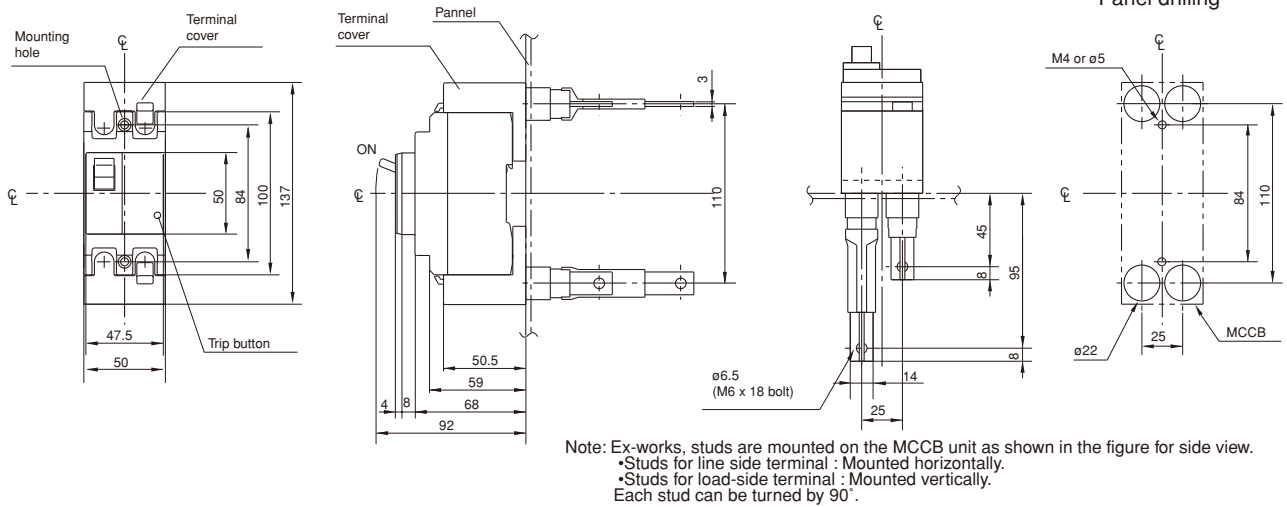
Molded Case Circuit Breakers

G-TWIN series Dimensions / Standard

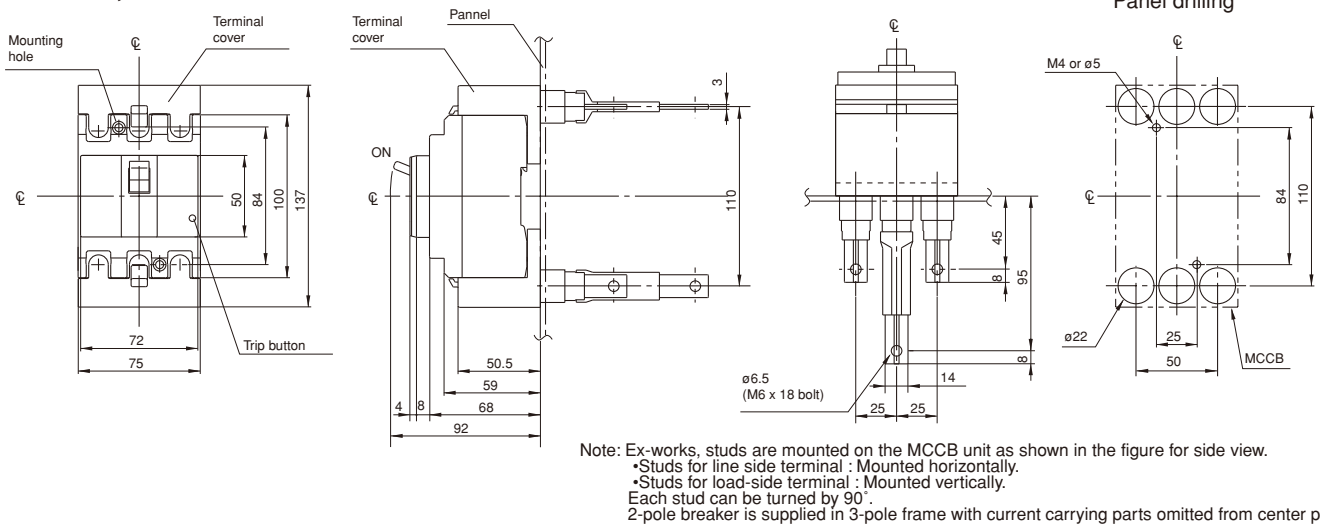
■ Dimensions, mm

● Front mounting, rear connection (type X)

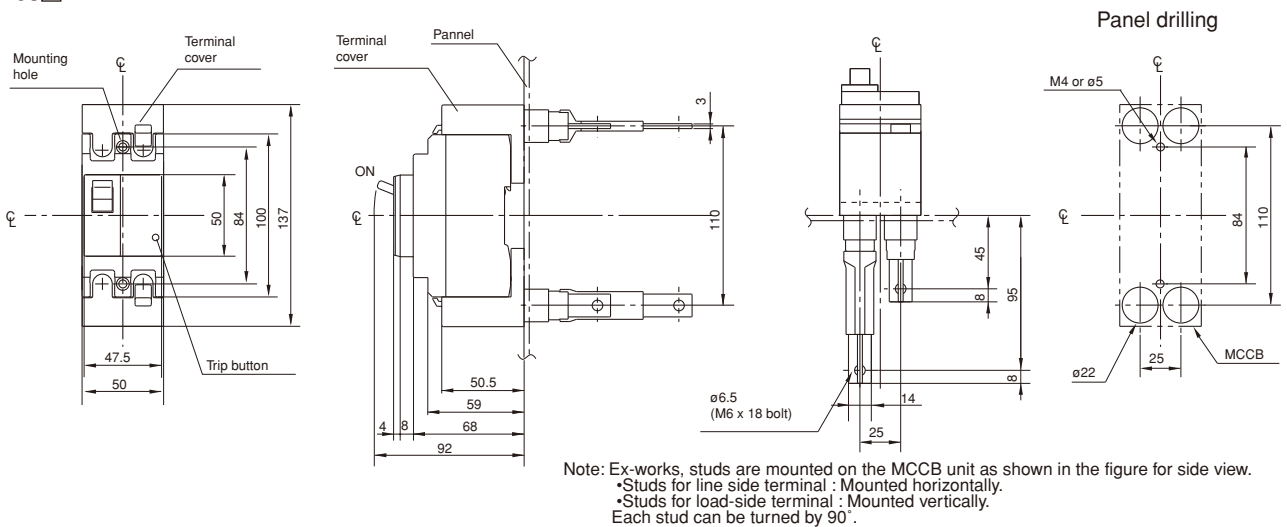
BW32□-2P, BW50□-2P



BW32□-3P, BW50□-3P



BW63□-2P



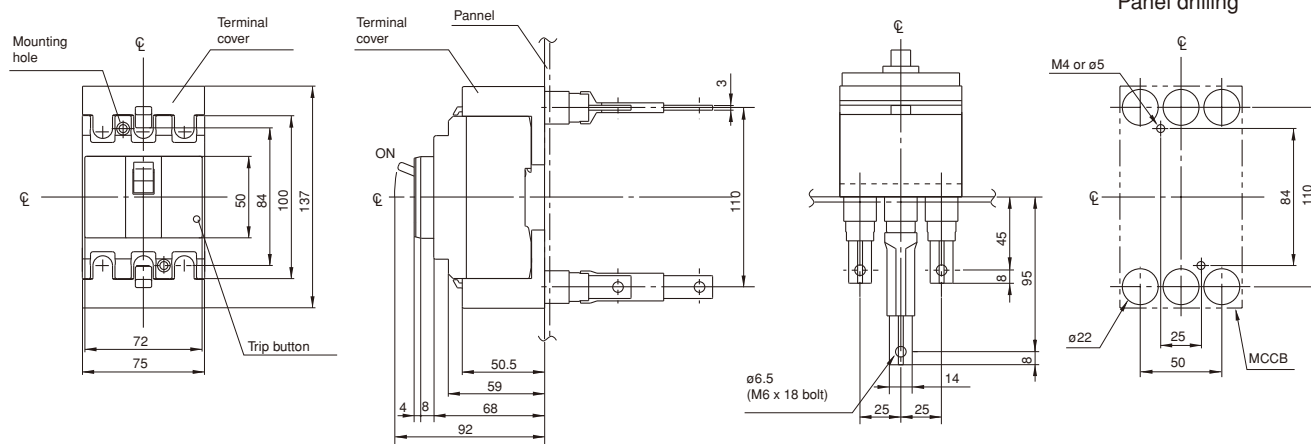
Molded Case Circuit Breakers

G-TWIN series Dimensions / Standard

■ Dimensions, mm

● Front mounting, rear connection (type X)

BW63□-3P



Note: Ex-works, studs are mounted on the MCCB unit as shown in the figure for side view.

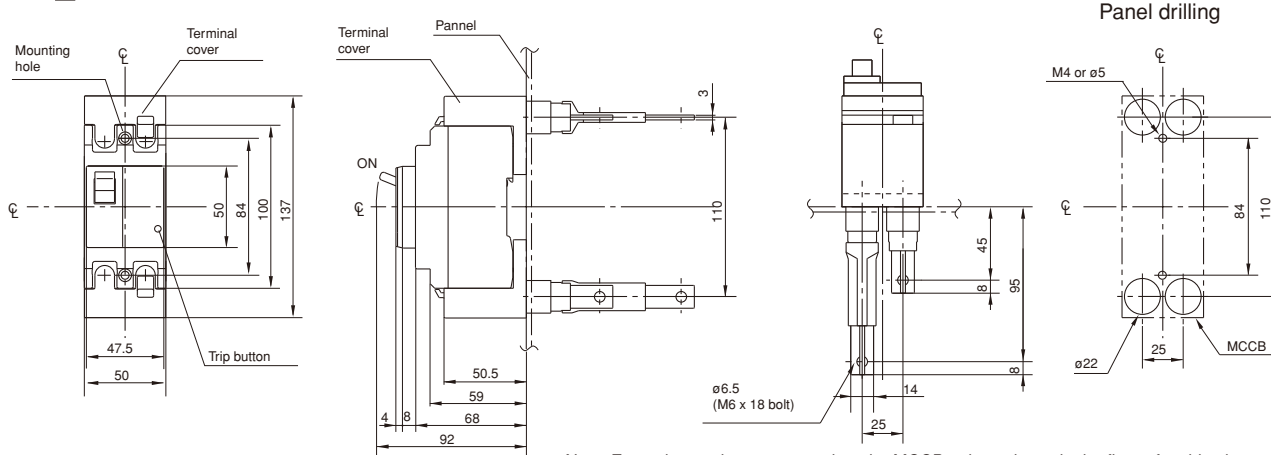
• Studs for line side terminal : Mounted horizontally.

• Studs for load-side terminal : Mounted vertically.

Each stud can be turned by 90°.

2-pole breaker is supplied in 3-pole frame with current carrying parts omitted from center pole.

BW100□-2P



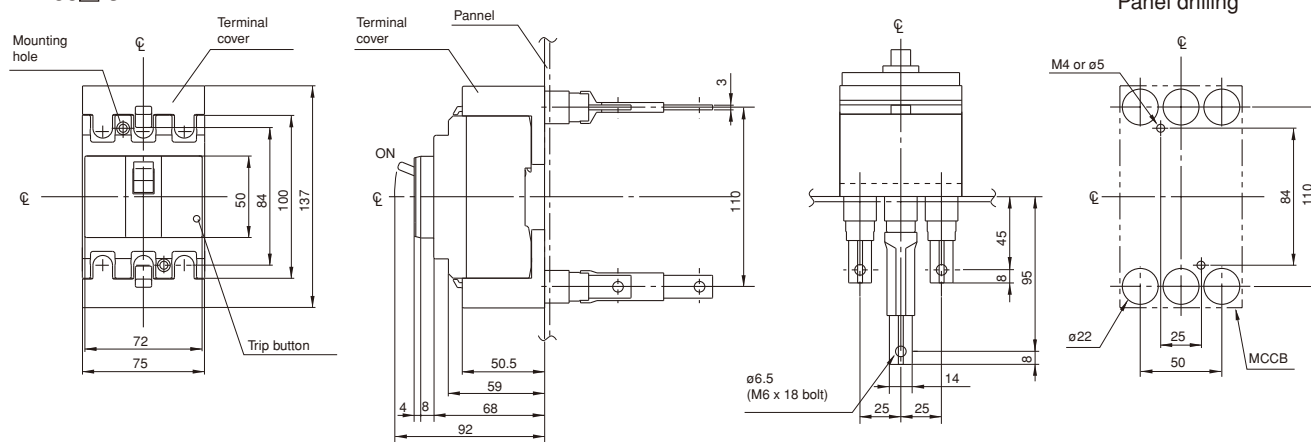
Note: Ex-works, studs are mounted on the MCCB unit as shown in the figure for side view.

• Studs for line side terminal : Mounted horizontally.

• Studs for load-side terminal : Mounted vertically.

Each stud can be turned by 90°.

BW100□-3P



Note: Ex-works, studs are mounted on the MCCB unit as shown in the figure for side view.

• Studs for line side terminal : Mounted horizontally.

• Studs for load-side terminal : Mounted vertically.

Each stud can be turned by 90°.

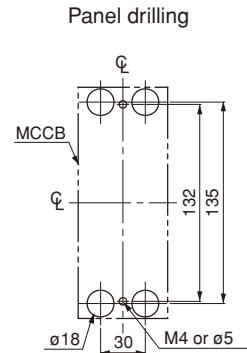
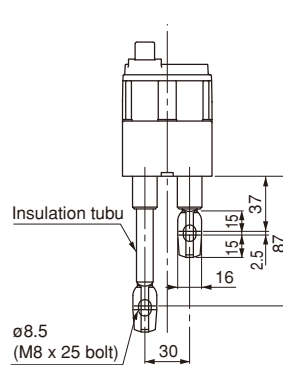
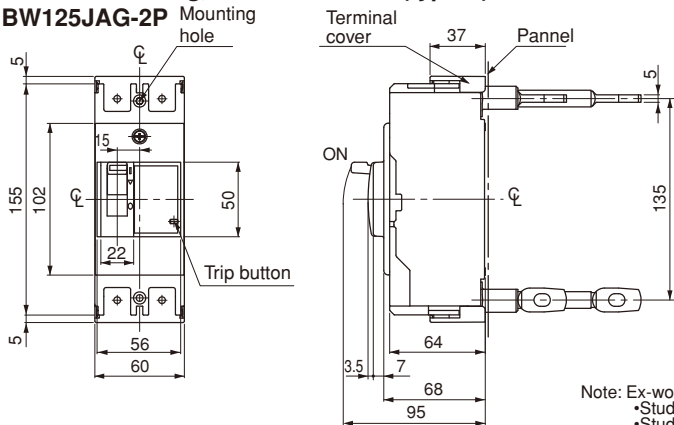
2-pole breaker is supplied in 3-pole frame with current carrying parts omitted from center pole.

Molded Case Circuit Breakers G-TWIN series Dimensions / Standard

■ Dimensions, mm

● **Front mounting, rear connection (type X)**

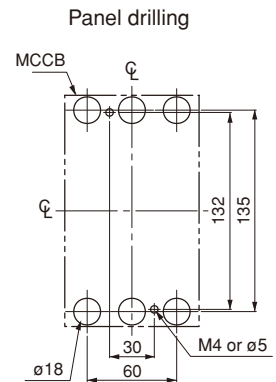
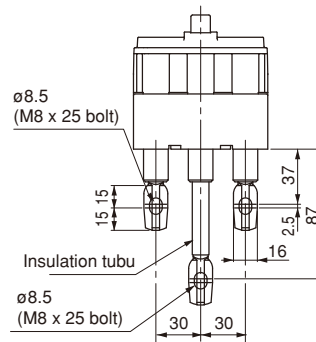
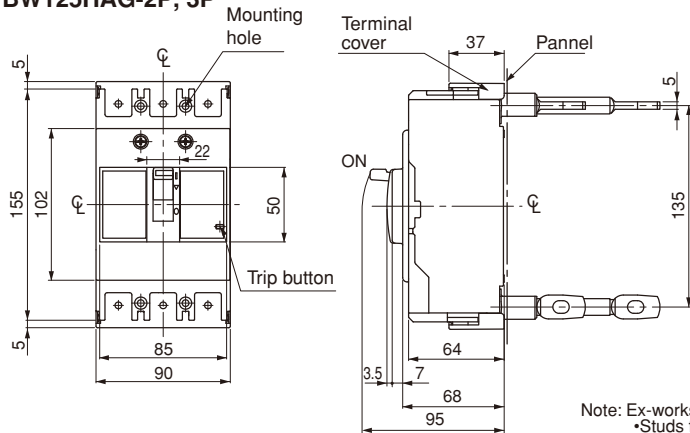
BW125JAG-2P



Note: Ex-works, studs are mounted on the MCCB unit as shown in the figure for side view.

- Studs for line side terminal : Mounted horizontally.
 - Studs for load-side terminal : Mounted vertically.
- Each stud can be turned by 90°.

BW50HAG-2P, 3P, BW125JAG-3P
BW125SAG-2P, 3P, BW125RAG-2P, 3P
BW125HAG-2P, 3P

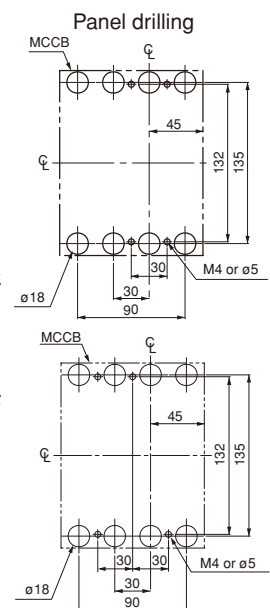
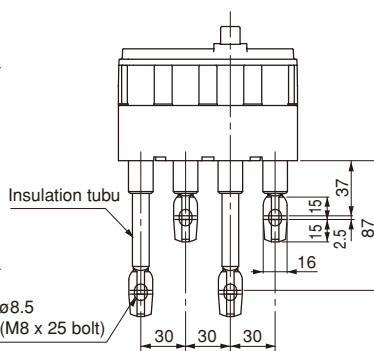
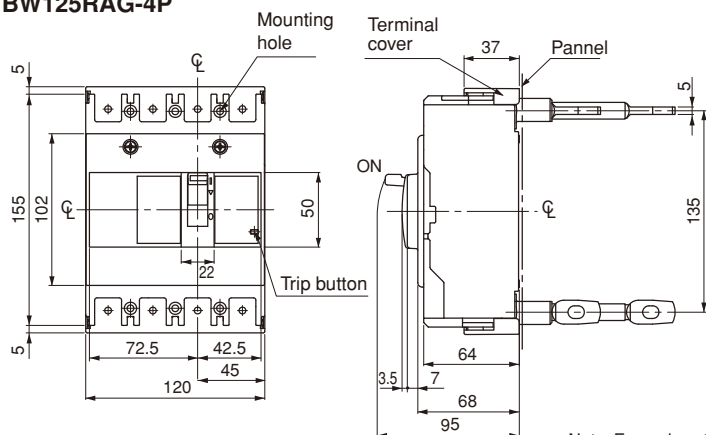


Note: Ex-works, studs are mounted on the MCCB unit as shown in the figure for side view.

- Studs for line side terminal : Mounted horizontally.
 - Studs for load-side terminal : Mounted vertically.
- Each stud can be turned by 90°.

2-pole breaker is supplied in 3-pole frame with current carrying parts omitted from center pole.

BW125JAG-4P
BW125SAG-4P
BW125RAG-4P



For V, N-type handle

Note: Ex-works, studs are mounted on the MCCB unit as shown in the figure for side view.

- Studs for line side terminal : Mounted horizontally.
- Studs for load-side terminal : Mounted vertically.

Each stud can be turned by 90°.

Molded Case Circuit Breakers

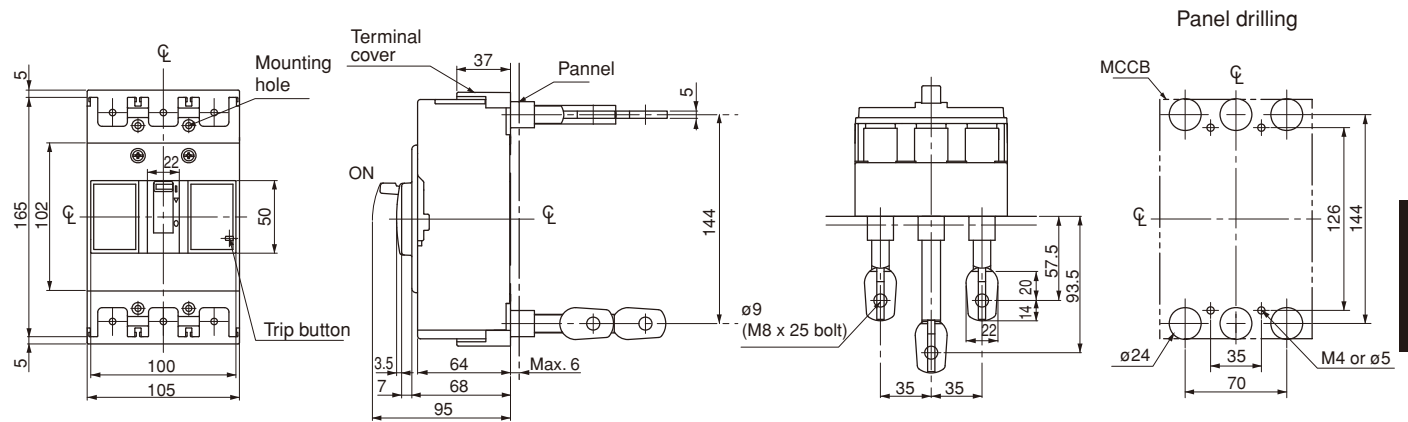
G-TWIN series Dimensions / Standard

■ Dimensions, mm

● Front mounting, rear connection (type X)

BW160□-2P, 3P

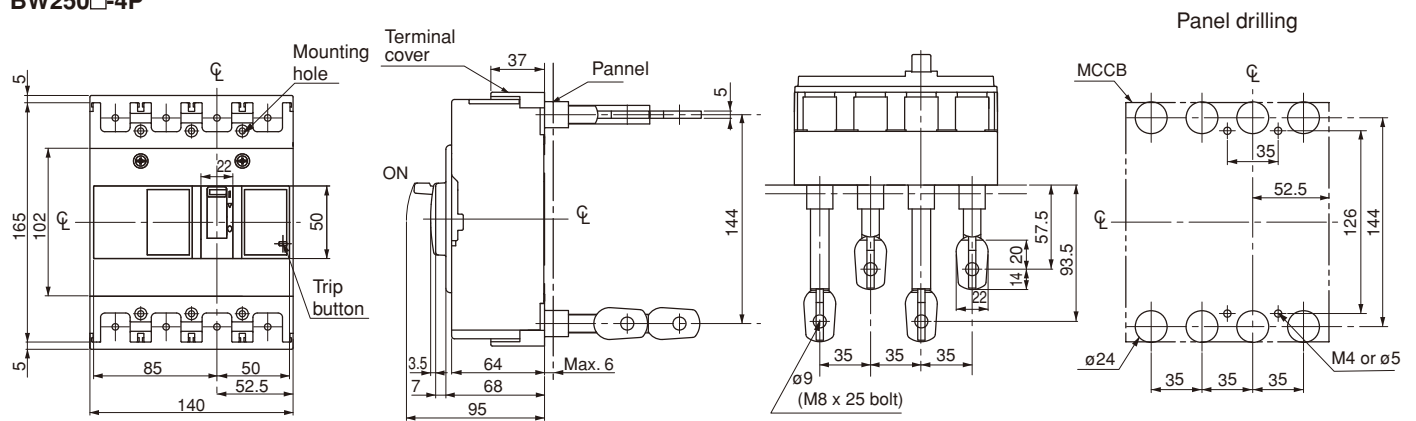
BW250□-2P, 3P



Note: Ex-works, studs are mounted on the MCCB unit as shown in the figure for side view.
 •Studs for line side terminal : Mounted horizontally.
 •Studs for load-side terminal : Mounted vertically.
 Each stud can be turned by 90°.
 2-pole breaker is supplied in 3-pole frame with current carrying parts omitted from center pole.

BW160□-4P

BW250□-4P



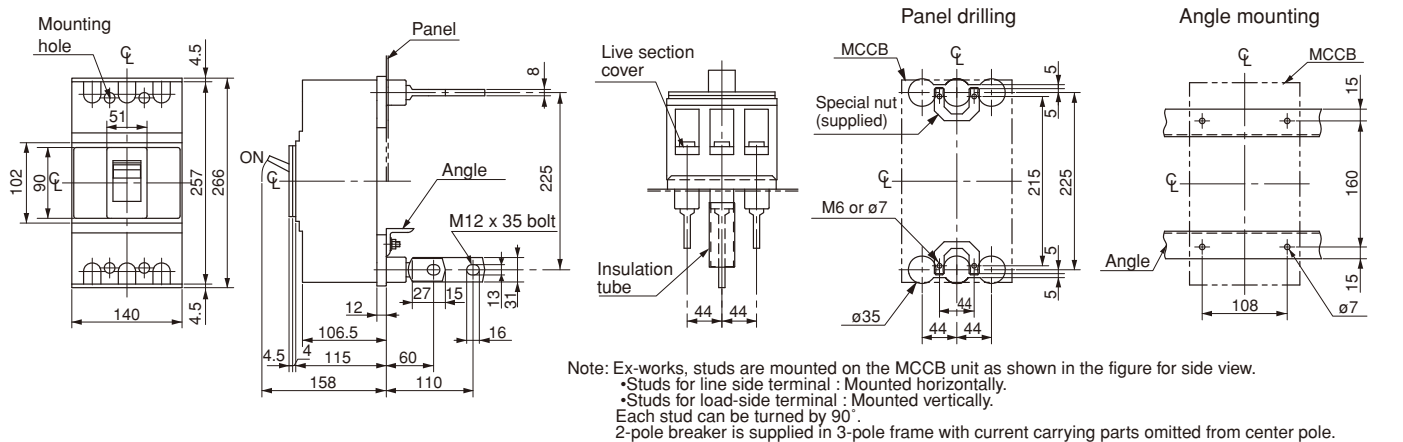
Note: Ex-works, studs are mounted on the MCCB unit as shown in the figure for side view.
 •Studs for line side terminal : Mounted horizontally.
 •Studs for load-side terminal : Mounted vertically.
 Each stud can be turned by 90°.

Molded Case Circuit Breakers

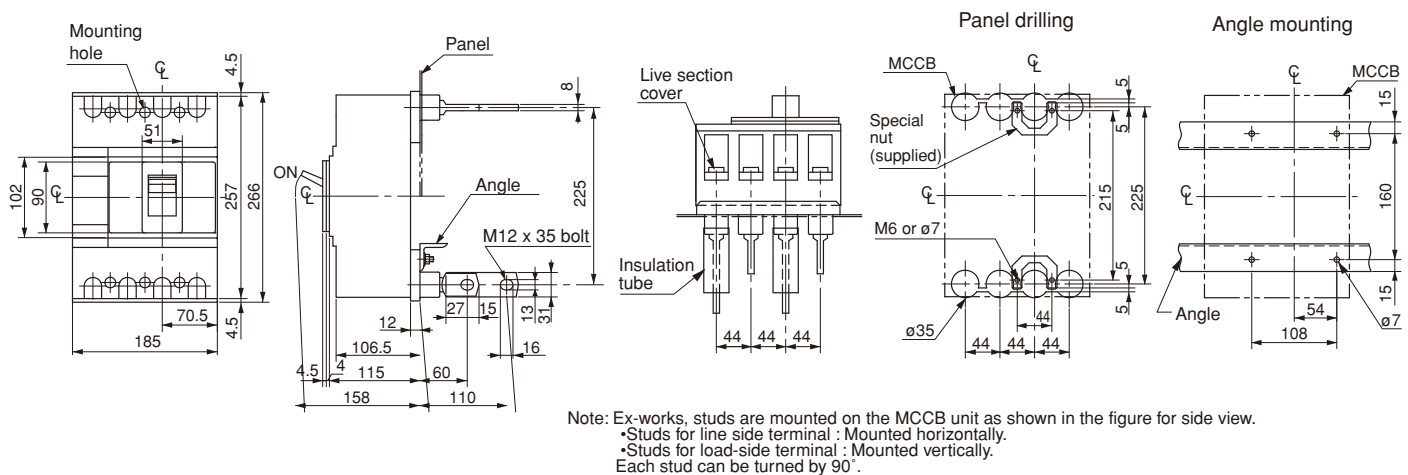
G-TWIN series Dimensions / Standard

■ Dimensions, mm

- **Front mounting, rear connection (type X)**
BW400□-2P, 3P



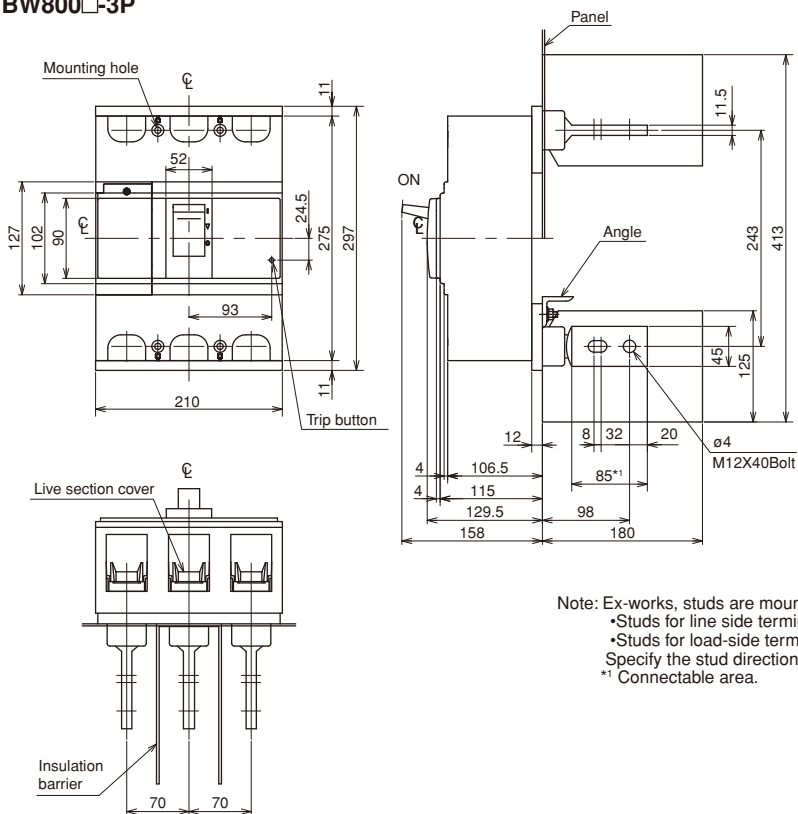
BW400□-4P



Molded Case Circuit Breakers G-TWIN series Dimensions / Standard

■ Dimensions, mm

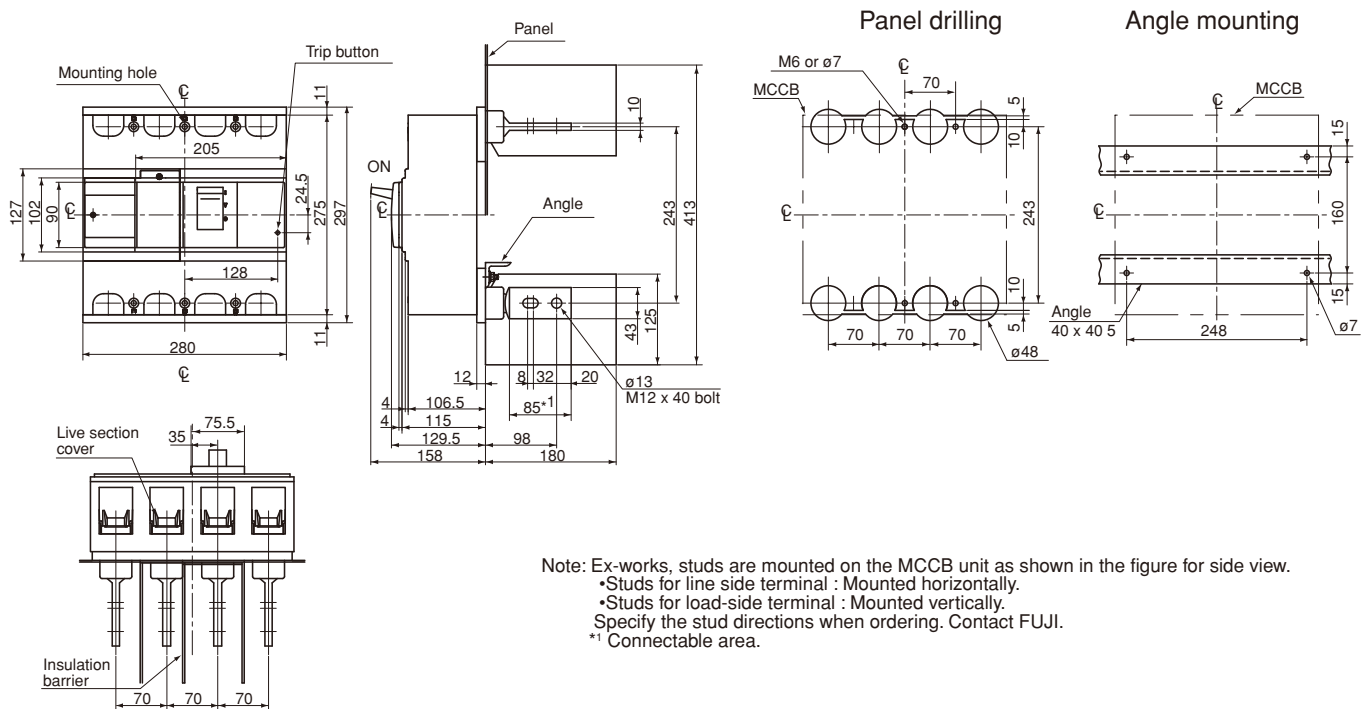
- Front mounting, rear connection (type X)
BW800□-3P



Note: Ex-works, studs are mounted on the MCCB unit as shown in the figure for side view.

- Studs for line side terminal : Mounted horizontally.
• Studs for load-side terminal : Mounted vertically.
Specify the stud directions when ordering. Contact FUJI.
*1 Connectable area.

BW800□-4P



Note: Ex-works, studs are mounted on the MCCB unit as shown in the figure for side view.

- Studs for line side terminal : Mounted horizontally.
• Studs for load-side terminal : Mounted vertically.
Specify the stud directions when ordering. Contact FUJI.
*1 Connectable area.

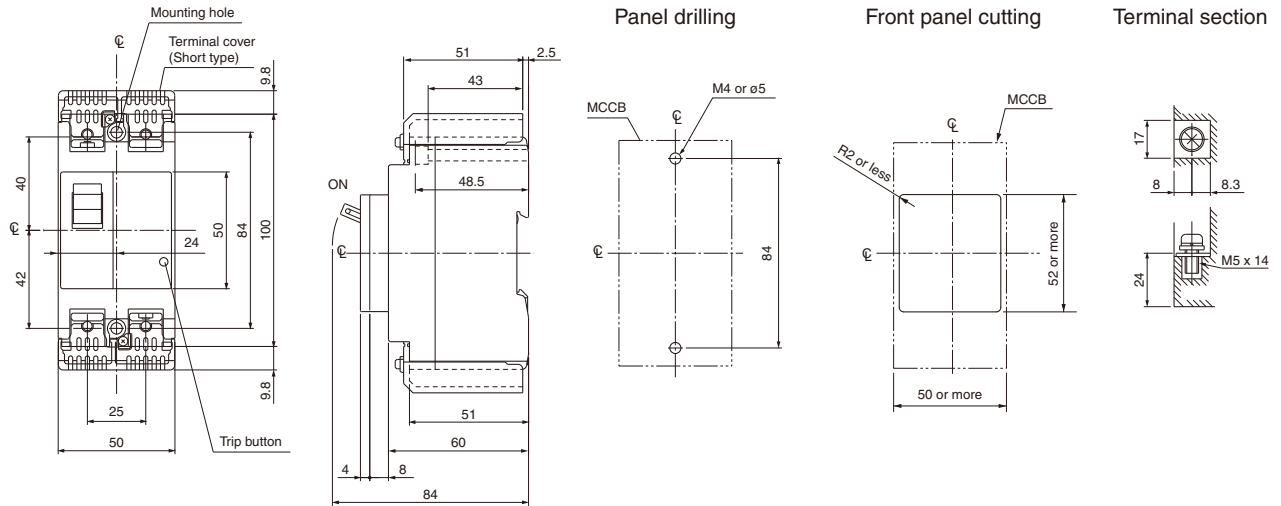
Molded Case Circuit Breakers

G-TWIN series Dimensions / Global

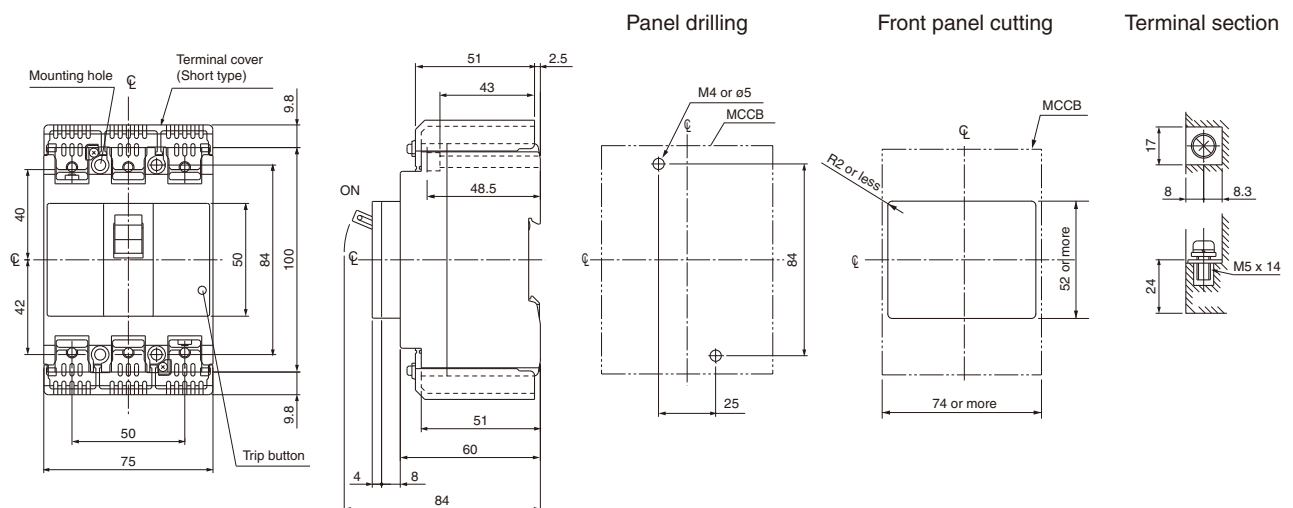
■ Dimensions, mm

● Front mounting, front connection

BW50RAGU-2P



BW50RAGU-3P



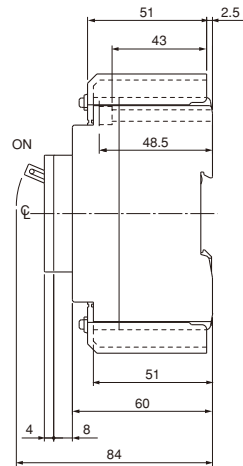
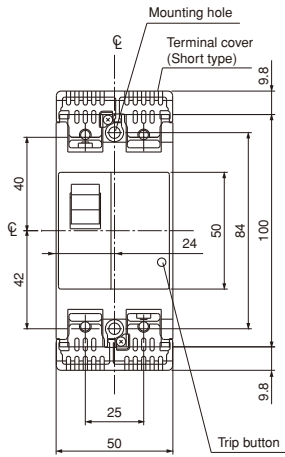
Molded Case Circuit Breakers

G-TWIN series Dimensions / Global

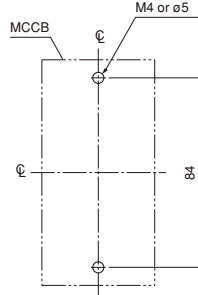
■ Dimensions, mm

● Front mounting, front connection

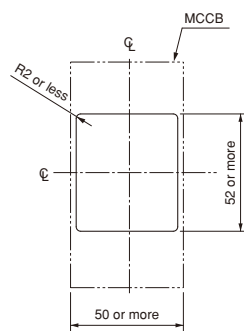
BW100EAGU-2P



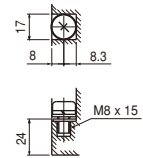
Panel drilling



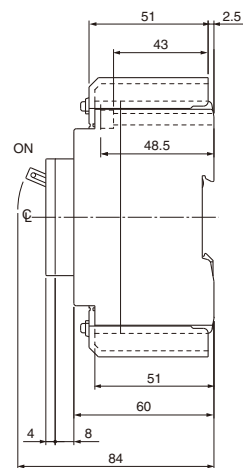
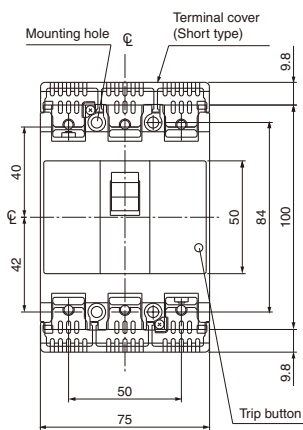
Front panel cutting



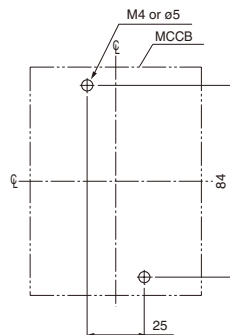
Terminal section



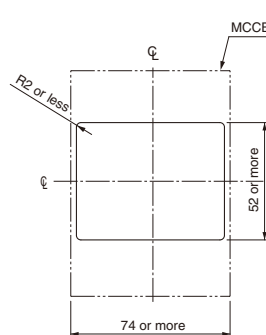
BW100EAGU-3P



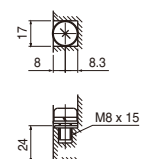
Panel drilling



Front panel cutting



Terminal section

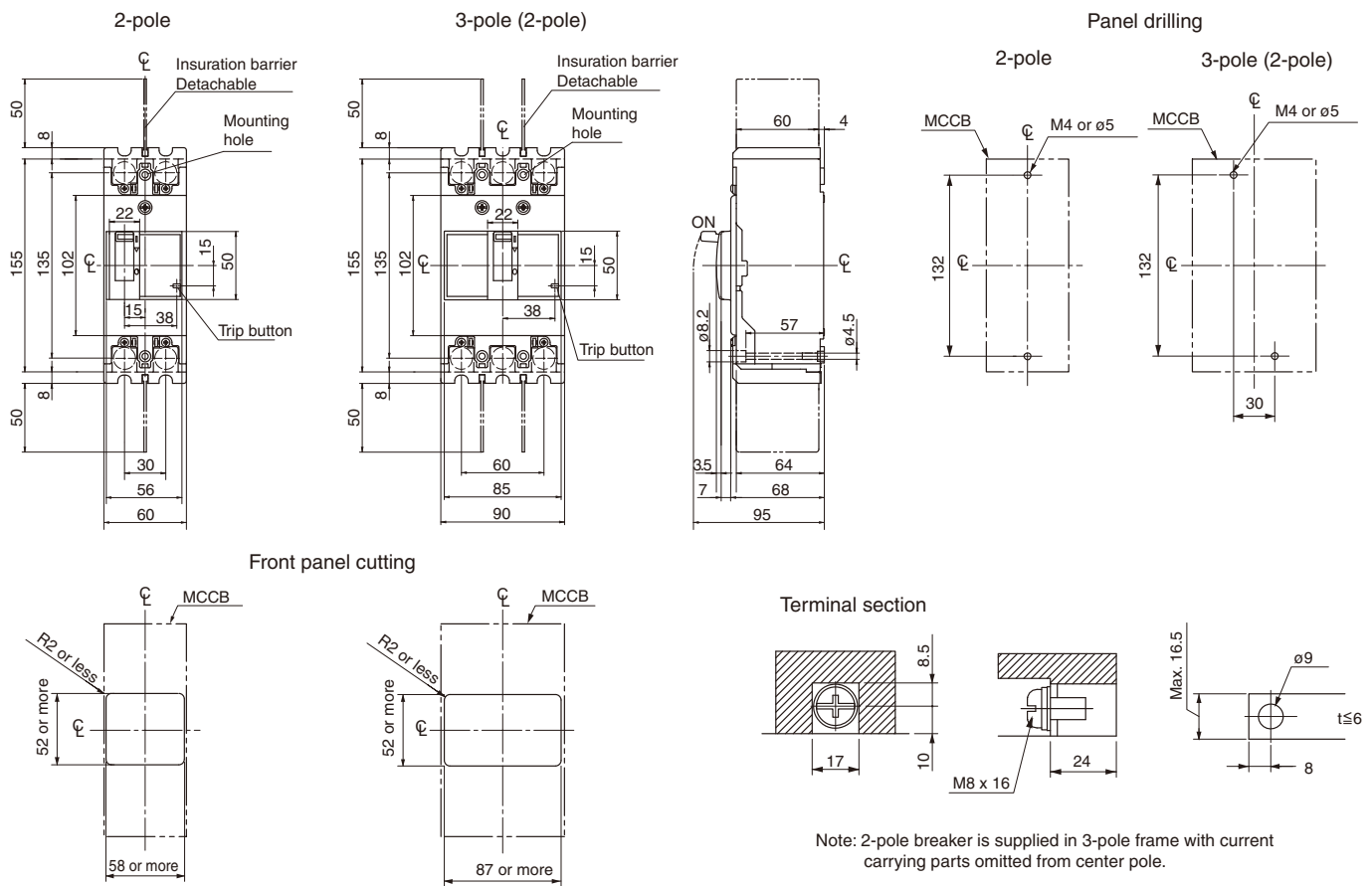


Molded Case Circuit Breakers

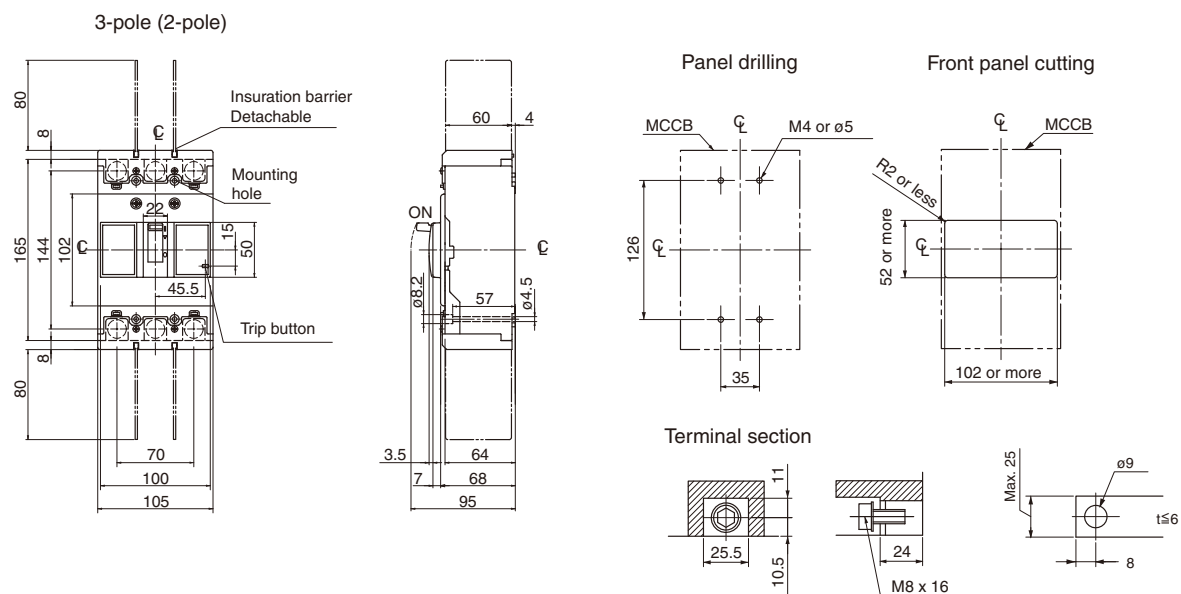
G-TWIN series Dimensions / Global

■ Dimensions, mm

● Front mounting, front connection BW125□U-2P, 3P



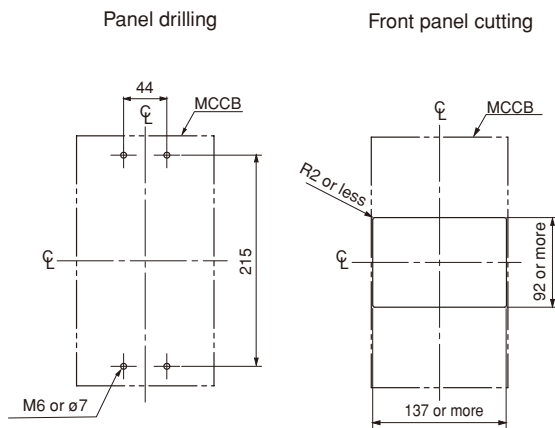
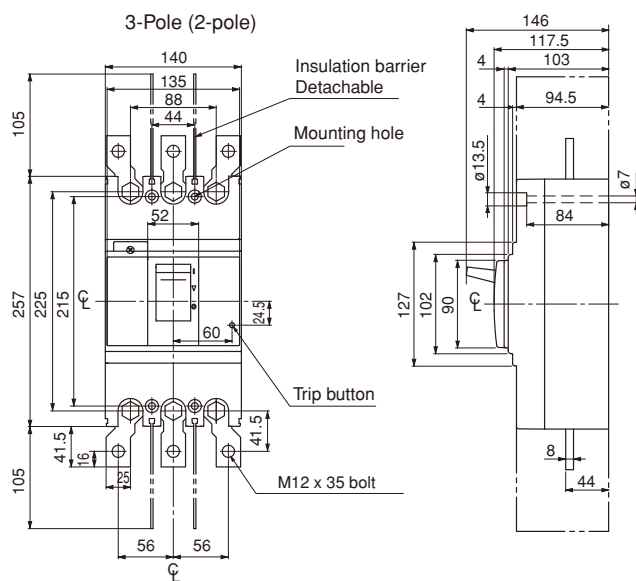
BW250□U-2P, 3P



Molded Case Circuit Breakers G-TWIN series Dimensions / Global

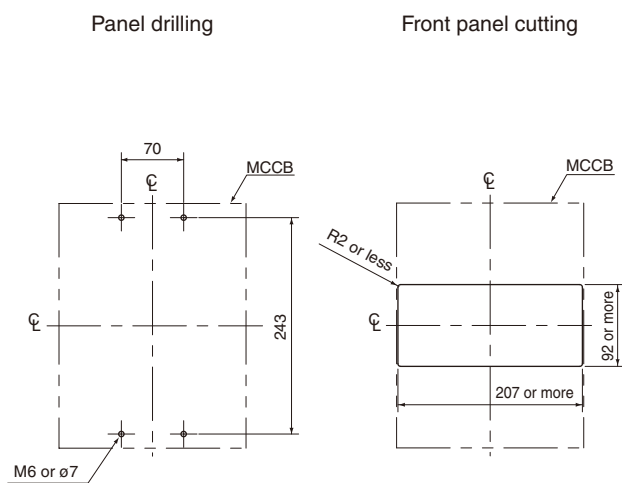
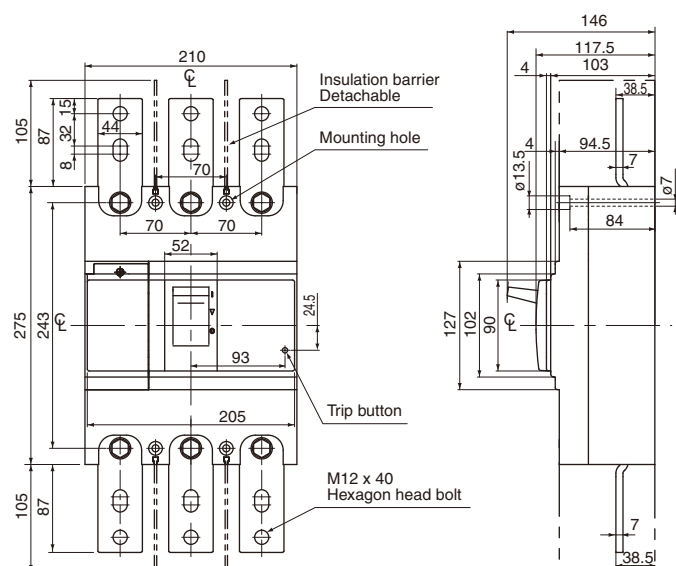
■ Dimensions, mm

- Front mounting, front connection
BW400□U-2P, 3P



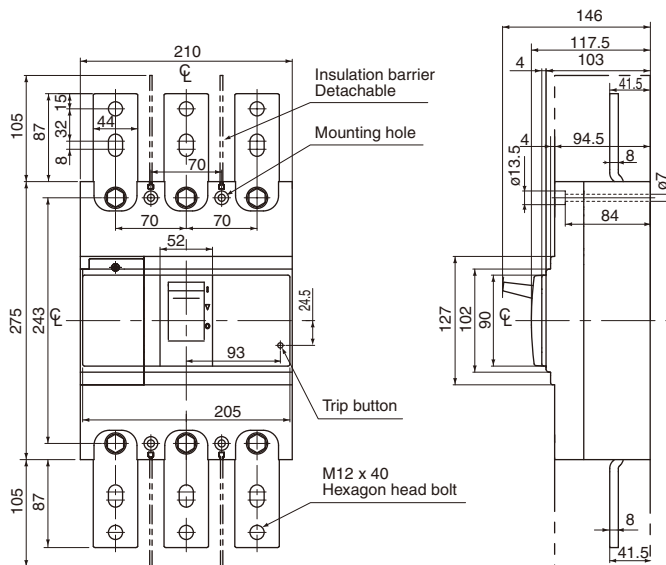
Note: 2-pole breaker is supplied in 3-pole frame with current carrying parts omitted from center pole.

BW630□U-3P

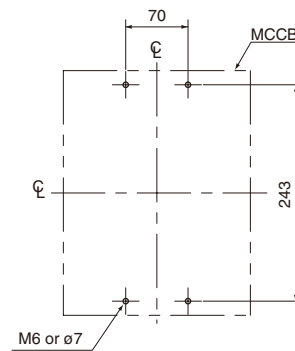


B1

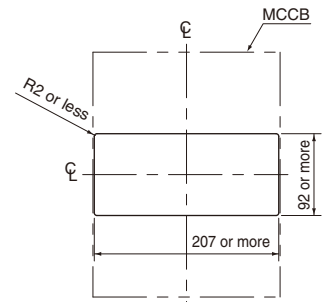
- Front mounting, front connection
BW800□U-3P



Panel drilling



Front panel cutting



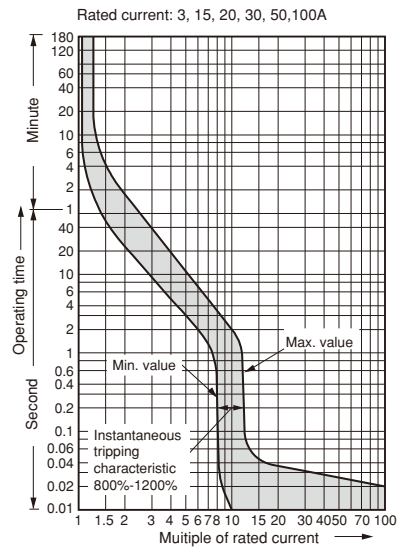
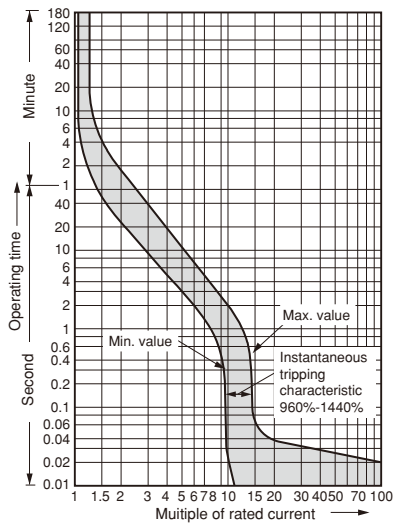
Molded Case Circuit Breakers

G-TWIN series Characteristic curves

■ Characteristic curves / Line protection

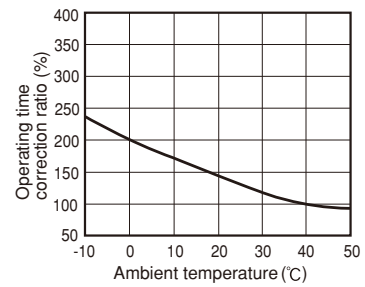
BW32, 50(A,E,S,R), 63, 100

Rated current: 5, 10, 32, 40, 60, 63, 70, 75, 80, 90A



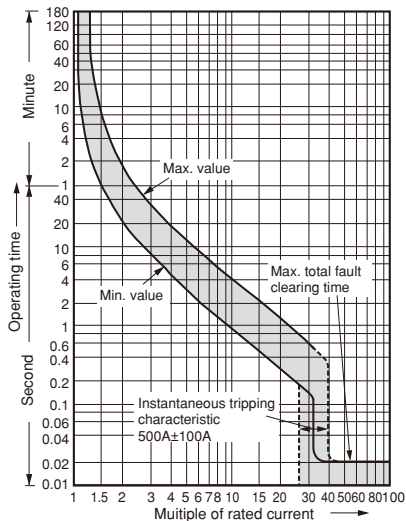
Temperature correction curve

Reference temp. 40 °C

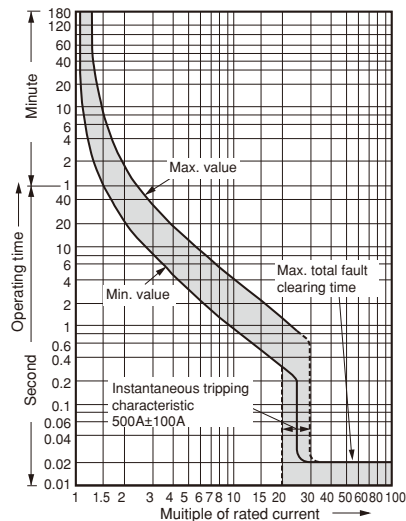


BW50HAG, BW125

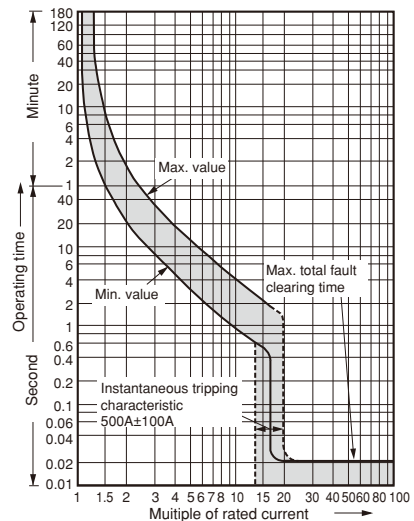
• 15A



• 20A



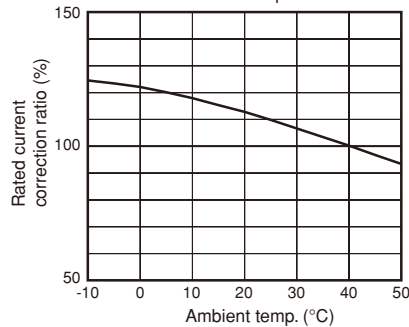
• 30A



Temperature correction curve

• 15-30A

Reference temp. 40 °C

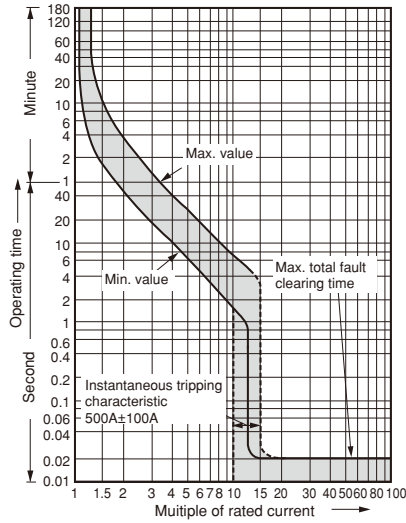


Molded Case Circuit Breakers G-TWIN series Characteristic curves

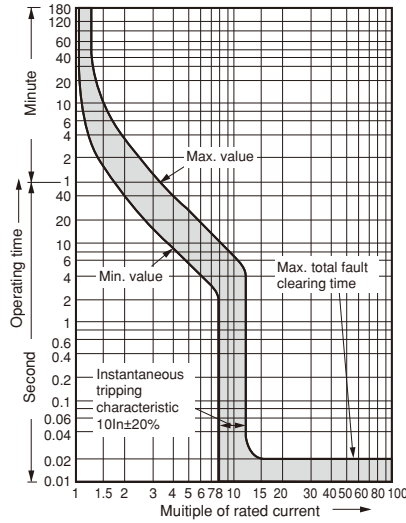
■ Characteristic curves / Line protection

BW50HAG, BW125

• 40A

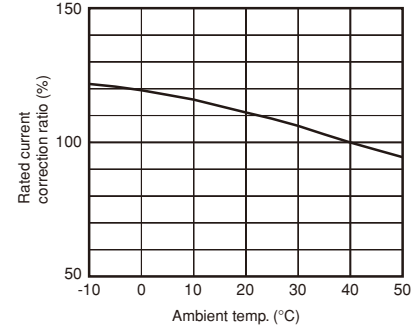


• 50-125A

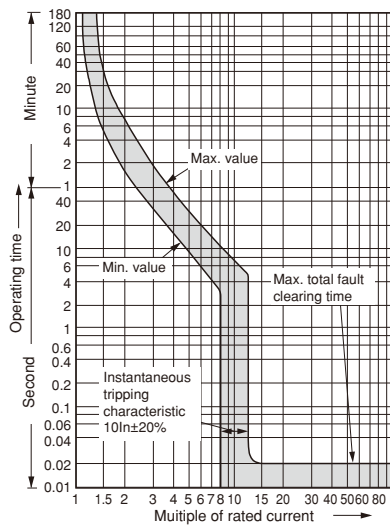


Temperature correction curve

• 40-125A Reference temp. 40°C

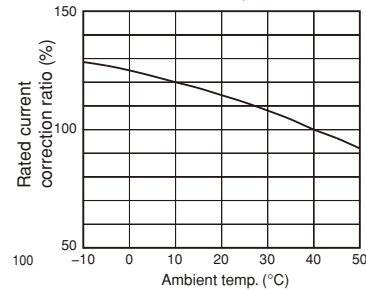


BW160, 250

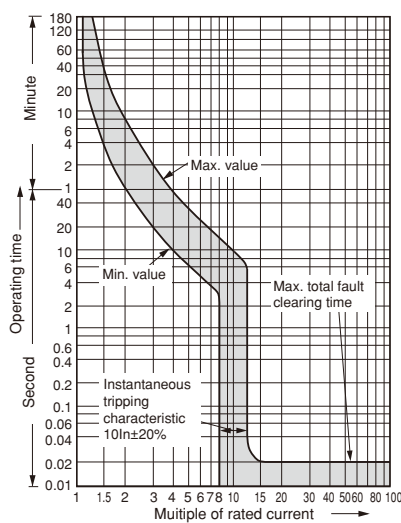


Temperature correction curve

Reference temp. 40°C

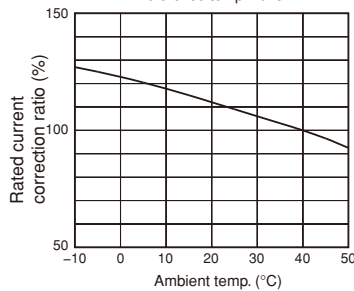


BW400



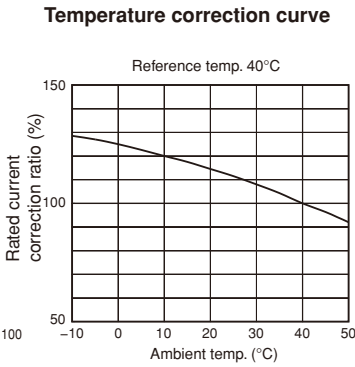
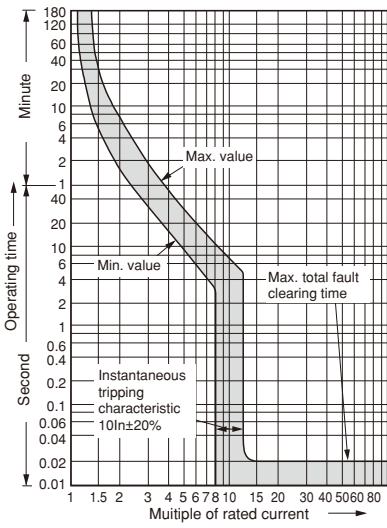
Temperature correction curve

Reference temp. 40°C

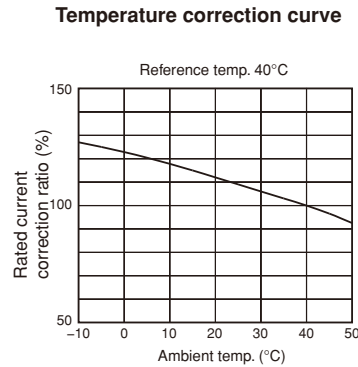
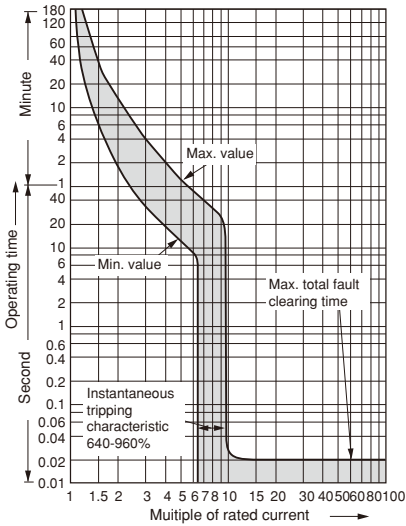


Molded Case Circuit Breakers G-TWIN series Characteristic curves

■ Characteristic curves / Line protection BW630

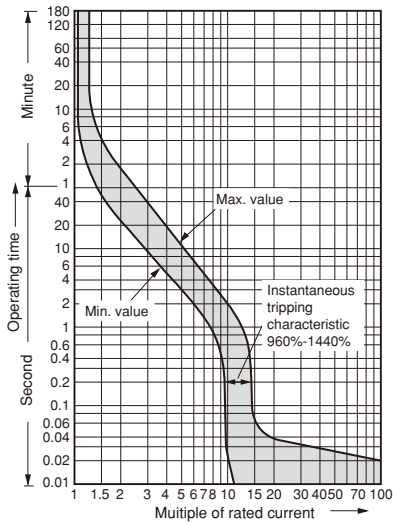


BW800

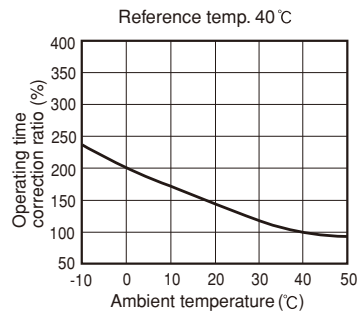


Molded Case Circuit Breakers G-TWIN series Characteristic curves

■ Characteristic curves / Motor protection BW32, 50, 63, 100

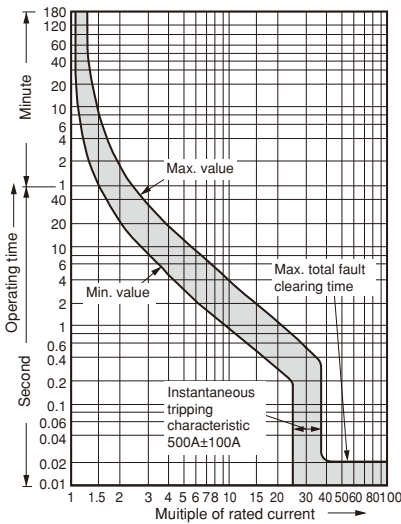


Temperature correction curve

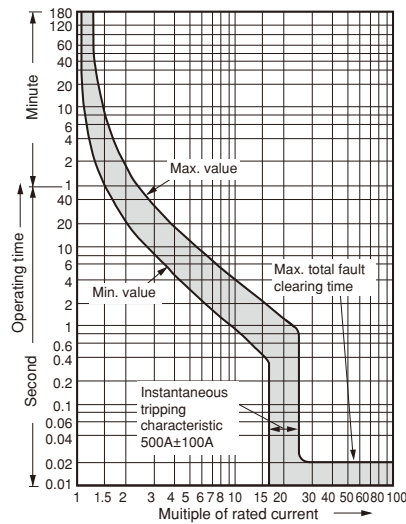


BW125

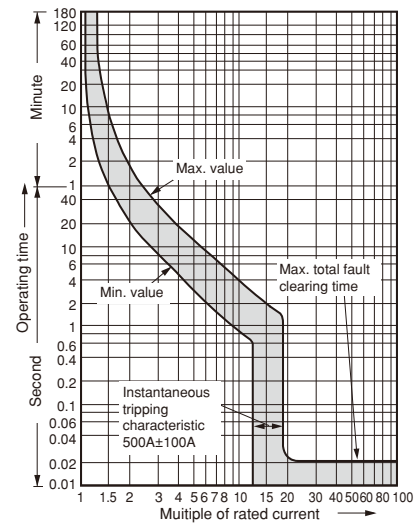
• 16A



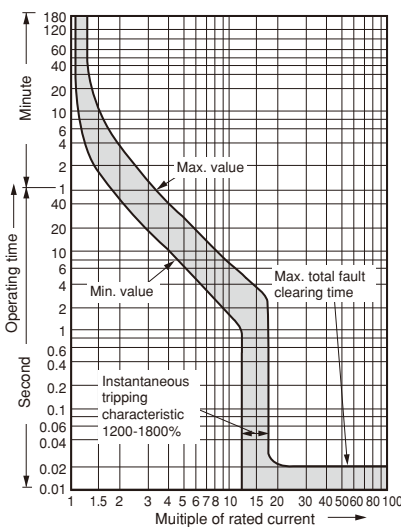
• 24A



• 32A

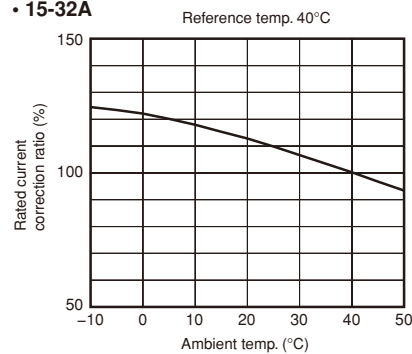


• 40-90A

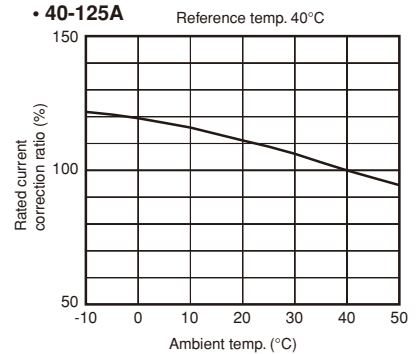


Temperature correction curve

• 15-32A

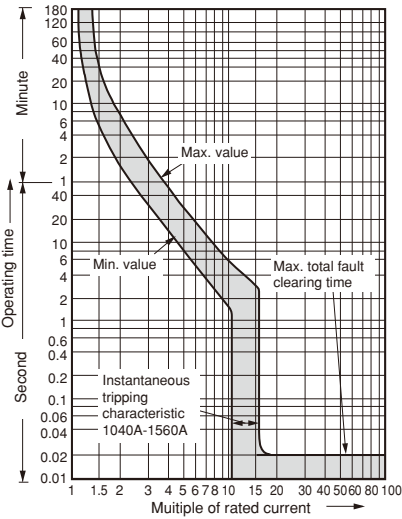


• 40-125A

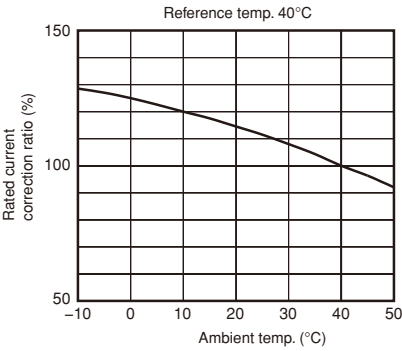


Molded Case Circuit Breakers G-TWIN series Characteristic curves

■ Characteristic curves / Motor protection BW250



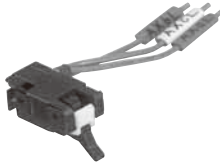
Temperature correction curve



■ Variation of internal accessory

● 32 to 100AF

Auxiliary switch (Type W)



This switch is used for indicator lamp or control circuit.
See page B1-69.

Alarm switch (Type K)

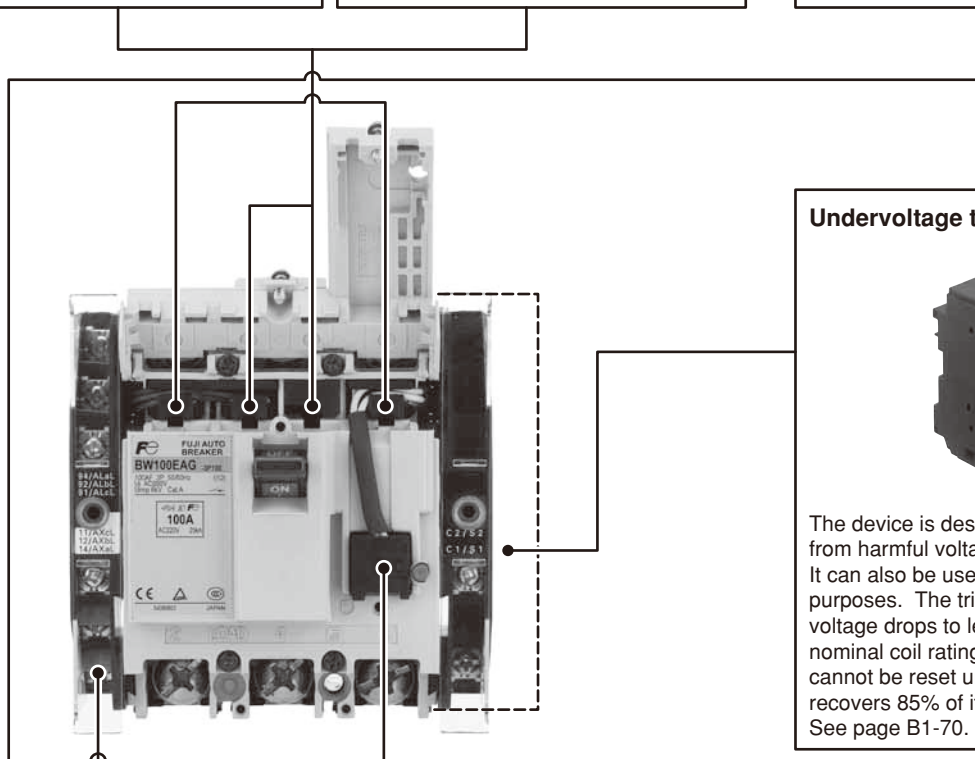


This switch can be connected to a warning lamp or buzzer to indicate when the breaker has been tripped.
See page B1-69.

Shunt trip device (Type F)



The purpose of this accessory is to trip the breaker from a distance.
See page B1-70.



Undervoltage trip device (Type R)



The device is designed to protect circuits from harmful voltage drops. It can also be used for remote control purposes. The trip operates when the voltage drops to less than 70% of nominal coil rating, and the breaker cannot be reset until the voltage recovers 85% of its normal rating.
See page B1-70.

Terminal block (Type A)



A wiring terminal for internal accessories
(Order with W, K or F)
See page B1-71.

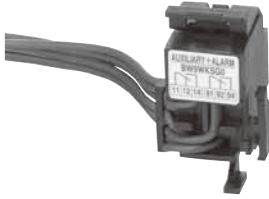
Molded Case Circuit Breakers

G-TWIN series Accessories

■ Variation of internal accessory

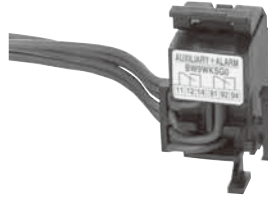
● 125 to 250AF

Auxiliary switch (Type W)



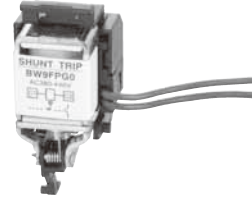
This switch is used for indicator lamp or control circuit.
See page B1-69.

Alarm switch (Type K)



This switch can be connected to a warning lamp or buzzer to indicate when the breaker has been tripped.
See page B1-69.

Shunt trip device (Type F)

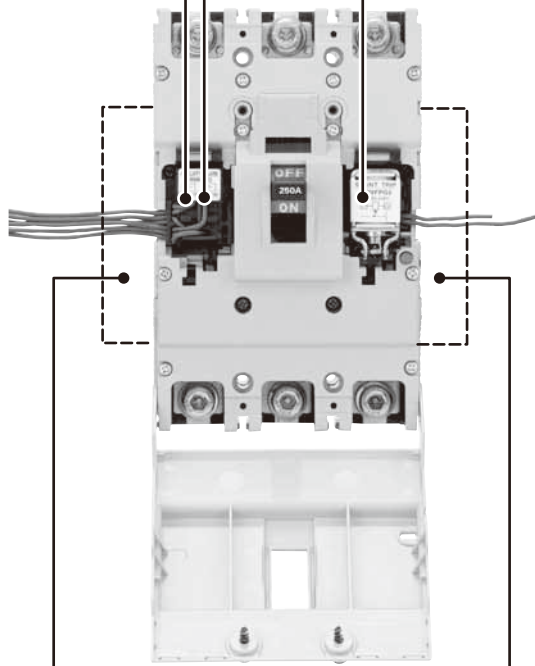


The purpose of this accessory is to trip the breaker from a distance.
See page B1-70.

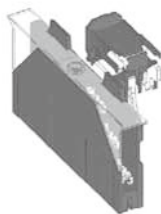
Undervoltage trip device (Type R)



The device is designed to protect circuits from harmful voltage drops. It can also be used for remote control purposes. The trip operates when the voltage drops to less than 70% of nominal coil rating, and the breaker cannot be reset until the voltage recovers 85% of its normal rating.
See page B1-70.



Terminal block (Type A)

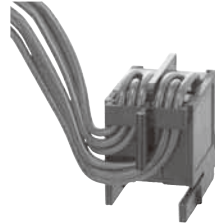


A wiring terminal for internal accessories (Factory-mounted)
See page B1-71.

■ Variation of internal accessory

- 400 to 800AF

Alarm switch (Type K)



This switch can be connected to a warning lamp or buzzer to indicate when the breaker has been tripped. See page B1-69.

Shunt trip device (Type F)

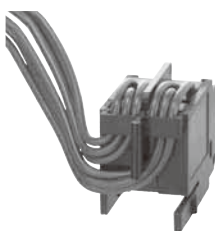


The purpose of this accessory is to trip the breaker from a distance. See page B1-70.

Terminal block (Type A)

A wiring terminal for internal accessories (Factory-mounted)
See page B1-71.

Auxiliary switch (Type W)

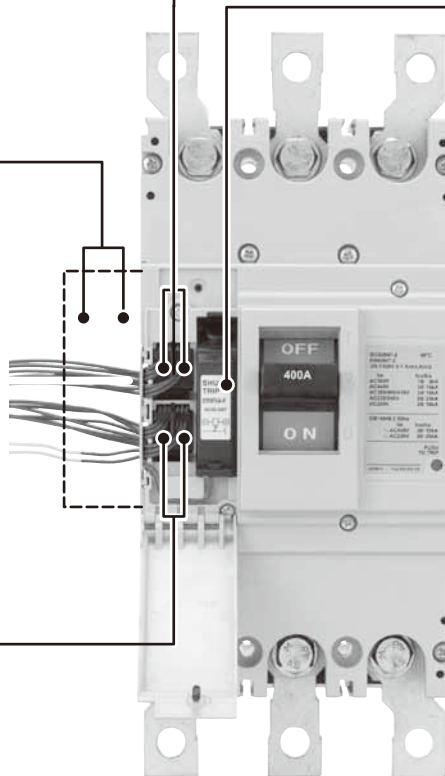


This switch is used for indicator lamp or control circuit. See page B1-69.

Undervoltage trip device (Type R)



The device is designed to protect circuits from harmful voltage drops. It can also be used for remote control purposes. The trip operates when the voltage drops to less than 70% of nominal coil rating, and the breaker cannot be reset until the voltage recovers 85% of its normal rating. See page B1-70.



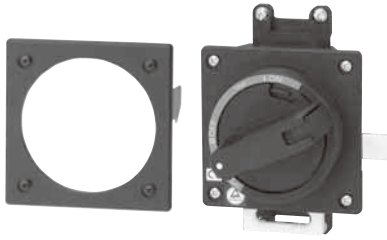
Molded Case Circuit Breakers G-TWIN series Accessories

■ Variation of external accessory

External operating handles

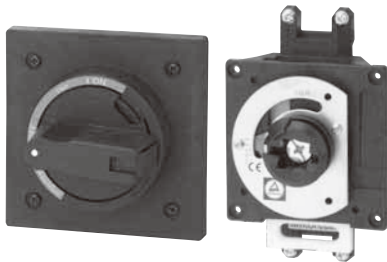
• N-type

See page B1-79.



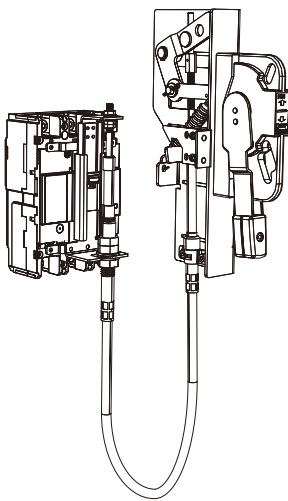
• V-type

See page B1-79.



• F-type

See page B1-79.



Terminal cover

Long type

See page B1-90.



Interphase barrier

See page B1-91.



Terminal cover

Short type

See page B1-90.

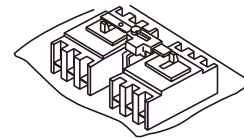
Steel enclosures

See page B1-88.



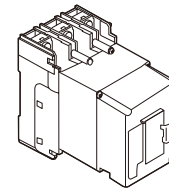
Mechanical interlock device

See page B1-75.



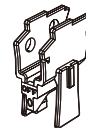
Motor-operating mechanism

See page B1-74.



Handle locking cover (L1)

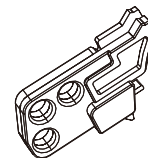
See page B1-92.



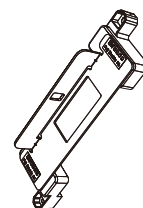
Padlocking device

See page B1-92.

• Cap type (Q1, QN)



• Plate type (Q2)

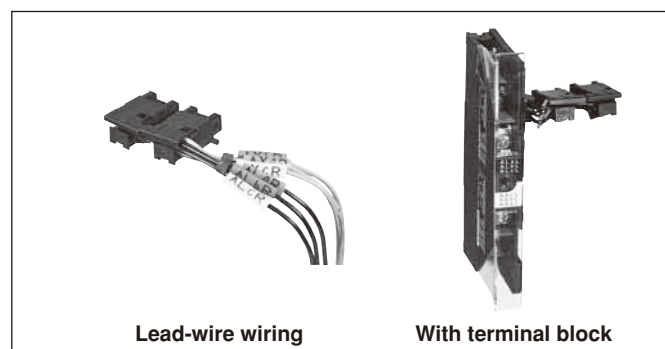


Molded Case Circuit Breakers

G-TWIN series Internal accessories

■ Terminal blocks for auxiliary circuit

- It indicates the terminal No. of internal accessory. The connection method of internal accessory is lead-wire system and terminal block system.
- For the available configuration of internal accessory, see page B1-68.



● Terminal number of internal accessory

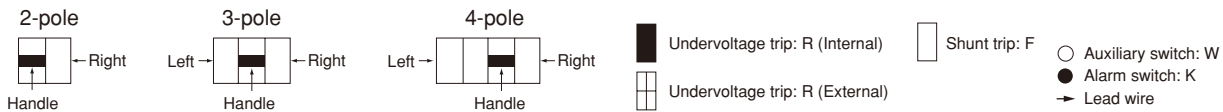
Accessory		32 – 250AF		400 – 800AF
		Left side mounting	Right side mounting	Left side mounting
Auxiliary switch	SPDT: W (1)*			
	2PDT: V (2)*			
Alarm switch	SPDT: K (8)*			
	2PDT: J (9)*			
Shunt trip device : F	With 1NO contact to prevent coil burn-out			
	Continuous rating			
Undervoltage trip device : R				

Note: * () Code of Low level circuit

Molded Case Circuit Breakers

G-TWIN series Internal accessories

Available configurations



MCCB	BW32□-2P BW50□-2P BW63□-2P BW100□-2P	BW32□-3P BW50□-3P BW63□-3P BW100□-3P	BW125JAG-2P BW125JAGU-2P	BW125 BW160 BW250 (Except for BW125JAG-2P, BW125JAGU-2P)	BW400 BW630 BW800	
Pole	2	3	2	2, 3	4	2, 3, 4
Auxiliary switch SPDT: W (1)*						
Alarm switch SPDT: K (8)*						
Shunt trip: F						
Undervoltage trip: R	*2	*2				
W+K (1+8)						
Auxiliary switch 2PDT: V (2)						
Alarm switch 2PDT: J (9)						
V+K (2+8)						
W+J (1+9)						
V+J (2+9)						
W+F (1+F)						
W+R (1+R)	*2	*2				
K+F (8+F)						
K+R (8+R)	*2	*2				
W+K+F (1+8+F)						
W+K+R (1+8+R)	*2	*2				
V+F (2+F)						
V+R (2+R)		*2				
J+F (9+F)						
J+R (9+R)		*2				
V+K+F (2+8+F)						
V+K+R (2+8+R)		*2				
W+J+F (1+9+F)						
W+J+R (1+9+R)		*2				
V+J+F (2+9+F)				*1		
V+J+R (2+9+R)		*2		*1		

Notes: •The above table is applied to front mounting type, rear mounting type, flush mounting type, and plug-in mounting type.

• Terminal block is attached on the same side of the accessory.

• () Code of low level circuit □: See page B1-2.

*1 Configurations with terminal block are not available.

*2 Flush mounting, rear connection type breakers of 100AF or less are not available.

Molded Case Circuit Breakers

G-TWIN series Internal accessories

■ Operation of auxiliary switches(W) and alarm switches(K)

Accessory	Handle position		Trip
	ON	OFF	
Auxiliary switch	SPDT: W (1)		
	2PDT: V (2)		
Alarm switch	SPDT: K (8)		
	2PDT: J (9)		

Note: Ring mark indication
 () Code of low level circuit

■ Ratings of auxiliary switches(W) and alarm switches(K)

● 32-100AF

	IEC60947-5-1			NECA C4505		Minimum load current
	Voltage (V)	Make/break current (A)		Voltage (V)	Make/break current (A)	
		AC 15	DC 13		Res. load	
Standard type	125 AC	5	–	125 AC	5	5V DC 160mA 30V DC 30mA
	250 AC	5	–	250 AC	3	
	–	–	–	30 DC	4	
	125 DC	–	0.6	125 DC	0.4	
	250 DC	–	0.3	250 DC	0.2	
Low level circuit	–	–	–	30 DC	0.1	5V DC 1mA

● 125-800AF

	Rated thermal current (A)	Rated operational current (A)						Minimum load current
		AC			DC			
		Rated operational Voltage (V)	Res. load	Ind. load	Rated operational Voltage (V)	Res. load	Ind. load	
Standard type	5	24	5	5	24	4	3	5V DC 160mA
		48	5	5	48	2.5	1	30V DC 30mA
		125	5	3	125	0.4	0.4	
		250	3	2	250	0.2	0.2	
Low level circuit	0.1	30	0.1	—	30	0.1	—	5V DC 1mA

Molded Case Circuit Breakers

G-TWIN series Internal accessories

Rating of shunt trip (F)

MCCB type	AC		DC		Code	Time rating of coil	Operating time (ms)
	V	VA	V	W			
BW32 BW50 BW63 BW100	100-120	150	100-110	150	FAC100-120V/ DC100-110V	Continuous (With 1NO contact to prevent coil burn-out)	7-13
	200-240	150	—	—	FAC200-240V		
	380-450	200	—	—	FAC380-450V		
	24	150	24	150	FAC/DC24V		
BW125 BW160 BW250	24	50	24	50	FAC/DC24V		13-21
	48	50	48	50	FAC/DC48V		
	100-120	50	100-110	50	FAC100-120V/ DC100-110V		
	120-130	50	—	—	FAC120-130V		
	200-240	50	200-220	50	FAC200-240V/ DC200-220V		
	277	50	—	—	FAC277V		
	380-440	50	—	—	FAC380-440V		
	440-480	50	—	—	FAC440-480V		
	500-550	50	—	—	FAC500-550V		
BW400 BW630 BW800	24-48	2	24-48	2	FAC/DC24-48V	Continuous	8-20
	100-240	3	100-220	3	FAC100-240V DC100-220V		
	277	3	—	—	FAC277V		
	380-550	4	—	—	FAC380-550V		

Note: The operating tripping voltage range for shunt trip devices is 70% to 110% of the rated operating voltage.

Rating of undervoltage trip (R)

MCCB type	Installation	AC		DC		Code
		V	VA	V	W	
BW32 *2 BW50 *2 BW63 *2 BW100 *2	External	100 (50Hz)/ 100-110(60Hz)	2.8	—	—	RAC100(50Hz)/ 100-110V(60Hz)
		200 (50Hz)/ 200-220 (60Hz)	3.4	—	—	RAC200(50Hz)/ 200-220V(60Hz)
		400 (50Hz)/ 400-440 (60Hz)	4.4	—	—	RAC400(50Hz)/ 400-440V(60Hz)
		—	—	24	40	RDC24V
		—	—	100-110	—	RDC100-110V
BW125 *1 BW160 *1 BW250 *1	Internal	—	—	24	5	RDC24V
		—	—	48	5	RDC48V
		—	—	100-110	5	RDC100-110V
		—	—	125	5	RDC125V
		100-110	5	—	—	RAC100-110V
		110-130	5	—	—	RAC110V-130V
		200-240	5	—	—	RAC200-240V
		277	5	—	—	RAC277V
		380-415	5	—	—	RAC380-415V
		440-480	5	—	—	RAC440V-480V
BW400 *2 BW630 *2 BW800 *2	Internal	24	2	24	2	RAC/DC24V
		48	2	48	2	RAC/DC48V
		100-110	3	100-110	3	RAC/DC100-110V
		120-130	3	125	3	RAC120-130V/DC125V
		200-240	3	200-220	3	RAC200-240V/DC200-220V
		277	3	—	—	RAC277V
		380-480	4	—	—	RAC380-480V

Notes: • The operating voltages of undervoltage tripping devices are as follows:

Tripping voltage: 35% to 70% of rated voltage, closing voltage: 85% to 110% of rated voltage.

*1 Reset-allowed type: When the breaker handle is in the OFF or RESET state, tripping does not occur even if the R coil is not energized. Turning ON with the R coil not energized causes normal tripping.

*2 Reset-prohibited type: When the R coil is not energized, reset operation cannot reset the tripped breaker to the OFF state.

Molded Case Circuit Breakers

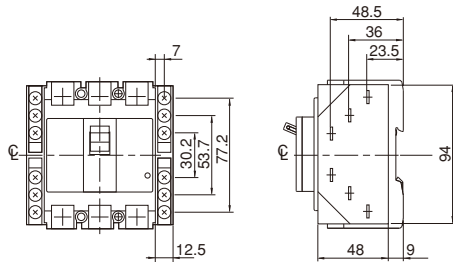
G-TWIN series Internal accessories

Lead wire specification

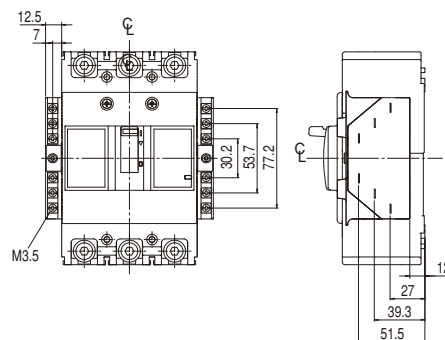
AF	Pole	wire size	Wire length
32 to 100AF	—	0.4mm ² (AWG22)	Ca 500mm
125 to 250AF	2P, 3P 4P	0.5mm ² (AWG20)	
400 to 800AF	2P, 3P 4P	0.5mm ²	Ca 500mm Ca 400 to 450mm

Terminal blocks

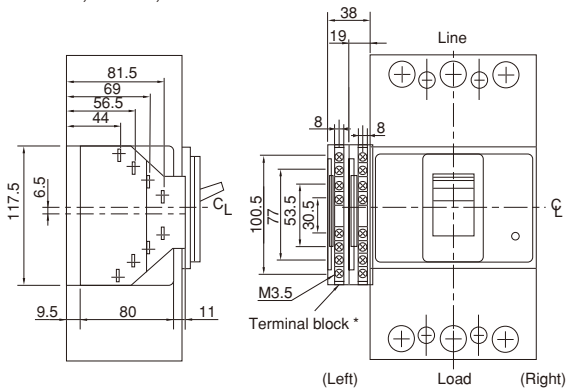
32AF, 50AF, 63AF, 100AF



125AF, 160AF, 250AF



400AF, 630AF, 800AF

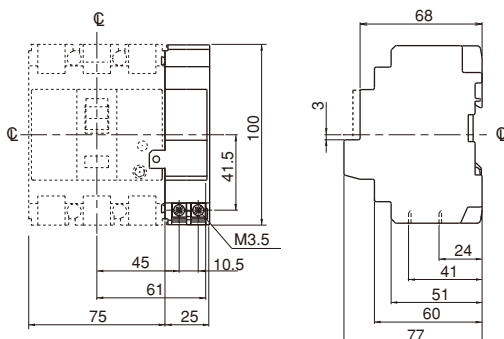


Notes:

- If the chosen combination has more than 8 terminals, 2 terminal blocks are mounted.
- Mount the terminal block on the surface on which the accessories are mounted. See the table of the combinations of internal accessories on pages B1-68. for information on the accessory mounting position.
- Available wire: Solid wire: 1.6ø Stranded wire: 2mm²
- Terminal blocks are available as factory mounted only.

Undervoltage trip device

32AF, 50AF, 63AF, 100AF



Mass: 0.15kg

Molded Case Circuit Breakers

G-TWIN series Internal accessories

■ Type number

Internal accessories (Sold separately)

● 32, 50, 63, 100AF IEC/EN/GB/JIS conformed

Accessory	Type				Operating voltage
	Lead wire system		Terminal block system		
	Left side	Right side	Left side	Right side	
Auxiliary switch	BZ6WL10C	BZ6WR10C	BZ6WL10CA	BZ6WR10CA	
Auxiliary switch (low level circuit)	BZ6WDL10C	BZ6WDR10C	BZ6WDL10CA	BZ6WDR10CA	
Alarm switch	BZ6KL10C	BZ6KR10C	BZ6KL10CA	BZ6KR10CA	
Alarm switch (low level circuit)	BZ6KDL10C	BZ6KDR10C	BZ6KDL10CA	BZ6KDR10CA	
Auxiliary switch + Alarm switch	BZ6WKL10C	BZ6WKR10C	BZ6WKL10CA	BZ6WKR10CA	
Auxiliary switch + Alarm switch (low level circuit)	BZ6WDKDL10C	BZ6WDKDR10C	BZ6WDKDL10CA	BZ6WDKDR10CA	
Shunt trip device	—	BZ6FA10C	—	BZ6FA10CA	100-120V AC/100-110V DC
	—	BZ6FK10C	—	BZ6FK10CA	200-240V AC
	—	BZ6FP10C	—	BZ6FP10CA	380-450V AC
	—	BZ6FR10C	—	BZ6FR10CA	24V AC/DC
Undervoltage trip device	—	—	—	BZ6R210C	100V AC 50Hz/100-110V AC 60Hz
	—	—	—	BZ6R110C	110V AC 50Hz/110-127V AC 60Hz
	—	—	—	BZ6RW10C	200V AC 50Hz/200-220V AC 60Hz
	—	—	—	BZ6R410C	220V AC 50Hz/220-240V AC 60Hz
	—	—	—	BZ6R510C	230V AC 50Hz/230-240V AC 60Hz
	—	—	—	BZ6R810C	240V AC 50Hz
	—	—	—	BZ6R010C	380V AC 50Hz 380-415V AC 60Hz
	—	—	—	BZ6R910C	400V AC 50Hz 400-440V AC 60Hz
	—	—	—	BZ6RF10C	24V DC
	—	—	—	BZ6RT10C	100-110V DC

● 50, 100AF IEC/EN/GB/JIS/UL/CSA conformed

Accessory	Type				Operating voltage
	Lead wire system		Terminal block system		
	Left side	Right side	Left side	Right side	
Auxiliary switch	BZ6WL10CU	BZ6WR10CU	BZ6WL10CAU	BZ6WR10CAU	
Auxiliary switch (low level circuit)	BZ6WDL10CU	BZ6WDR10CU	BZ6WDL10CAU	BZ6WDR10CAU	
Alarm switch	BZ6KL10CU	BZ6KR10CU	BZ6KL10CAU	BZ6KR10CAU	
Alarm switch (low level circuit)	BZ6KDL10CU	BZ6KDR10CU	BZ6KDL10CAU	BZ6KDR10CAU	
Auxiliary switch + Alarm switch	BZ6WKL10CU	BZ6WKR10CU	BZ6WKL10CA	BZ6WKR10CAU	
Auxiliary switch + Alarm switch (low level circuit)	BZ6WDKDL10CU	BZ6WDKDR10CU	BZ6WDKDL10CAU	BZ6WDKDR10CAU	
Shunt trip device	—	BZ6FA10CU	—	BZ6FA10CAU	100-120V AC/100-110V DC
	—	BZ6FK10CU	—	BZ6FK10CAU	200-240V AC
	—	BZ6FP10CU	—	BZ6FP10CAU	380-450V AC
Undervoltage trip device	—	—	—	BZ6R210CAU	100V AC 50Hz/100-110V AC 60Hz
	—	—	—	BZ6RW10CAU	110V AC 50Hz/110-127V AC 60Hz
	—	—	—	BZ6R910CAU	200V AC 50Hz/200-220V AC 60Hz

Molded Case Circuit Breakers

G-TWIN series Internal accessories

● 125, 160, 250AF IEC/EN/GB/JIS/UL/CSA conformed

Accessory	Type				Operating voltage
	Lead wire system		Terminal block system		
	Left side	Right side	Left side	Right side *	
Auxiliary switch	BW9W1SG0	BW9W1SG0-R	BW9W1SG0-A	—	—
Auxiliary switch (low level circuit)	BW9W1DG0	BW9W1DG0-R	— *		
Alarm switch	BW9K1SG0	BW9K1SG0-R	BW9K1SG0-A		
Alarm switch (low level circuit)	BW9K1DG0	BW9K1DG0-R	— *		
Auxiliary switch + Alarm switch	BW9WKS0	BW9WK1SG0-R	BW9WKS0-A		
Auxiliary switch + Alarm switch (low level circuit)	BW9WKDG0	BW9WK1DG0-R	— *		
Shunt trip device	BW9FRG0	BW9FRG0	BW9FRG0-A		24V AC/DC
	BW9FSG0	BW9FSG0	BW9FSG0-A		48V AC/DC
	BW9FAG0	BW9FAG0	BW9FAG0-A		100-120V AC/100-110V DC
	BW9F1G0	BW9F1G0	BW9F1G0-A		120-130V AC
	BW9FKG0	BW9FKG0	BW9FKG0-A		200-240V AC/200-220V DC
	BW9FBG0	BW9FBG0	BW9FBG0-A		277V AC
	BW9FPG0	BW9FPG0	BW9FPG0-A		380-440V AC
	BW9FHG0	BW9FHG0	BW9FHG0-A		440-480V AC
	BW9FJG0	BW9FJG0	BW9FJG0-A		500-550V AC
Undervoltage trip devices	BW9RGAR	—	BW9RGAR-A		24V DC
	BW9RGAS		BW9RGAS-A		48V DC
	BW9RGAL		BW9RGAL-A		100-110V DC
	BW9RGA5		BW9RGA5-A		125V DC
	BW9RGAA		BW9RGAA-A		100-110V AC
	BW9RGAT		BW9RGAT-A		110-130V AC
	BW9RGAK		BW9RGAK-A		200-240V AC
	BW9RGAB		BW9RGAB-A		277V AC
	BW9RGAP		BW9RGAP-A		380-415V AC
	BW9RGAH		BW9RGAH-A		440-480V AC

Note: * Factory-mounted

● 400, 630, 800AF IEC/EN/GB/JIS/UL/CSA conformed

Accessory	Type		Operating voltage
	Lead wire system	Terminal block system *	
	Left side		
Auxiliary switch x 1	BW9W1SHA	—	—
Auxiliary switch x 2	BW9W2SHA		
Auxiliary switch (low level circuit) x 1	BW9W1DHA		
Auxiliary switch (low level circuit) x 2	BW9W2DHA		
Alarm switch x 1	BW9K1SHA		
Alarm switch x 2	BW9K2SHA		
Alarm switch (low level circuit) x 1	BW9K1DHA		
Alarm switch (low level circuit) x 2	BW9K2DHA		
Shunt trip device	BW9FHA-R		24-48V AC/DC
	BW9FHA-A		100-240V AC/100-220V DC
	BW9FHA-B		277V AC
	BW9FHA-P		380-550V AC
Undervoltage trip devices	BW9RHA-R		24V AC/DC
	BW9RHA-S		48V AC/DC
	BW9RHA-A		100-110 AC/DC
	BW9RHA-1		120-130V AC/125V DC
	BW9RHA-K		200-240V AC/200-220V DC
	BW9RHA-B		277V AC
	BW9RHA-P		380-480V AC

Note: * Factory-mounted

Molded Case Circuit Breakers

G-TWIN series External accessories

Motor-operated breakers

Description

The breaker is fitted with a motor operating mechanism which enables ON, OFF and RESET operations to be carried out electronically by remote control.

The breakers do not conform to IEC and EN standard.



Type and ratings

MCCB type	Motor rating			Power source capacity	Mass (kg)
	Operating voltage	Operating time	Time rating		
BW32□-3P□M, BW50□-3P□M, BW63□-3P□M, BW100□-3P□M	100V DC 100/110V AC 200/220V AC	0.1s	15s per on-off operation	500VA	1.2
					1.3

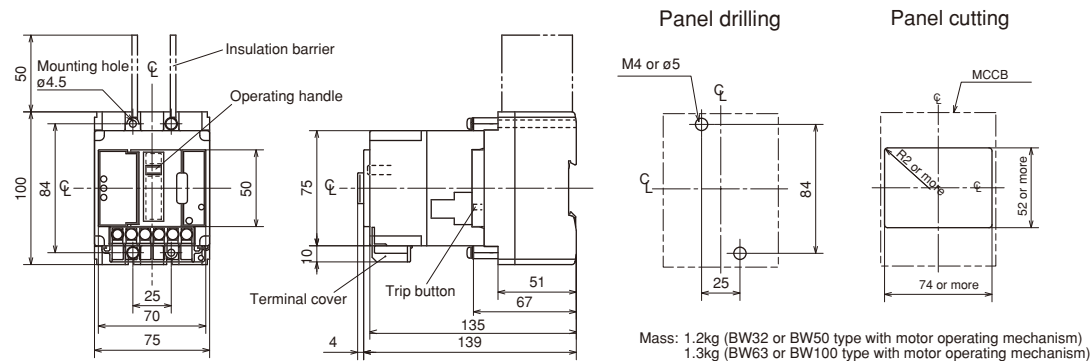
Ordering information

Specify the following:

1. Type number
2. Motor operating voltage

Dimensions, mm / Front mounting, front connection

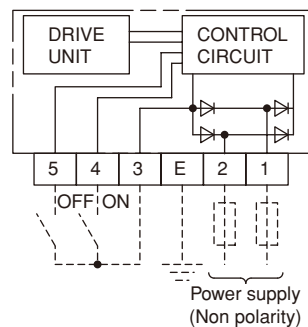
BW32□-3P, BW50□-3P, BW63□-3P, BW100□-3P,



- Notes:
- Trip button operation can be carried out at right side of the breaker.
 - IEC 35mm wide mounting rail is not available.

Wiring diagrams

100/110V AC, 200/220V AC, 100V DC



Molded Case Circuit Breakers

G-TWIN series External accessories

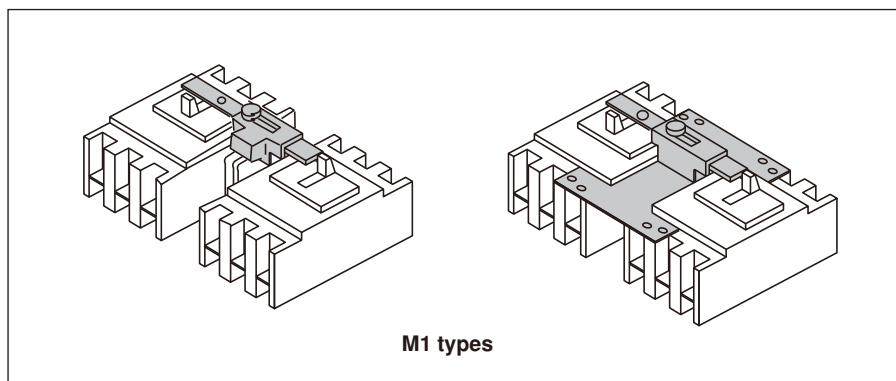
Mechanical interlocking devices

■ Description

These interlocking devices are mounted on the two separate breakers to prevent them from both being closed at the same time. A sliding mechanism that can be locked with a padlock is used. (The padlock is not included.)

They are designed for use when changing over power supplies.

These can be mounted to 3 types of breakers: front-mounting front-connection type, front-mounting rear-connection type (type X), and plug-in mounting type (type P). Interlock devices for flush mounting type breakers (type E, Y) are also available.



■ Type and applicable breakers

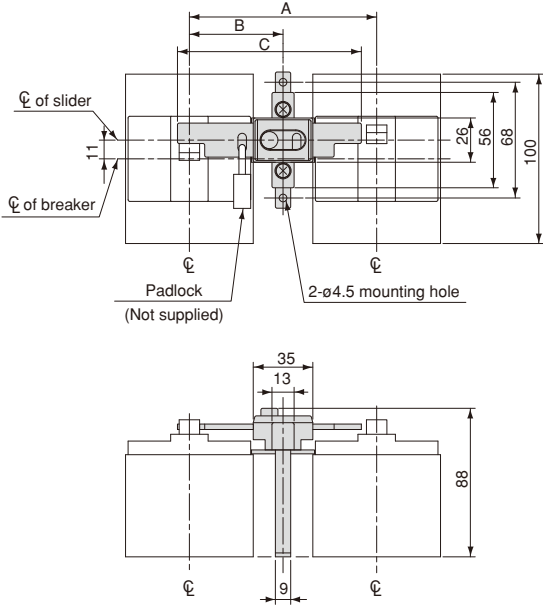
Type	Breaker type
BZ6M110C2	BW32AAG-2P, BW32SAG-2P BW50AAG-2P, BW50EAG-2P, BW50SAG-2P, BW50RAG-2P BW63EAG-2P, BW63SAG-2P, BW63RAG-2P BW100EAG-2P
BZ6M110C3	BW32AAG-3P, BW32SAG-3P BW50AAG-3P, BW50EAG-3P, BW50SAG-3P, BW50RAG-3P BW63EAG-3P, BW63SAG-3P, BW63RAG-3P BW100AAG-3P, BW100EAG-3P
BW9M1CA-2	BW125JAG-2P
BW9M1CA-3	BW125JAG-3P, BW125SAG-2P, BW125SAG-3P, BW125RAG-2P, BW125RAG-3P, BW50HAG-2P, BW50HAG-3P, BW125HAG-2P, BW125HAG-3P
BW9M1CA-4	BW125JAG-4P, BW125SAG-4P, BW125RAG-4P
BW9M1GA-3	BW160EAG-2P, BW160EAG-3P, BW160JAG-2P, BW160JAG-3P BW160SAG-2P, BW160SAG-3P, BW160RAG-2P, BW160RAG-3P BW250EAG-2P, BW250EAG-3P, BW250JAG-2P, BW250JAG-3P BW250SAG-2P, BW250SAG-3P, BW250RAG-2P, BW250RAG-3P, BW250HAG-2P, BW250HAG-3P
BW9M1GA-4	BW160JAG-4P, BW160SAG-4P, BW160RAG-4P BW250JAG-4P, BW250SAG-4P, BW250RAG-4P
BW9M1HA-3	BW400EAG-2P, BW400EAG-3P, BW400SAG-2P, BW400SAG-3P BW400RAG-2P, BW400RAG-3P, BW400HAG-2P, BW400HAG-3P
BW9M1HA-4	BW400RAG-4P, BW400HAG-4P
BW9M1JA-3	BW630EAG-3P, BW630RAG-3P, BW630HAG-3P BW800EAG-3P, BW800RAG-3P, BW800HAG-3P

Molded Case Circuit Breakers

G-TWIN series External accessories

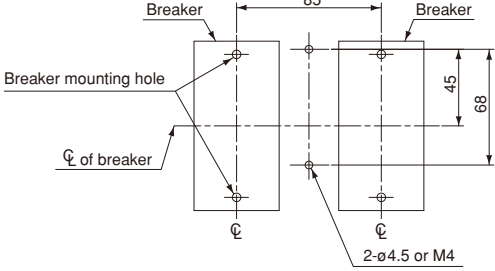
■ Dimensions, mm

● 32AF to 100AF

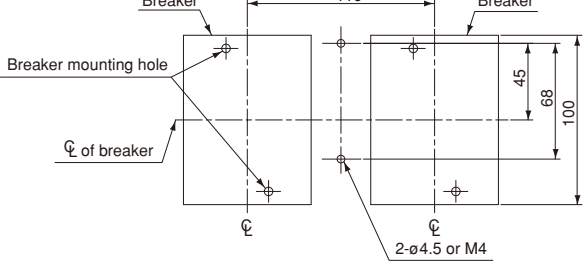


Panel drilling

BZ6M110C2

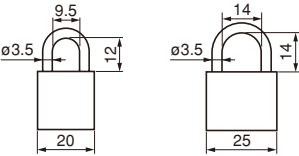


BZ6M110C3



Type	Dimensions, mm			Mass (kg)
	A	B	C	
BZ6M110C2	85	42.5	83	0.11
BZ6M110C3	110	55	108	0.12

Notes: • BZ6M110C2 is not available for padlock.
 • Applicable padlock(ø3.5) dimensions, mm
 • External installation forms F and R are not applicable to the MCCB on the left of the diagram.

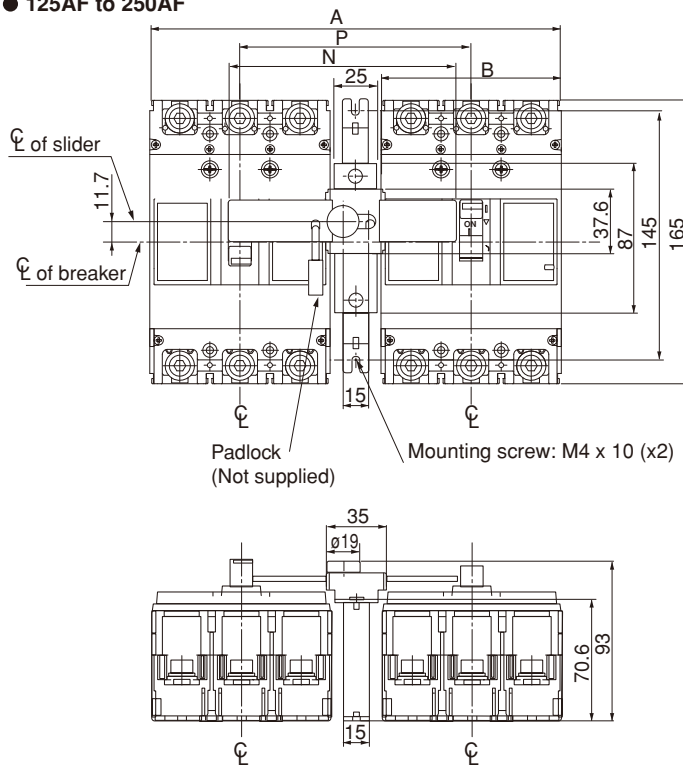


Molded Case Circuit Breakers

G-TWIN series External accessories

■ Dimensions, mm

● 125AF to 250AF



Panel drilling

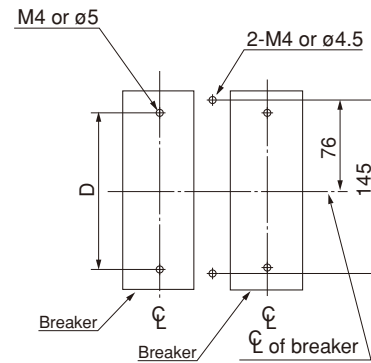


Fig.1

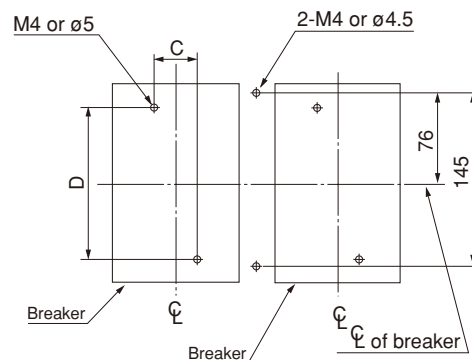


Fig.2

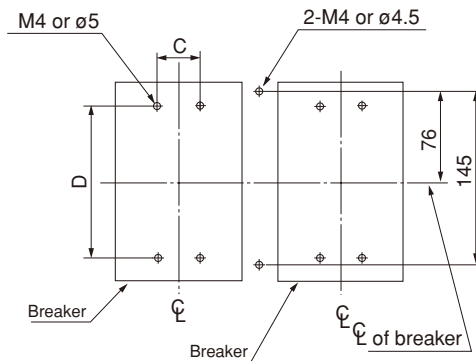


Fig.3

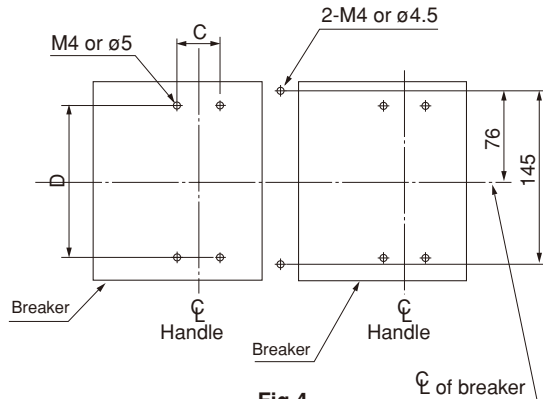
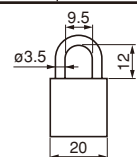


Fig.4

Type	Dimensions, mm						Panel Drilling	Mass(Kg)
	P	N	A	B	C	D		
BW9M1CA-2	90	88	150	60	—	132	Fig.1	
BW9M1CA-3	120	118	210	90	30	132	Fig.2	
BW9M1CA-4	150	148	270	102	30	132	Fig.4	
BW9M1GA-3	135	133	240	105	35	126	Fig.3	
BW9M1GA-4	170	168	310	140	35	126	Fig.4	

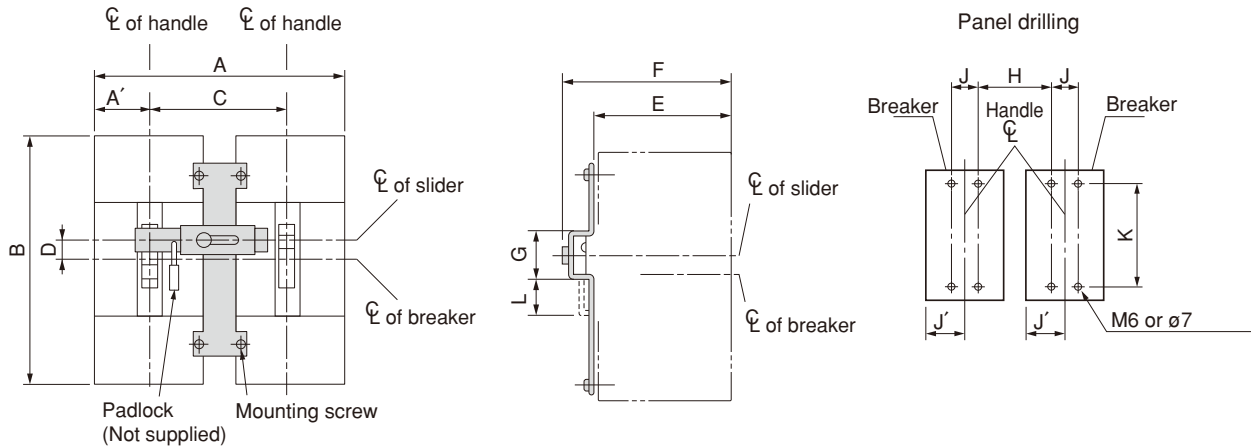
Notes: • The dimensions and Breaker mounting holes for back surface mounting are different from those given above. Inquire for details.
 • If a padlock is required, use a commercially available padlock with the dimensions shown in the diagram at the right.
 • External installation forms F and R are not applicable to the MCCB on the left of the diagram.



Molded Case Circuit Breakers
G-TWIN series External accessories

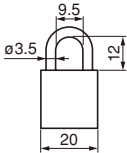
■ Dimensions, mm

● 400AF to 800AF



Type	Dimensions, mm											Mass(Kg)
	A (A')	B	C	D	E	F	G	H	J (J')	K	L	
BW9M1HA-3	355 (70)	257	215	20	94.5	132.5	54.5	171	44 (70)	215	38	
BW9M1HA-4	470 (140)	257	260	20	94.5	132.5	54.5	216	44 (140)	215	38	
BW9M1JA-3	500 (105)	275	290	20	94.5	132.5	54.5	220	70 (105)	243	38	

Notes: • The dimensions and Breaker mounting holes for back surface mounting are different from those given above. Inquire for details.
 • If a padlock is required, use a commercially available padlock with the dimensions shown in the diagram at the right.
 • External installation forms F and R are not applicable to the MCCB on the left of the diagram.



Molded Case Circuit Breakers G-TWIN series External accessories

External operating handles

■ Description

Molded case circuit breaker handles are generally directly manual-operated but when mounted in motor control centers or on control panels they are sometimes required to be operated externally. To meet such applications FUJI offers the following three types of handles.

N type handle

This type has a knob handle directly attached to the breaker. It is easily fitted by cutting a hole in the panel, which is provided with a door interlock. They may be fitted to all breakers up to 800 ampere frame sizes. Conformed to EN60947-1 isolation function. Available for EN60204-1 power breaking device.

Conformed to UL489 (File No.E93289)

V type handle

The V type handle may be fitted to breakers of up to 800AF.

A separately sold extension shaft provides distance adjustment between the handle and breaker.

Conformed to EN60947-1 isolation function. Available for EN60204-1 power breaking device.

Conformed to UL489 (File No.E93289)

F type handle

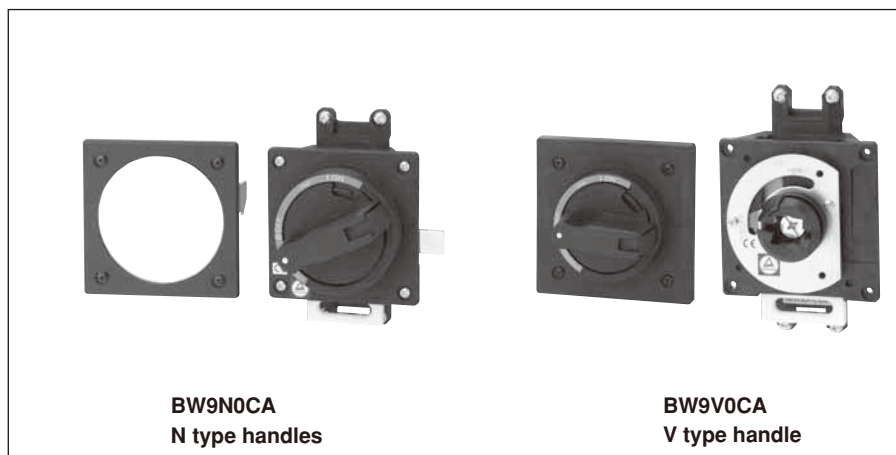
The F type handle may be fitted to breakers of 125 to 400AF.

It is a flange type handle, which is commonly used in the North American market.

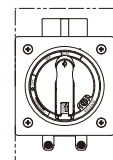
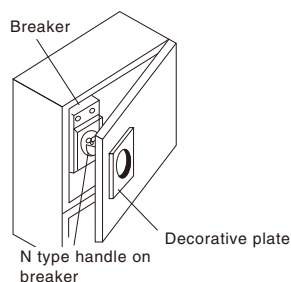
The drive section of the breaker and the external operating handle are connected with an optional cable.

Positioning between the breaker and the external operating handle is not required.

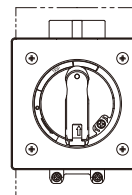
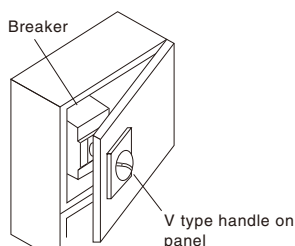
Conformed to UL489 (File No.E93289)



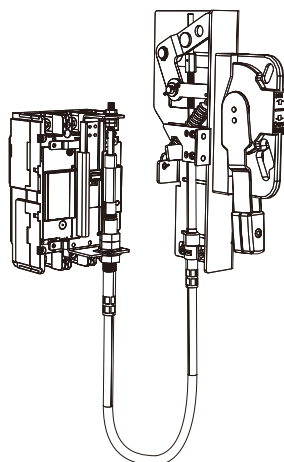
N type handles



V type handles



F type handles



Molded Case Circuit Breakers

G-TWIN series External accessories

N type handles

MCCB	N type handle
BW32	BZ6N10D
BW50	
BW63	
BW100	
BW125	BW9N0CA
BW160	BW9N0GA
BW250	
BW400	BW9N0HA
BW630	BW9N0JA
BW800	

F type handles

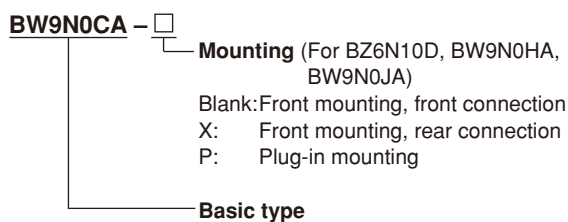
MCCB	N type handle
BW125	BW9F0CA
BW250	BW9F0GA
BW400	BW9F0HA

V type handles

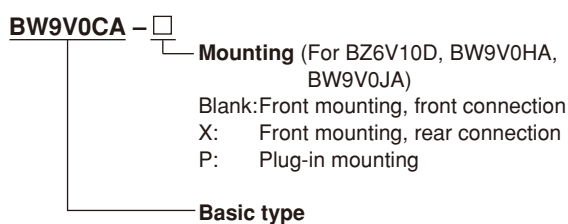
MCCB	V type handle
BW32	BZ6V10D
BW50	
BW63	
BW100	
BW125	BW9V0CA
BW160	BW9V0GA
BW250	
BW400	BW9V0HA
BW630	BW9V0JA
BW800	

■ Type number nomenclature

● N type handle



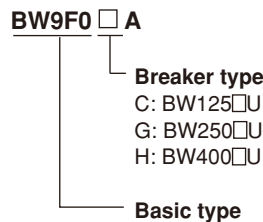
● V type handle



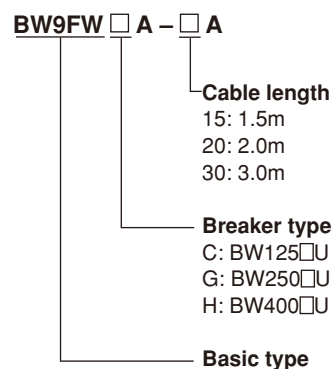
Note:

To order a V handle for front-mounting rear connection breakers, add "-X" to the type number; for plug-in mounting breakers, add "-P" to the type number.

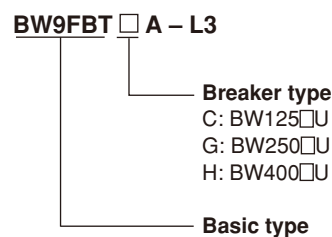
● F type handle



Cable (For F type)



Terminal cover (For F type)



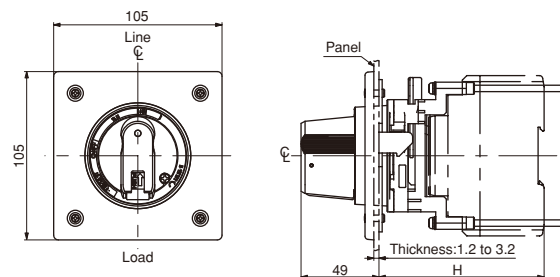
Molded Case Circuit Breakers

G-TWIN series External accessories

■ Dimensions, mm

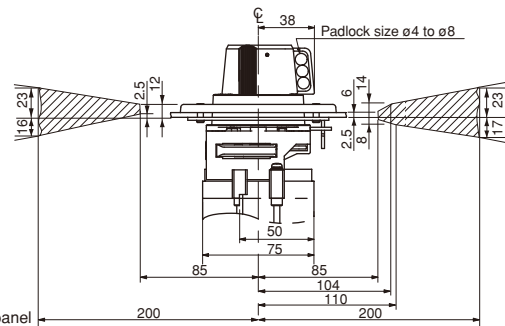
N type handle

● BZ6N10D



Door panel cutting

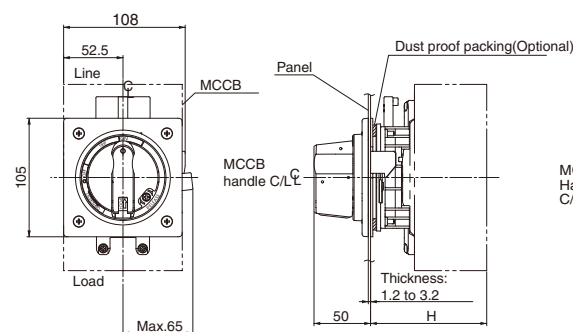
Note: Align the center of the hole cut in the panel with the center of the breaker handle.



Install the hinge in the shaded area.

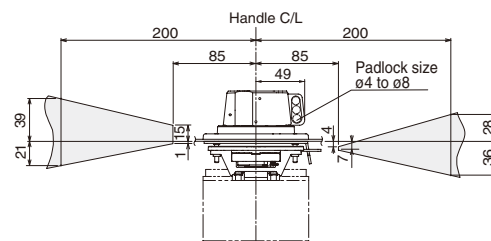
MCCB	Handle type	Dust proof packing	Mounting screw	H (mm)	Mass (kg)
BW32	BZ6N10D	Provided	M4 x 85	103	0.47
BW50	BZ6N10D-X	Provided	Contact FUJI.	111	
BW63	BZ6N10D-P			111	
BW100					

● BW9N0CA, BW9N0GA



Door panel cutting

Note: Align the center of the hole cut in the panel with the center of the breaker handle.



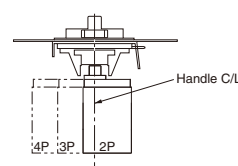
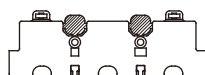
Install the hinge in the shaded area.

MCCB	Handle type	Dust proof packing	Mounting screw	H (mm)	Mass (kg)
BW125	BW9N0CA *1	BZ-NP-1C	M4 x 85	103±2	0.56
BW160	BW9N0GA *2	BZ-NP-1C	M4 x 85	103±2	0.56
BW250					

- Notes:
- The handle lock bars do not hold the entire door. Obtain a support bracket for the panel separately.
 - Remove the handle lock bar before opening the door. (Turn the handle in the open direction.) The lock bar will be damaged if the door is opened with force while the lock bar is engaged.
 - Engage the door interlock securely before turning ON the power.

*1 The Terminal Cover and Handle cannot be attached at the same time for the BW125JAG-2P or BW125RAGU-2P. Select the BW125JAG-3P or BW125RAGU-3P to use a Handle.

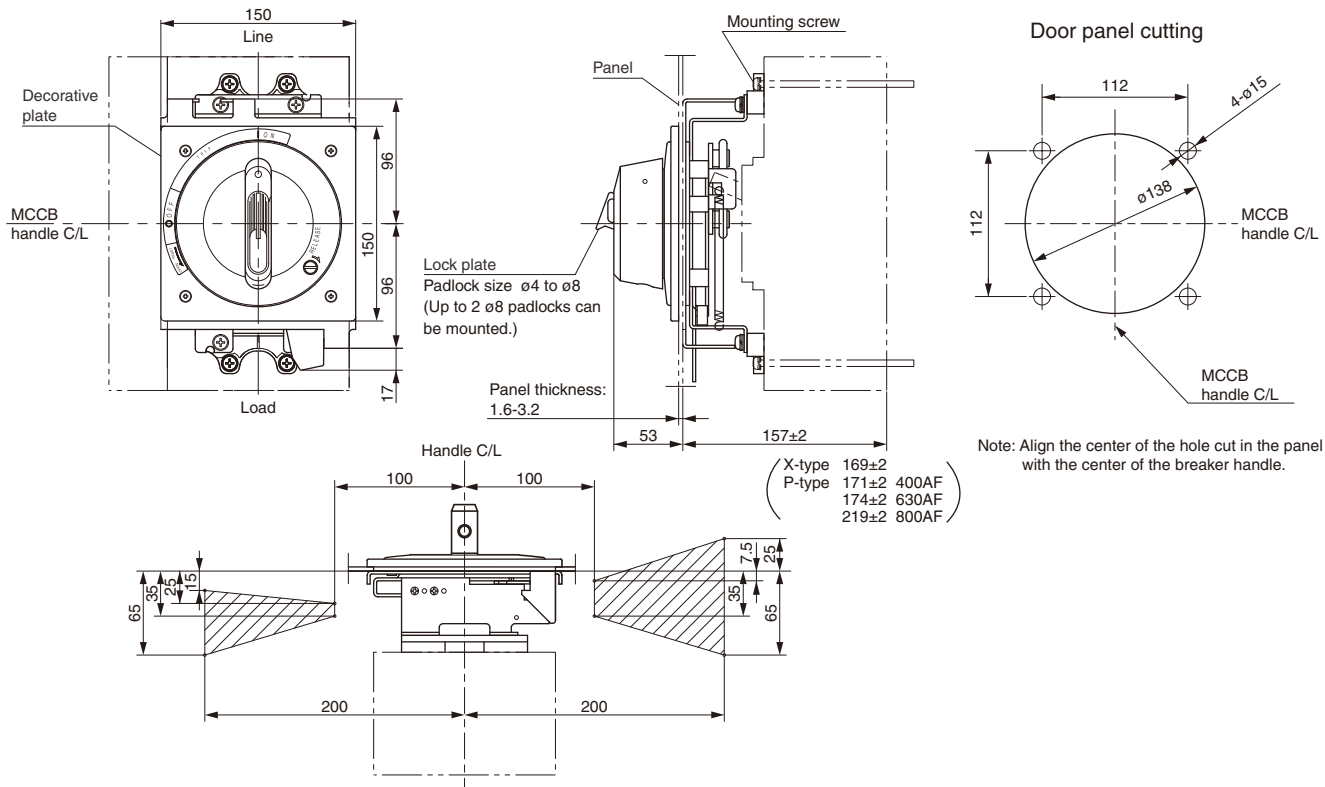
*2 The terminal cover will cover the mounting screws for the Breaker. When attaching the terminal cover, a portion of the terminal cover will need to be removed. Remove portion A in the following diagram.



Molded Case Circuit Breakers

G-TWIN series External accessories

● BW9N0HA, BW9N0JA



Install the door hinge in the shaded area.

MCCB	Handle type	Dust proof packing	Mounting screw	Mass (kg)
BW400	BW9N0HA BW9N0HA-X BW9N0HA-P	BZ-NP-2	M6 x 110 M6 x 115 Contact FUJI.	1.9
BW630 BW800	BW9N0JA BW9N0JA-X BW9N0JA-P	BZ-NP-2	M6 x 110 M6 x 115 Contact FUJI.	1.9

Notes:

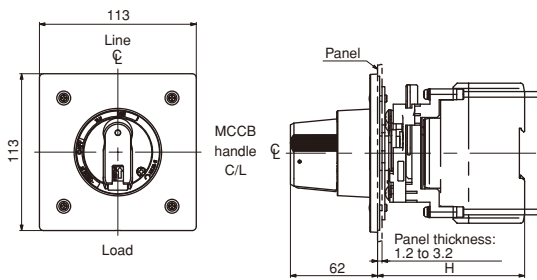
- The handle lock bars do not hold the entire door. Obtain a support bracket for the panel separately.
- Remove the handle lock bar before opening the door. (Turn the handle in the open direction.)
The lock bar will be damaged if the door is opened with force while the lock bar is engaged.
- Engage the door interlock securely before turning ON the power.
- Not available for side mounting.

Molded Case Circuit Breakers G-TWIN series External accessories

■ Dimensions, mm

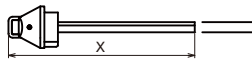
V type handle

● BZ6V10D

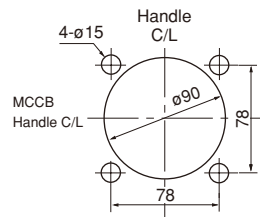


Optional shaft BZ6VS1D

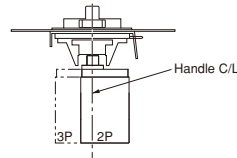
$$X = H - 105$$



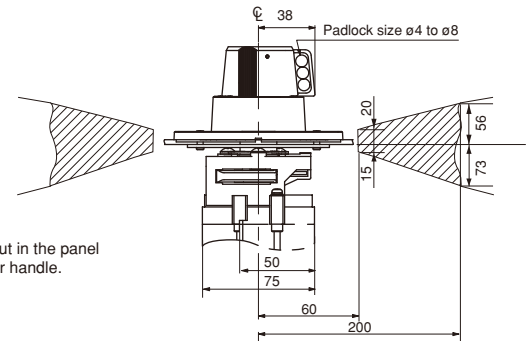
Door panel cutting



Note: Align the center of the hole cut in the panel with the center of the breaker handle.

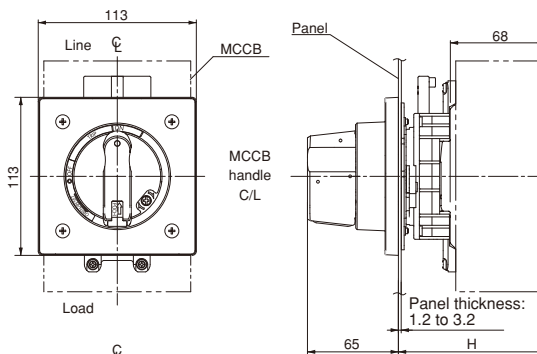


Door hinge installation area

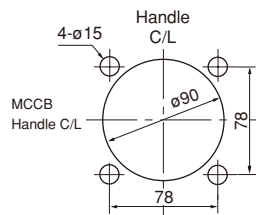


Install the door hinge in the shaded area.

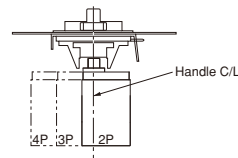
● BW9V0CA, BW9V0GA



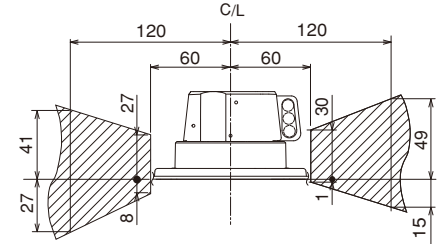
Door panel cutting



Note: Align the center of the hole cut in the panel with the center of the breaker handle.



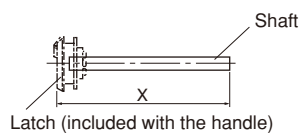
Door hinge installation area



Install the door hinge in the shaded area.

Optional shaft BW9VSG0

$$X = H - 95$$

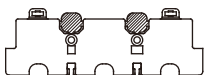


Molded Case Circuit Breakers

G-TWIN series External accessories

MCCB	Handle type	Optional shaft	Standard type H	With the optional shaft (X=154)		Mounting screw	Mass (kg)
				H	Area in which the hinge with H can be installed		
BW32 BW50 BW63 BW100	BZ6V10D	BZ6VS1D	105±2	250±2	140 to 250	M4 x 80	0.64
	BZ6V10D-X		113±2	258±2	150 to 258	Contact FUJI.	0.64
	BZ6V10D-P		113±2	258±2	150 to 258	Contact FUJI.	0.64
BW125	BW9V0CA	BW9VSG0	105±2	250±2	140 to 250	M4 x 85	0.67
BW160*2 BW250*2	BW9V0GA		105±2	250±2	140 to 250	M4 x 85	0.67

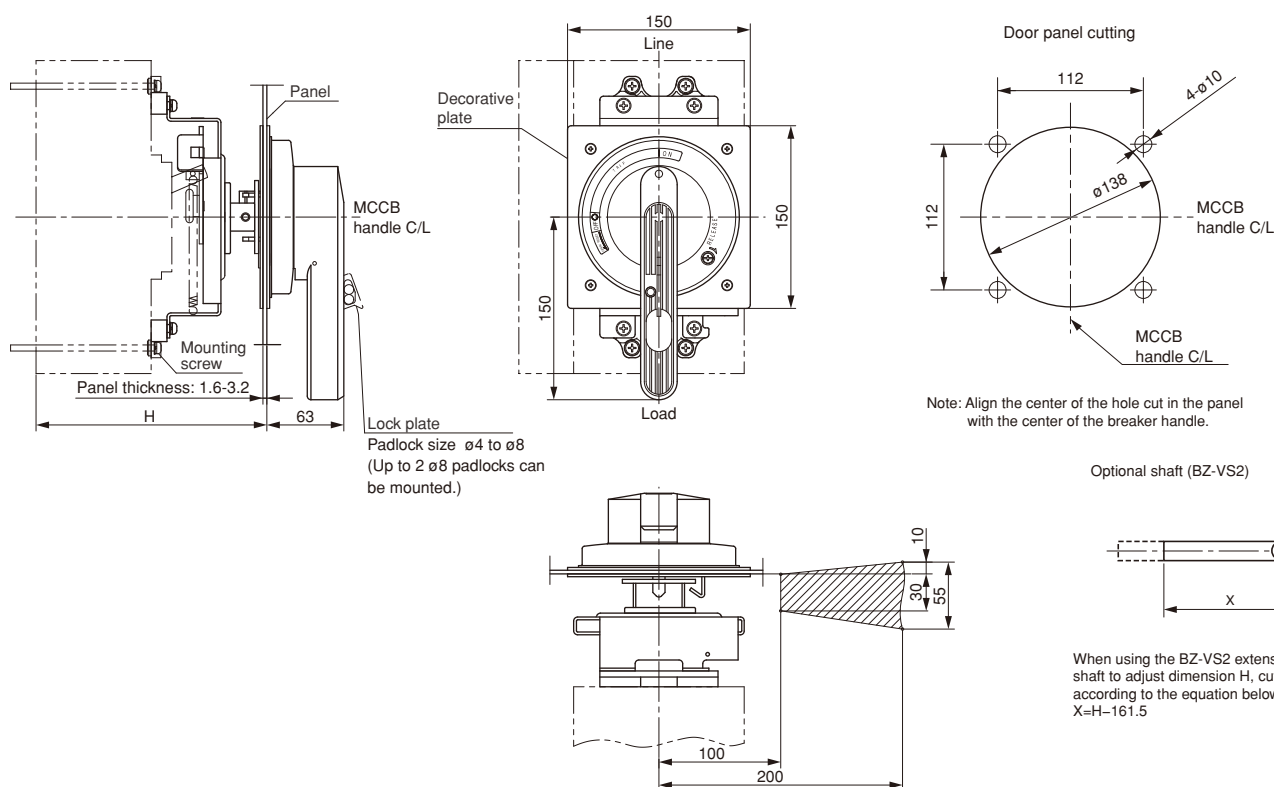
- Notes:
- The handle lock bars do not hold the entire door. Obtain a support bracket for the panel separately.
 - Remove the handle lock bar before opening the door. (Turn the handle in the open direction.)
The lock bar will be damaged if the door is opened with force while the lock bar is engaged.
 - Engage the door interlock securely before turning ON the power.
 - Not available for side mounting.
- *1 The Terminal Cover and Handle cannot be attached at the same time for the BW125JAG-2P or BW125RAGU-2P. Select the BW125JAG-3P or BW125RAGU-3P to use a Handle.
- *2 The terminal cover will cover the mounting screws for the Breaker. When attaching the terminal cover, a portion of the terminal cover will need to be removed. Remove portion A in the following diagram.



Molded Case Circuit Breakers

G-TWIN series External accessories

● BW9V0HA, BW9V0JA



Install the door hinge in the shaded area.

MCCB	Handle type	Optional shaft	Standard type H	With the optional shaft (X=154)		Mass (kg)
				H	Area in which the hinge with H can be installed	
BW400	BW9V0HA	BZ-VS2	190±2	250±2	202 to 250	2.2
	BW9V0HA-X		202±2	262±2	214 to 262	
	BW9V0HA-P		204±2	264±2	216 to 264	
BW630	BW9V0JA		190±2	250±2	202 to 250	
	BW9V0JA-X		202±2	262±2	214 to 262	
	BW9V0JA-P		207±2	267±2	219 to 269	
BW800	BW9V0JA		190±2	250±2	202 to 250	
	BW9V0JA-X		202±2	262±2	214 to 262	
	BW9V0JA-P		252±2	312±2	264 to 312	

- Notes:
- The handle lock bars do not hold the entire door. Obtain a support bracket for the panel separately.
 - Remove the handle lock bar before opening the door. (Turn the handle in the open direction.)
The lock bar will be damaged if the door is opened with force while the lock bar is engaged.
 - Engage the door interlock securely before turning ON the power.
 - Not available for side mounting.

Molded Case Circuit Breakers G-TWIN series External accessories

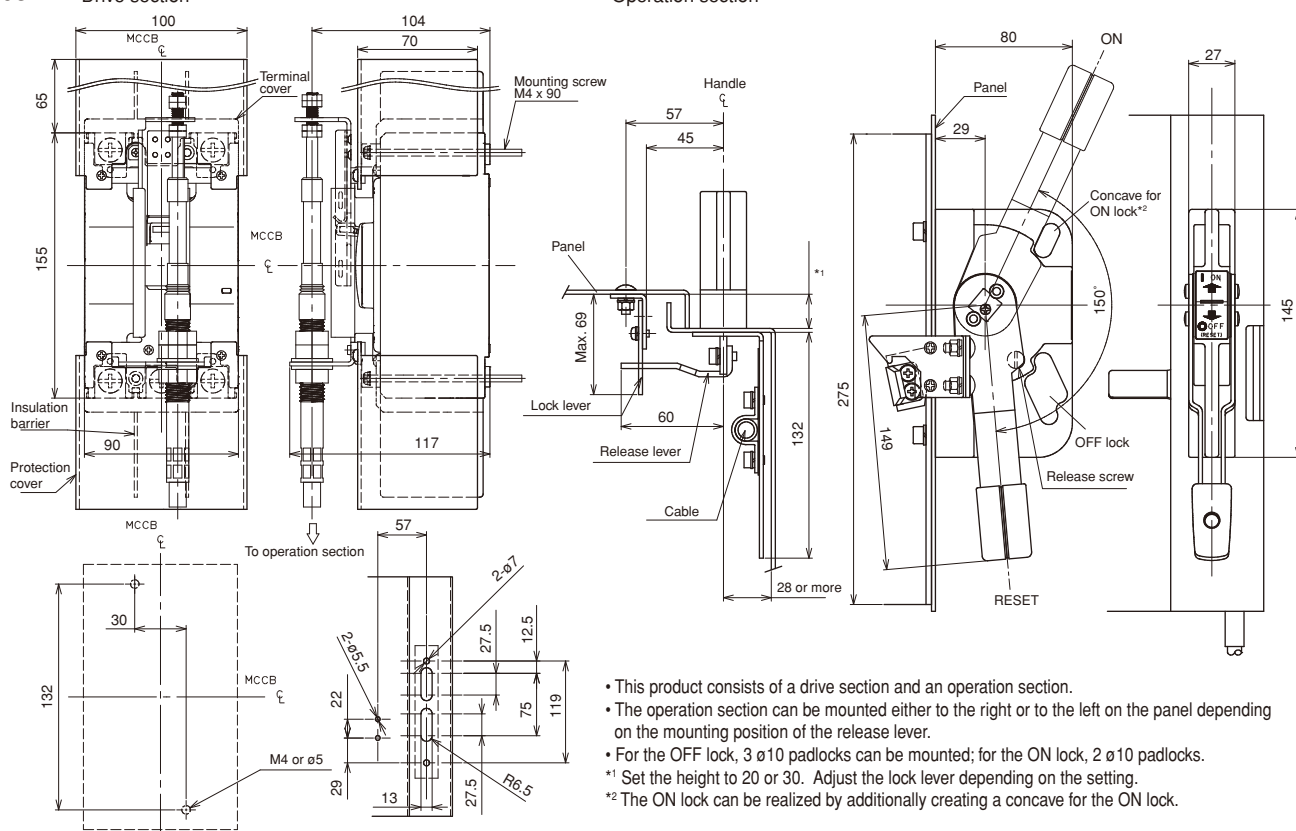
■ Dimensions, mm

F type handle

- BW9F0CA

Drive section

Operation section

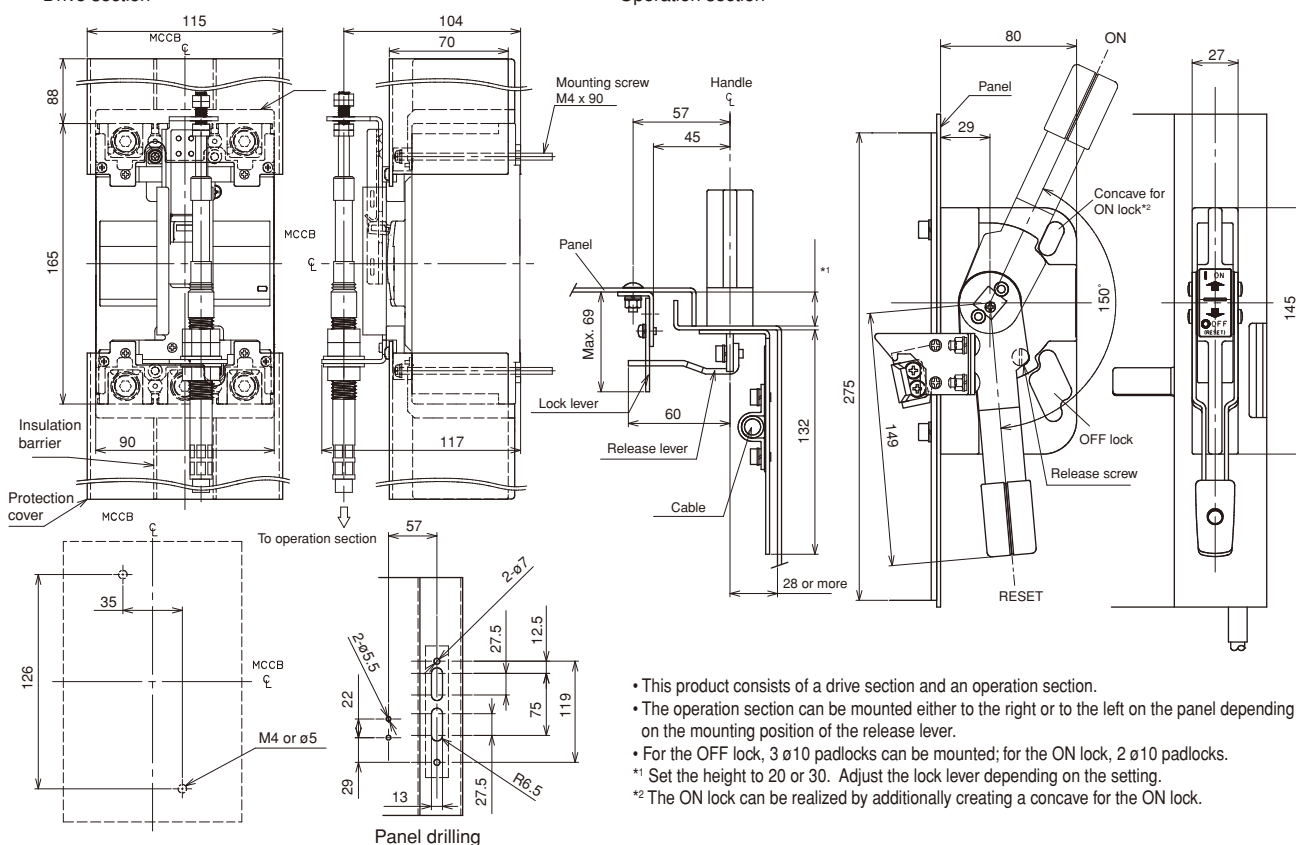


● BW9F0GA

Drive section

Panel drilling

Operation section



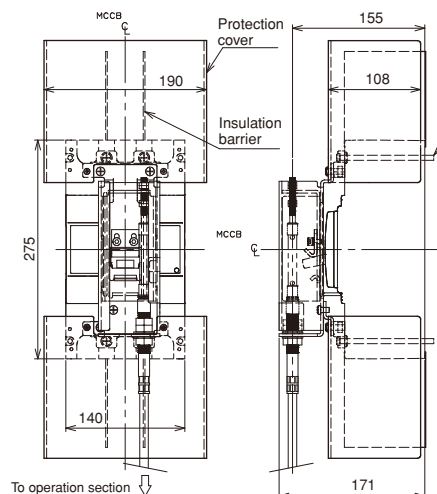
Molded Case Circuit Breakers

G-TWIN series External accessories

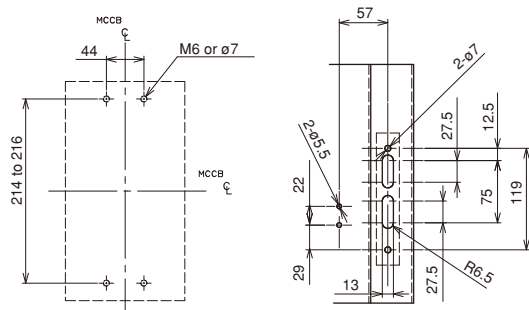
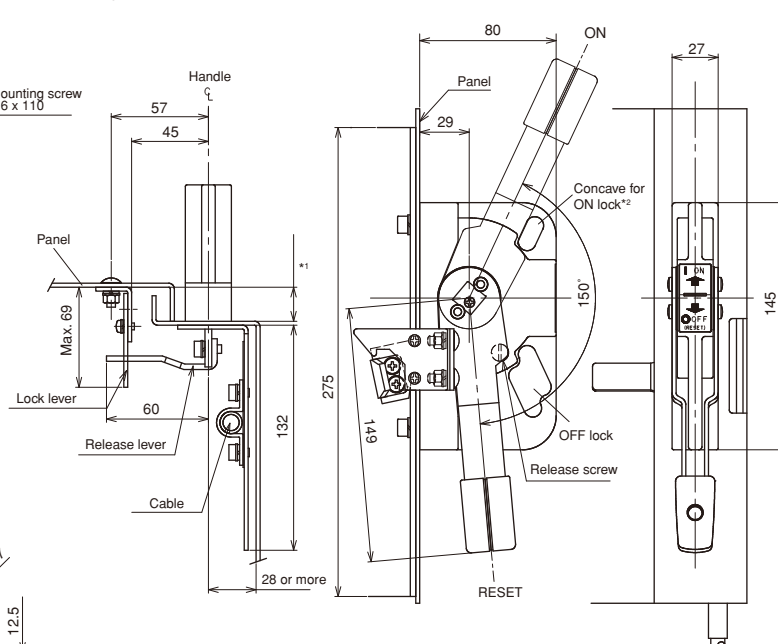
B

● BW9F0HA

Drive section



Operation section



Panel drilling

- This product consists of a drive section and an operation section.
- The operation section can be mounted either to the right or to the left on the panel depending on the mounting position of the release lever.
- For the OFF lock, 3 $\varnothing 10$ padlocks can be mounted; for the ON lock, 2 $\varnothing 10$ padlocks.
- *1 Set the height to 20 or 30. Adjust the lock lever depending on the setting.
- *2 The ON lock can be realized by additionally creating a concave for the ON lock.

MCCB *	Handle type	Cable		Terminal cover
		Type	Length (m)	
BW125JAGU-3P	BW9F0CA	BW9FWCA-15A	1.5	BW9FBTCA-L3
BW125RAGU-2P		BW9FWCA-20A	2.0	
BW125RAGU-3P		BW9FWCA-30A	3.0	
BW250EAGU-2P	BW9F0GA	BW9FWGA-15A	1.5	BW9FBTGA-L3
BW250EAGU-3P		BW9FWGA-20A	2.0	
BW250JAGU-2P		BW9FWGA-30A	3.0	
BW250JAGU-3P				
BW250RAGU-2P	BW9F0HA			BW9FBTHA-L3
BW250RAGU-3P				
BW400EAGU-2P		BW9FWHA-15A	1.5	
BW400EAGU-3P		BW9FWHA-20A	2.0	
BW400SAGU-2P		BW9FWHA-30A	3.0	
BW400SAGU-3P				
BW400RAGU-2P				
BW400RAGU-3P				
BW400HAGU-2P				
BW400HAGU-3P				

Note: * Not available for BW125JAGU-2P

B1

Molded Case Circuit Breakers

G-TWIN series External accessories

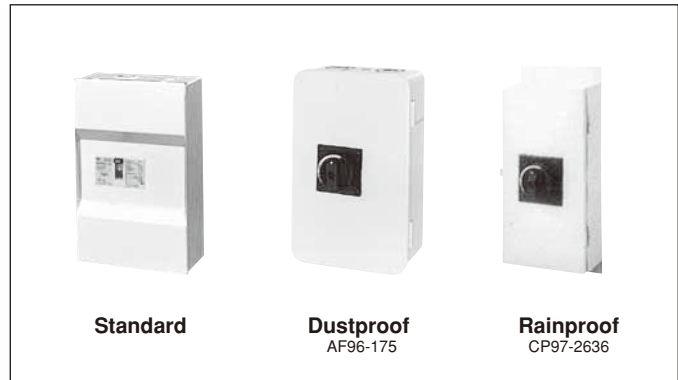
Steel enclosures

■ Description

Steel enclosures are available in three types — two with V-type handle which allows the operation from the outside and other with the operating handle of the breaker extending from it to allow it to be directly switched ON or OFF from outside the enclosure.

Enclosures with V-type handles are provided with a door interlocking mechanism which prevents the door from being opened in the ON condition.

Knockout holes for wiring use are provided as shown in the diagram.



■ Type of enclosures

MCCB	Enclosure		
	Standard ^{*1}	With V-type handle Dustproof ^{*1*2}	Rainproof ^{*1*2}
BW32 BW50 BW63	BZ6C10C2 ^{*3} BZ6C10C3	BW9UVBA-3A ^{*3}	BW9UWBA-3A ^{*3}
BW100	BZ6C25C2 ^{*3} BZ6C25C3 ^{*3}	BW9UVBA-3B ^{*3}	BW9UWBA-3B ^{*3}
BW125	BW9UCCA-2 BW9UCCA-3	BW9UVCA-3	BW9UWCA-3
BW250	BW9UCGA-3	BW9UVGA-3	BW9UWGA-3
BW400	BZ-C60B	BW9UVHA-3	BW9UWHA-3
BW630 BW800	BZ-C70B	BW9UVJA-3	—

*1 No models are available for four-pole products.

*2 The appearance of dust-proof and rain-proof models differs from the photograph (400A frames and higher).

*3 Combination with external accessories(R) is not possible.

■ Ordering information

Specify the following:

1. Type number of enclosures

Molded Case Circuit Breakers

G-TWIN series External accessories

■ Dimensions, mm

Fig.1 Standard

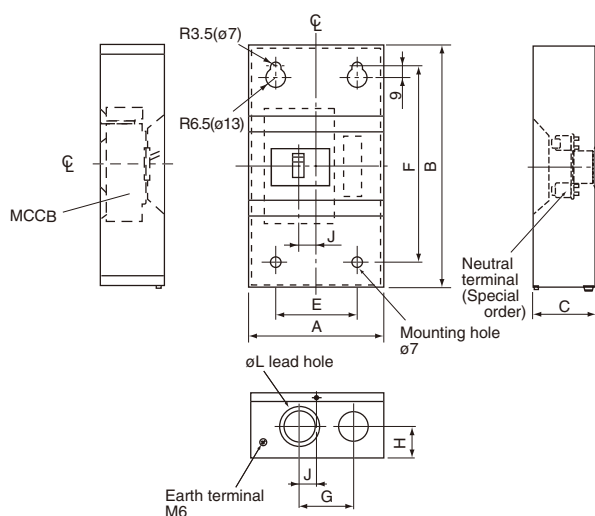


Fig.2 With V type handle
BW9UVBA-3A, BW9UVBA-3B
BW9UVCA-3, BW9UVGA-3

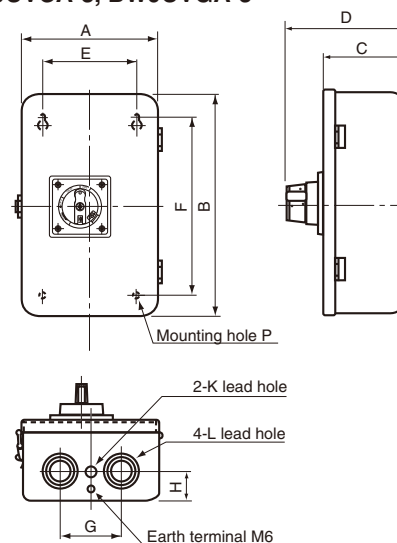
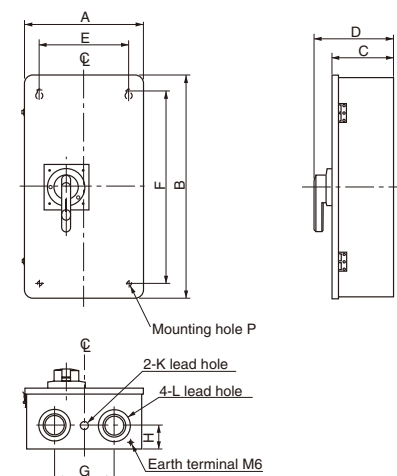
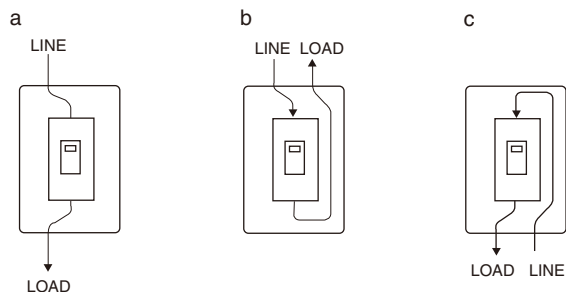


Fig.3. With V type handle
BW9UVHA-3, BW9UVJA-3



■ Connection method diagrams



Type	Connection	Fig.	A	B	C	D	E	F	G	H	J	K	L	P
BZ6C10C2	a, b, c	1	135	225	95	—	90	170	65	40	25	—	ø35, ø22	—
BZ6C10C3														
BZ6C25C2			200	320	95	—	120	240	80	40	25	—	ø45, ø30	—
BZ6C25C3														
BW9UCCA-2			200	320	103	—	120	240	80	40	25	—	ø45, ø30	—
BW9UCCA-3														
BW9UCGA-3			360	280	45	ø55, ø40								
BZ-C60B			400	750	175	—	300	650	200	80	100	—	ø106, ø78, ø63	—
BZ-C70B														
BW9UVBA-3A		2	180	300	114	178.5	100	220	70	40	—	—	ø28, ø35, ø43	ø7
BW9UVBA-3B			250	400	142	206.5 207	170	320	110	50	—	ø23	ø35, ø52, ø63	ø9
BW9UVCA-3														
BW9UVGA-3														
BW9UVHA-3	3	400	750	206	269	300	650	200	80	—	ø28	ø63, ø78, ø106	ø12	
BW9UVJA-3														

Molded Case Circuit Breakers

G-TWIN series External accessories

Terminal covers

Description

These terminal covers are used as guards to prevent accidental touch with live line terminations.

These terminal covers can be fitted to either line or load side.

● Up to 400AF

Short type: BW9BT □ A-S □

- Snap-on fitting

Long type: BW9BT □ A-L □

- Crimp connection use

● 630, 800AF

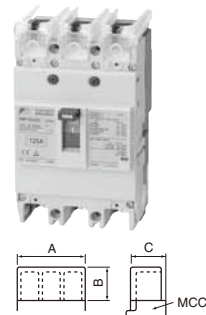
Long type: BW9BTJA-L □

- Transparent

Long type

Type		No. of poles	MCCB	Dimensions (mm)			Packing quantity	Appearance
Transparent	Gray			A	B	C		
BW9BTAA-L2	BW9BTAA-L2W	2	BW32□-2P, BW50□-2P BW63□-2P, BW100□-2P	50	40	53	2	• Preventing exposure of live section when amplifier's terminals are connected • Snap-on mounting
BW9BTAA-L3	BW9BTAA-L3W	2, 3	BW32□-3P, BW50□-3P BW63□-3P, BW100□-3P	75	40	53	2	
BW9BTCA-L2	BW9BTCA-L2W	2	BW125JAG-2P	60	40	66.5	2	
BW9BTCA-L3	BW9BTCA-L3W	2, 3	BW50HAG-2P, BW50HAG-3P BW125RAG-2P, BW125HAG-2P BW125□-3P	90	40	66.5	2	
BW9BTCA-C3	—	2, 3	BW125RAG-2P, BW125□-3P	90	60	66.5	2	
BW9BTCA-L4	BW9BTCA-L4W	4	BW125JAG-4P, BW125RAG-4P	120	40	66.5	2	
BW9BTGA-L3 *1	BW9BTGA-L3W *1	2, 3	BW160□-2P, BW160□-3P	105	50	66.5	2	
BW9BTGA-L4 *1	BW9BTGA-L4W *1	4	BW160□-4P	140	50	66.5	2	
BW9BTGA-C3	—	2, 3	BW250□-2P, BW250□-3P	105	75	66.5	2	
BW9BTGA-L3 *1	BW9BTGA-L3W *1	2, 3	BW250□-2P, BW250□-3P	105	50	66.5	2	
BW9BTGA-L4 *1	BW9BTGA-L4W *1	4	BW250□-4P	140	50	66.5	2	
BW9BTHA-L3 *2	BW9BTHA-L3W *1	2, 3	BW400□-2P, BW400□-3P	172	110	98	2	
BW9BTHA-L4 *2	—	4	BW400□-4P	220	110	98	2	
BW9BTJA-L3	BW9BTJA-L3W	3	BW630□-3P, BW800□-3P	230	135	97.5	2	
BW9BTJA-L4	BW9BTJA-L4W	4	BW630□-4P, BW800□-4P	280	155	98	2	

Short type

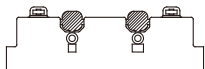
Type		No. of poles	MCCB	Dimensions (mm)			Packing quantity	Appearance
Transparent	Gray			A	B	C		
BW9BTAA-S2	BW9BTAA-S2W	2	BW32□-2P, BW50□-2P BW63□-2P, BW100□-2P	50	10	53	2	• Preventing exposure of live section when amplifier's terminals are connected • Snap-on mounting
BW9BTAA-S3	BW9BTAA-S3W	2, 3	BW32□-3P, BW50□-3P BW63□-3P, BW100□-3P	75	10	53	2	
BW9BTCA-S2	BW9BTCA-S2W	2	BW125JAG-2P	60	8	66.5	2	
BW9BTCA-S3	BW9BTCA-S3W	2, 3	BW50HAG-2P, BW50HAG-3P BW125RAG-2P, BW125HAG-2P BW125□-3P	90	8	66.5	2	
BW9BTCA-S4	BW9BTCA-S4W	4	BW125JAG-4P, BW125RAG-4P	120	8	66.5	2	
BW9BTGA-S3 *1	BW9BTGA-S3W *1	2, 3	BW160□-2P BW160□-3P BW250□-2P BW250□-3P	105	8	66.5	2	
BW9BTGA-S4 *1	BW9BTGA-S4W *1	4	BW160□-4P BW250□-4P	140	8	66.5	2	
BW9BTHA-S3 *3	BW9BTHA-S3W *2	2, 3	BW400□-2P BW400□-3P	140	65	98	2	
BW9BTHA-S4 *3	BW9BTHA-S4W *2	4	BW400□-4P	185	65	98	2	

Notes: • A gray-white terminal cover comes standard with the Global Series 125AF and 250AF.

*1 When using the external operating handle, part of the terminal cover () must be cut away.

*2 Crimp terminals for 325 mm² are not available.

*3 This type of cover can be mounted on the 400AF when flat terminals are not used.



Molded Case Circuit Breakers

G-TWIN series External accessories

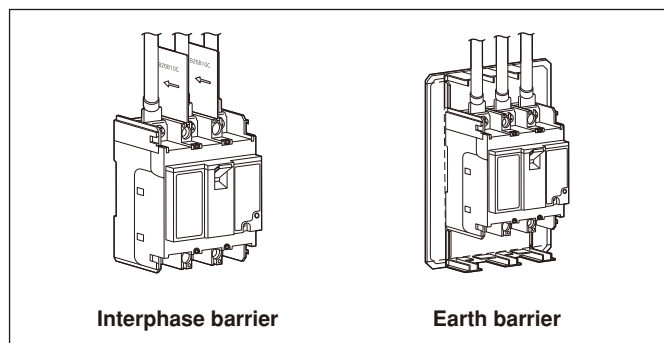
Insulation barriers

Description

The interphase barriers are provided on frame size of 32AF to 800AF breakers for front mounting. The barriers are installed in the molded slots between terminals.

The earth barrier is used to increase the insulation with the mounting plate surface when two crimp terminals are wired.

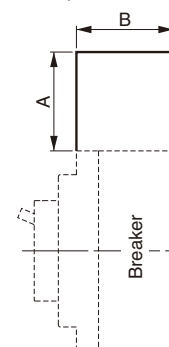
Installation of these barriers after wiring is possible even when an external accessory is installed.



Interphase barrier

MCCB	Interphase barrier		Dimensions (mm)	Packing quantity	Mass (g)
	Type				
BW32 BW50AAG, EAG BW50SAG, RAG BW63 BW100	BZ6B10C		50 49	4	23
BW50HAG, BW125	BW9BPCA		50 60	2	15
BW160 BW250	BW9BPGA		80 60	2	25
BW400 BW630 BW800	B-43A		105 95	4	130

Interphase barrier

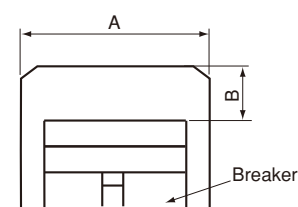


Earth barrier

MCCB	Earth barrier		Dimensions (mm)	Packing quantity	Mass (g)
	Type				
BW32□-2P BW50□-2P BW63□-2P BW100□-2P	BZ6BL10C2		100 43 (50, 75)*1 (30)*1	1	33
BW32□-3P BW50□-3P BW63□-3P BW100□-3P	BZ6BL10C3		125 43 (75, 100)*1 (30)*1	1	41

Note: *1 Can be cut to dimensions

Earth barrier



Molded Case Circuit Breakers

G-TWIN series External accessories

Padlocking device and handle locking cover

■ Description

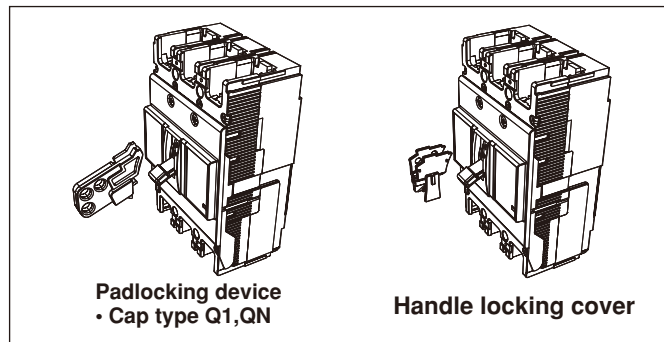
● Padlocking device

These padlocking device lock the Breaker handle in the OFF position. Use a commercially available padlock with a shackle diameter of 3.5 to 5mm (5mm for the BZ6L10CA).

● Handle locking covers (Order Separately)

These simple handle locking covers can be easily installed by the user.

Tripping is possible while the Breaker is locked ON.



MCCB	Padlocking device			Handle locking cover
	Q1: Cap type	QN: Scissors type	Q2: Plate type	
BW32	BZ6L10CA	—	▲ *1*4	BZ6L10C
BW50AAG, EAG, SAG, RAG				
BW63				
BW100				
BW50HAG, BW125	BW9Q1CA *5		BW9Q2CA *3	BW9L1CA
BW160			BW9Q2GA	
BW250				
BW400	▲ *1	BW9QNHA *2	BW9Q2HA	BW9L1HA
BW630			BW9Q2JA	
BW800				

Notes:

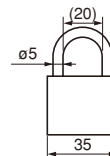
*1 Specify Locks when ordering the Breaker. (▲: Factory-mounted)

*2 ON and OFF locking is possible.

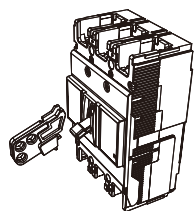
*3 Not applicable to the BW125JA□-2P (models with a width of 60 mm).

*4 If a padlock is required, use a commercially available padlock with the dimensions shown in the diagram at the right.

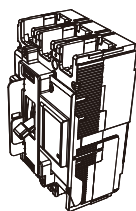
*5 Three padlocks with shackles from 3.5 to 8 mm in diameter can be attached.



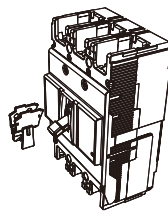
Padlocking device • Cap type Q1



• Plate type Q2



Handle locking cover



Q1: BZ6L10CA (OFF-locking Padlocking device)

