

Earth Leakage Circuit Breakers

List of products

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

Line protection

• 2-pole

AC230V (Icu)	EW32	EW50	EW100
2.5kA	AAG-2P	AAG-2P	
10kA			EAG-2P

• 3-pole

AC415V (Icu)	EW32	EW50	EW63	EW100	EW125	EW160	EW250	EW400	EW630	EW800
1.5kA	EAG-3P									
2.5kA	SAG-3P	EAG-3P	EAG-3P							
7.5kA		SAG-3P	SAG-3P							
10kA		RAG-3P	RAG-3P	EAG-3P						
18kA						EAG-3P	EAG-3P			
30kA					JAG-3P	JAG-3P	JAG-3P	EAG-3P		
36kA					SAG-3P	SAG-3P	SAG-3P	SAG-3P	EAG-3P	EAG-3P
50kA					RAG-3P	RAG-3P	RAG-3P	RAG-3P	RAG-3P	RAG-3P
70kA								HAG-3P	HAG-3P	HAG-3P

• 4-pole

AC415V (Icu)	EW125	EW160	EW250	EW400
30kA	JAG-4P	JAG-4P	JAG-4P	
36kA	SAG-4P	SAG-4P	SAG-4P	
50kA	RAG-4P	RAG-4P	RAG-4P	RAG-4P
70kA				HAG-4P

Motor protection

• 3-pole

AC415V (Icu)	EW32	EW50	EW63	EW100	EW125	EW250
1.5kA	EAM-3P					
2.5kA	SAM-3P	EAM-3P	EAM-3P			
7.5kA		SAM-3P	SAM-3P			
10kA				EAM-3P		
18kA						EAM-3P
30kA					JAM-3P	JAM-3P
50kA					RAM-3P	RAM-3P

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

Line protection

• 2-pole

AC230V (Icu)	EW100
10kA	EAGU-2P

• 3-pole

AC415V (Icu)	EW50	EW100	EW125	EW250	EW400	EW630
10kA	RAGU-3P	EAGU-3P				
30kA			JAGU-3P	JAGU-3P		
36kA					SAGU-3P	
50kA			RAGU-3P	RAGU-3P	RAGU-3P	RAGU-3P
70kA					HAGU-3P	

■ HG Series

Line protection (3-pole)

AC415V (Icu)	50AF	100AF	225AF
65kA	HG53B	HG103B	HG203B

Earth Leakage Circuit Breakers

G-TWIN series

Type number nomenclature

Type number nomenclature

EW

250

EA

G

-

3P

225

B

X

Series

EW: G-TWIN series ELCB

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) *(at 230V AC)									
	32AF	50AF	63AF	100AF	125AF	160AF	250AF	400AF	630AF	800AF
AA	2.5kA*	2.5kA*	—	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	—	—	—	—	—	—	—	70kA	70kA	70kA

Model

G: Line protection M: Motor protection

G-TWIN series

Blank: Standard U: Global

No. of poles

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

Rated current

See page 07/29.

Rated sensitive current

A: 15mA J: 100/300/500/1000mA
B: 30mA K: 100/200mA
C: 100mA 100/200/500mA
D: 50mA 100/200/500/1000mA

Terminal combination (Global type)			Applicable breaker type		
Code	Terminal position		EW50, 100	EW125, 250	EW400, 630
	Line	Load			
Blank	Screw	Screw	●	●	—
Blank	Flat teminal	Flat teminal	—	—	●
SB	Block terminal	Block terminal	—	●	●
SF	Flat teminal	Flat teminal	●	●	—
S3	Screw	Flat terminal	●	●	—
S4	Flat teminal	Screw	●	●	—
S5	Screw	Block terminal	—	●	—
S6	Block terminal	Screw	—	●	—
S7	Flat teminal	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

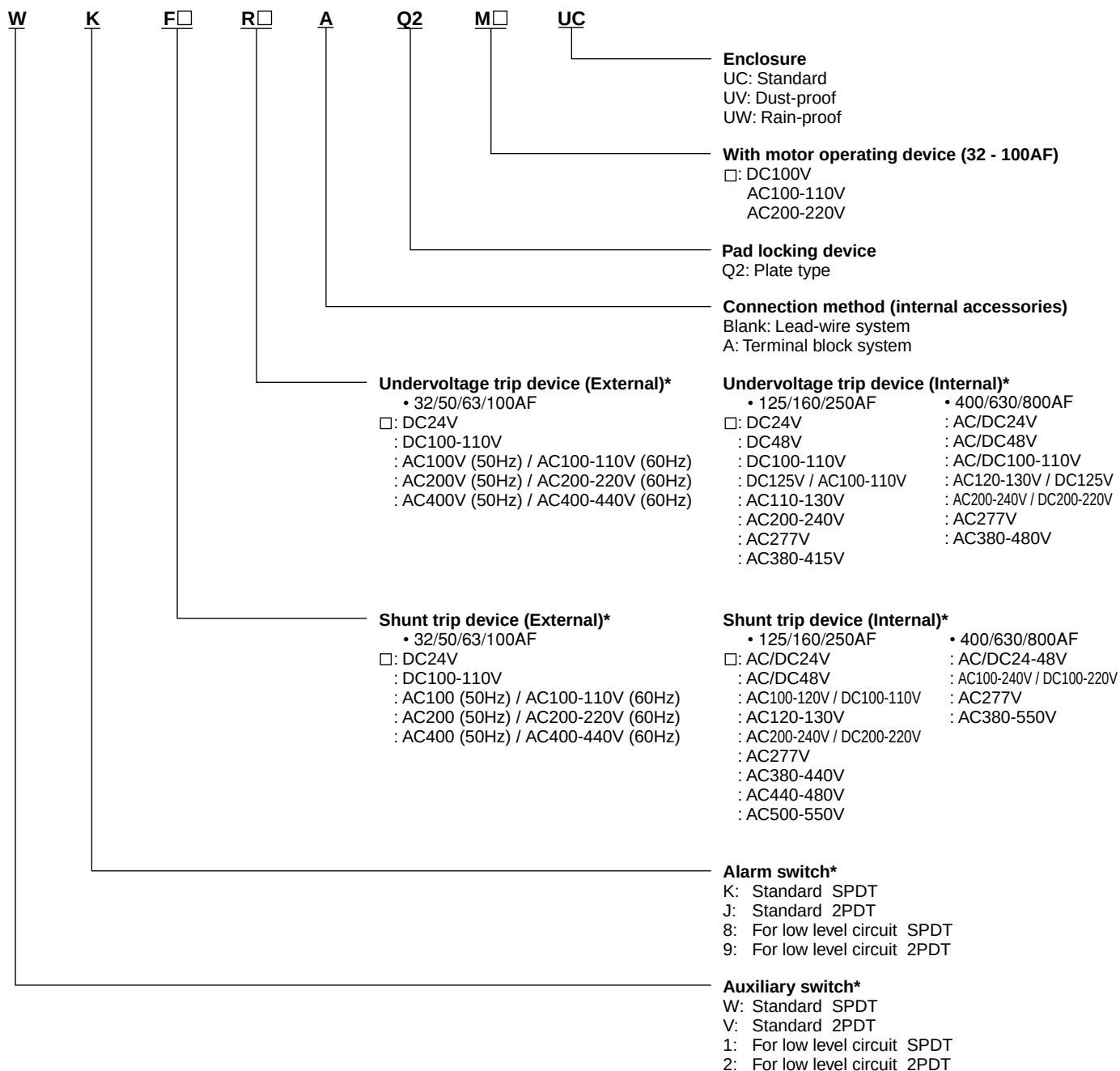
Y: Flush mounting, top & buttom connection

P: Plug-in mounting

Earth Leakage Circuit Breakers

G-TWIN series

Type number nomenclature



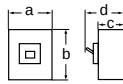
* For the available configuration of accessory, see page 07/62.

Earth Leakage Circuit Breakers

G-TWIN series

Quick reference guide

■ G-TWIN Standard Series

Ampere frame				32A				
Type				EW32AAG		EW32EAG	EW32SAG	
Pole				2	3	3	3	
Rated current	Reference amb. temp. (40°C)	In(A)		5, 10, 15, 20, 30, 32	5, 10, 15, 20, 30, 32	5, 10, 15, 20, 30, 32	3, 5, 10, 15, 20, 30, 32	
Rated impulse withstand voltage		Uimp(kV)		2.5	4	4	4	
Isolation compliant				●	●	●	●	
Rated voltage Ue (AC V)				100-230	100-230	100-230-440	100-230-440	
Rated sensitive current (mA)				15, 30, 100	15, 30, 100	15, 30, 100	30, 100/200/500 changeover	
Tripping time (s)				0.1 or less	0.1 or less	0.1 or less	0.1 or less	
Rated breaking capacity Icu/Ics (kA)	IEC 60947-2 EN 60947-2 JIS C 8201-2-2	AC	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	
			230V	2.5/2	2.5/2	2.5/2	5/3	
			200V	2.5/2	2.5/2	2.5/2	5/3	
			100V	2.5/2	5/3	5/3	5/3	
	GB14048.2	AC	400V	—	—	1.5/1	2.5/2	
			230V	2.5/2	2.5/2	2.5/2	5/3	
Conforming to standards	CE Marking			● (TÜV)	● (TÜV)	● (TÜV)	● (TÜV)	
	CCC certificate			●	●	●	●	
	Electrical Appliance and Material Safety Law ^{※1}			●	●	●	●	
Dimensions (mm) 			a	50	75	75	75	
			b	100			100	100
			c	60			60	60
			d	84			84	84
Mass (kg)				0.4	0.5	0.5	0.6	
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 07/57				
Alarm switch	K	○		○		○	○	
Auxiliary switch	W	○		○		○	○	
Undervoltage trip	R	○		○		○	○	
Shunt trip	F	○		○		○	○	
Earth alarm switch	L	—		—		—	—	
External accessories				Page 07/60				
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	○	○		○	○	
	Earth	BL	○	○		○	○	
Handle locking cover		L1	○	○		○	○	
Flat terminal		SS	○	○		○	○	
Block terminal		SL	—	—		—	—	

●: Approved ○: Available —: Not available ▲: Factory-mounted accessory
 Note: *1 Electrical Appliance and Material Safety Law of Japan

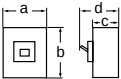
Rated voltage (V)	Operational voltage range (V)
100–230	80–264
100–230–440	80–484

Earth Leakage Circuit Breakers

G-TWIN series

Quick reference guide

■ G-TWIN Standard Series

Ampere frame				50A				
Type				EW50AAG		EW50EAG	EW50SAG	EW50RAG
Pole				2	3	3	3	3
Rated current	Reference amb. temp. (40°C)	In(A)	5, 10, 15, 20, 30, 32, 40, 50		5, 10, 15, 20, 30, 32, 40, 50	5, 10, 15, 20, 30, 32, 40, 50	10, 15, 20, 30, 32, 40, 50	
Rated impulse withstand voltage		Uimp(kV)	2.5	4	6	6	6	
Isolation compliant			●		●	●	●	
Rated voltage Ue (AC V)			100-230		100-230-440	100-230-440	100-230-440	
Rated sensitive current (mA)			15, 30, 100		15, 30, 100/200 changeover	30, 100/200/500 changeover	30, 100/200/500 changeover	
Tripping time (s)			0.1 or less		0.1 or less	0.1 or less	0.1 or less	
Rated breaking capacity Icu/Ics (kA)	IEC 60947-2 EN 60947-2 JIS C 8201-2-2	AC	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
			230V	2.5/2		5/3	10/5	25/13
			200V	2.5/2		5/3	10/5	25/13
			100V	2.5/2	5/3	5/3	10/5	25/13
	GB14048.2	AC	400V	-		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 *1		●		●	●	●	
Dimensions (mm) 			a	50	75	75	75	
			b	100		100	100	
			c	60		60	60	
			d	84		84	84	
			Mass (kg)		0.4	0.6	0.6	0.6
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 07/57					
Alarm switch	K	○			○	○	○	
Auxiliary switch	W	○			○	○	○	
Undervoltage trip	R	○			○	○	○	
Shunt trip	F	○			○	○	○	
Earth alarm switch	L	-			-	-	-	
External accessories			Page 07/60					
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	○			○	○	
	Earth	BL	○			○	○	
Handle locking cover		L1	○			○	○	
Flat terminal		SS	○			○	○	
Block terminal		SL	-			-	-	

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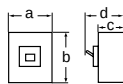
Rated voltage (V)	Operational voltage range (V)
100-230	80-264
100-230-440	80-484

Earth Leakage Circuit Breakers

G-TWIN series

Quick reference guide

■ G-TWIN Standard Series

Ampere frame				63A			
Type				EW63EAG		EW63SAG	EW63RAG
Pole				3		3	3
Rated current		Reference amb. temp. (40°C)	In(A)	60, 63		60, 63	60, 63
Rated impulse withstand voltage			Uimp(kV)	6		6	6
Isolation compliant				●		●	●
Rated voltage Ue (AC V)				100-230-440		100-230-440	100-230-440
Rated sensitive current (mA)				15, 30, 100/200 changeover		30, 100/200/500 changeover	30, 100/200/500 changeover
Tripping time (s)				0.1 or less		0.1 or less	0.1 or less
Rated breaking capacity Icu/lcs (kA)	IEC 60947-2 EN 60947-2 JIS C 8201-2-2	AC	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	
			230V	5/3	10/5	25/13	
			200V	5/3	10/5	25/13	
			100V	5/3	10/5	25/13	
			GB14048.2	AC	400V	2.5/2	7.5/4
	230V	5/3	10/5		25/13		
	Conforming to standards	CE Marking		● (TÜV)		● (TÜV)	● (TÜV)
CCC certificate		●		●	●		
Electrical Appliance and Material Safety Law ^{※1}		●		●	●		
Dimensions (mm) 			a	75	75	75	
			b	100	100	100	
			c	60	60	60	
			d	84	84	84	
Mass (kg)				0.6		0.6	0.6
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 07/57			
Alarm switch		K	○	○		○	○
Auxiliary switch		W	○	○		○	○
Undervoltage trip		R	○	○		○	○
Shunt trip		F	○	○		○	○
Earth alarm switch		L	—	—		—	—
External accessories				Page 07/60			
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	○	○		○
		Earth	BL	○	○		○
Handle locking cover			L1	○	○		○
Flat terminal			SS	○	○		○
Block terminal			SL	—	—		—

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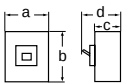
Rated voltage (V)	Operational voltage range (V)
100–230	80–264
100–230–440	80–484

Earth Leakage Circuit Breakers

G-TWIN series

Quick reference guide

■ G-TWIN Standard Series

Ampere frame				100A								
Type				EW100AAG		EW100EAG						
Pole				3		2		3				
Rated current		Reference amb. temp. (40°C)		In(A)		60, 63, 75, 100		50, 60, 63, 75, 100		50, 60, 63, 75, 100		
Rated impulse withstand voltage				Uimp(kV)		4		4		6		
Isolation compliant						●		●		●		
Rated voltage Ue (AC V)						100-230		100-230		100-230-400		
Rated sensitive current (mA)						30, 100/200/500 changeover		30, 100/200 changeover		30, 100/200/500 changeover		
Tripping time (s)						0.1 or less		0.1 or less		0.1 or less		
Rated breaking capacity Icu/Ics (kA)	IEC 60947-2 EN 60947-2 JIS C 8201-2-2	AC	440V	—		—		—		10/5		
			415V	—		—		—		10/5		
			400V	—		—		—		10/5		
			380V	—		—		—		10/5		
			230V	5/3		10/5		10/5		25/13		
			200V	5/3		10/5		10/5		25/13		
			100V	5/3		10/5		10/5		25/13		
			GB14048.2	AC	400V	—		—		—		10/5
	230V	5/3			10/5		10/5		25/13			
	Conforming to standards	CE Marking			● (TÜV)		● (TÜV)		● (TÜV)		● (TÜV)	
CCC certificate			●		●		●		●			
Electrical Appliance and Material Safety Law *1			●		●		●		●			
Dimensions (mm) 				a	75		75		75			
				b	100		100		100			
				c	60		60		60			
				d	84		84		84			
Mass (kg)				0.6		0.6		0.6		0.6		
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 07/57								
Alarm switch				K	○			○			○	
Auxiliary switch				W	○			○			○	
Undervoltage trip				R	○			○			○	
Shunt trip				F	○			○			○	
Earth alarm switch				L	—			—			—	
External accessories				Page 07/60								
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	○			○			○	
Earth				BL	○			○			○	
Handle locking cover				L1	○			○			○	
Flat terminal				SS	○			○			○	
Block terminal				SL	—			—			—	

●: Approved ○: Available —: Not available ▲: Factory-mounted accessory
 Note: ^{*1} Electrical Appliance and Material Safety Law of Japan

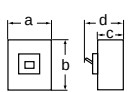
Rated voltage (V)	Operational voltage range (V)
100–230	80–264
100–230–440	80–484

Earth Leakage Circuit Breakers

G-TWIN series

Quick reference guide

■ G-TWIN Standard Series

Ampere frame				125A						
Type				EW125JAG		EW125SAG		EW125RAG		
Pole				3	4	3	4	3	4	
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	
Isolation compliant				●		●		●		
Rated voltage Ue (AC V)				100-230-440						
Type of earth leakage trip action				AC type						
Instantaneous trip type		Rated sensitive current (mA)		30						
		Tripping time (s)		0.1 or less						
Instantaneous/time-delay trip type		Rated sensitive current (mA)		100/300/500/1000 changeover						
		Tripping time (s)		0.1/0.4/1/2 changeover						
		Inertia non-tripping time (s) (2IΔn)		0/0.2/0.5/1						
Rated breaking capacity Icu/Ics (kA)		IEC60947-2 EN60947-2 JISC8201-2-2	AC	440V	30/15		36/18		50/25	
				415V	30/15		36/18		50/25	
				400V	30/15		36/18		50/25	
				380V	30/15		36/18		50/25	
				230V	50/25		85/43		100/50	
				200V	50/25		85/43		100/50	
				100V	50/25		85/43		100/50	
		GB14048.2	AC	400V	30/15		36/18		50/25	
				230V	50/25		85/43		100/50	
Conforming to standards		CE Marking		● (TÜV)		● (TÜV)		● (TÜV)		
		CCC certificate		●		●		●		
		Electrical Appliance and Material Safety Law *1		● (except for 125A)		● (except for 125A)		● (except for 125A)		
Dimensions (mm) 				a	90	120	90	120	90	120
				b	155		155		155	
				c	68		68		68	
				d	95		95		95	
Mass (kg)				1.3	1.7	1.2	1.6	1.3	1.7	
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 07/58								
Alarm switch		K	○	○	○	○	○	○		
Auxiliary switch		W	○	○	○	○	○	○		
Undervoltage trip		R	○	○	○	○	○	○		
Shunt trip		F	○	○	○	○	○	○		
Earth alarm switch		L	○	○	○	○	○	○		
External accessories		Page 07/60								
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 ▲: Factory-mounted accessory

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

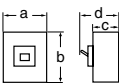
Rated voltage (V)	Operational voltage range (V)
100–230–440	80–484

Earth Leakage Circuit Breakers

G-TWIN series

Quick reference guide

■ G-TWIN Standard Series

Ampere frame			160A							
Type			EW160EAG		EW160JAG		EW160SAG		EW160RAG	
Pole			3	3	4	3	4	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 voltage Ue (AC V)			100-230-440							
Type of earth leakage trip action			AC type							
Instantaneous trip type	Rated sensitive current (mA)		30							
	Tripping time (s)		0.1 or less							
Instantaneous/time-delay trip type	Rated sensitive current (mA)		100/300/500/1000 changeover							
	Tripping time (s)		0.1/0.4/1/2 changeover							
	Inertia non-tripping time (s) (2IΔn)		0/0.2/0.5/1							
Rated breaking capacity Icu/Ics (kA)	IEC60947-2 EN60947-2 JISC8201-2-2	AC	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			
			230V	36/18	50/25	85/43	100/50			
			200V	36/18	50/25	85/43	100/50			
			100V	36/18	50/25	85/43	100/50			
			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 certified (TÜV)		● (TÜV)	● (TÜV)	● (TÜV)	● (TÜV)	● (TÜV)		
CCC certificate		●	●	●	●	●				
Dimensions (mm) 			a	105	105	140	105	140	105	140
			b	165	165		165		165	
			c	68	68		68		68	
			d	95	95		95		95	
Mass (kg)			1.8	1.8	2.3	1.8	2.3	1.8	2.3	
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 07/58										
Alarm switch	K	○	○	○	○	○	○	○	○	
Auxiliary switch	W	○	○	○	○	○	○	○	○	
Undervoltage trip	R	○	○	○	○	○	○	○	○	
Shunt trip	F	○	○	○	○	○	○	○	○	
Earth alarm switch	L	○	○	○	○	○	○	○	○	
External accessories Page 07/60										
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 ▲: Factory-mounted accessory
 Note: *1 Electrical Appliance and Material Safety Law of Japan

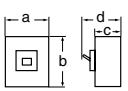
Rated voltage (V)	Operational voltage range (V)
100–230–440	80–484

Earth Leakage Circuit Breakers

G-TWIN series

Quick reference guide

■ G-TWIN Standard Series

Ampere frame				250A								
Type				EW250EAG		EW250JAG		EW250SAG		EW250RAG		
Pole				3		3	4	3	4	3	4	
Rated current		Reference amb. temp. (40°C)	In(A)	175, 200, 225, 250			175,200,225	175,200,225,250		175,200,225	175,200,225,250	175,200,225
Rated impulse withstand voltage			Uimp(kV)	6		6		6		6		
Isolation compliant				●		●		●		●		
Rated voltage Ue (AC V)				100-230-440								
Type of earth leakage trip action				AC type								
Instantaneous trip type	Rated sensitive current (mA)			30								
	Tripping time (s)			0.1 or less								
Instantaneous/time-delay trip type	Rated sensitive current (mA)			100/300/500/1000 changeover								
	Tripping time (s)			0.1/0.4/1/2 changeover								
	Inertia non-tripping time (s) (2IΔn)			0/0.2/0.5/1								
Rated breaking capacity Icu/Ics (kA)	IEC60947-2 EN60947-2 JISC8201-2-2	AC	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			
			230V	36/18	50/25		85/43		100/50			
			200V	36/18	50/25		85/43		100/50			
			100V	36/18	50/25		85/43		100/50			
	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			●		●		●		●			
Dimensions (mm) 				a	105	105	140	105	140	105	140	
				b	165	165		165		165		
				c	68	68		68		68		
				d	95	95		95		95		
				e	18	18	23	18	23	18	23	
Mass (kg)				1.8		1.8	2.3	1.8	2.3	1.8	2.3	
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 07/58												
Alarm switch			K	○	○	○	○	○	○	○	○	
Auxiliary switch			W	○	○	○	○	○	○	○	○	
Undervoltage trip			R	○	○	○	○	○	○	○	○	
Shunt trip			F	○	○	○	○	○	○	○	○	
Earth alarm switch			L	○	○	○	○	○	○	○	○	
External accessories Page 07/60												
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 ▲ : Factory-mounted accessory
 Note: *1 Electrical Appliance and Material Safety Law of Japan

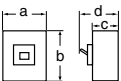
Rated voltage (V)	Operational voltage range (V)
100–230–440	80–484

Earth Leakage Circuit Breakers

G-TWIN series

Quick reference guide

■ G-TWIN Standard Series

Ampere frame				400A								
Type				EW400EAG		EW400SAG		EW400RAG		EW400HAG		
Pole				3		3		3		4		
Rated current		Reference amb. temp. (40°C)		In(A)		250, 300, 350, 400						
Rated impulse withstand voltage				Uimp(kV)		6		6		6		
Isolation compliant				●		●		●		●		
Rated voltage Ue (AC V)				IEC		100-230-440						
Type of earth leakage trip action						AC type						
Instantaneous trip type	Rated sensitive current (mA)			30								
	Tripping time (s)			0.1 or less								
Instantaneous/time-delay trip type	Rated sensitive current (mA)			100/300/500/1000 changeover								
	Tripping time (s)			0.1/0.4/1/2 changeover								
	Inertia non-tripping time (s) (2IΔn)			0/0.2/0.5/1								
Rated breaking capacity Icu/Ics (kA)	IEC60947-2 EN60947-2 JISC8201-2-2	AC	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					
			230V	50/25	85/43	100/50	125/63					
			200V	50/25	85/43	100/50	125/63					
			100V	50/25	85/43	100/50	125/63					
			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			●		●		●		●			
Dimensions (mm) 				a	140	140	140	185	140	185		
				b	257	257	257	257				
				c	103	103	103	103				
				d	146	146	146	146				
				Mass (kg)			5.8	5.8	5.8	7.8	5.8	7.8
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 07/59								
Alarm switch				K	○	○	○	○	○	○		
Auxiliary switch				W	○	○	○	○	○	○		
Undervoltage trip				R	○	○	○	○	○	○		
Shunt trip				F	○	○	○	○	○	○		
Earth alarm switch				L	▲	▲	▲	▲	▲	▲		
External accessories				Page 07/60								
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		
Block terminal				SL	○	○	○	○	○	○		

●: Approved ○: Available —: Not available ▲: Factory-mounted accessory
Note: *1 Electrical Appliance and Material Safety Law of Japan
*2 Standard provided

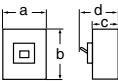
Rated voltage (V)	Operational voltage range (V)
100–230–440	80–484

Earth Leakage Circuit Breakers

G-TWIN series

Quick reference guide

■ G-TWIN Standard Series

Ampere frame				630A			800A			
Type				EW630EAG	EW630RAG	EW630HAG	EW800EAG	EW800RAG	EW800HAG	
Pole				3	3	3	3	3	3	
Rated current		Reference amb. temp. (40°C)	In(A)	500, 600, 630			700, 800			
Rated impulse withstand voltage			Uimp(kV)	6	6	6	6	6	6	
Isolation compliant				●	●	●	●	●	●	
Rated voltage Ue (AC V)				100-230-440						
Type of earth leakage trip action				AC type						
Instantaneous/time-delay trip type	Rated sensitive current (mA)			100/300/500/1000 changeover						
	Tripping time (s)			0.1/0.4/1/2 changeover						
	Inertia non-tripping time (s) (2IΔn)			0/0.2/0.5/1						
Rated breaking capacity Icu/Ics (kA)	IEC60947-2 EN60947-2 JISC8201-2-2	AC	440V	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	
			400V	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	
			230V	50/25	100/50	125/63	50/25	100/50	125/63	
			200V	50/25	100/50	125/63	50/25	100/50	125/63	
			100V	50/25	100/50	125/63	50/25	100/50	125/63	
	GB14048.2	AC	400V	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	
Conforming to standards	CE Marking			● (TÜV)	● (TÜV)	● (TÜV)	● (TÜV)	● (TÜV)	● (TÜV)	
	CCC certificate			●	●	●	●	●	●	
Dimensions (mm) 			a	210	210	210	210	210	210	
			b	275	275	275	275	275	275	
			c	103	103	103	103	103	103	
			d	146	146	146	146	146	146	
Mass (kg)				9.1	9.1	9.1	9.6	9.6	9.6	
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 07/59						
Alarm switch				K	○	○	○	○	○	○
Auxiliary switch				W	○	○	○	○	○	○
Undervoltage trip				R	○	○	○	○	○	○
Shunt trip				F	○	○	○	○	○	○
Earth alarm switch				L	▲	▲	▲	▲	▲	▲
External accessories				Page 07/60						
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	
Block terminal			SL	○	○	○	○	○	○	

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

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

*2 Standard provided

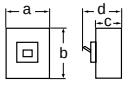
Rated voltage (V)	Operational voltage range (V)
100–230–440	80–484

Earth Leakage Circuit Breakers

G-TWIN series

Quick reference guide

■ G-TWIN Global Series

Ampere frame				50A	100A	
Type				EW50RAGU	EW100EAGU	
Pole				3	2	3
Rated current		Reference amb. temp. (40°C)	In(A)	3, 5, 10, 15, 20, 30, 32, 40, 50	60, 63, 70, 75, 80, 90, 100	
Rated impulse withstand voltage			Uimp(kV)	6	4	6
Isolation compliant				●	●	●
Rated voltage Ue (AC V)			IEC	100-230-440	100-230	100-230-440
			UL	240	240	240
Rated sensitive current (mA)				30, 50, 100/200/500 changeover	30, 100/200 changeover	30, 50, 100/200/500 changeover
Tripping time (s)				0.1 or less	0.1 or less	0.1 or less
Rated breaking capacity	IEC 60947-2 EN 60947-2 JIS C 8201-2-2 Icu/Ics (kA)	AC	440V	10/5	7.5/4	10/5
			415V	10/5	7.5/4	10/5
			400V	10/5	7.5/4	10/5
			380V	10/5	7.5/4	10/5
			230V	25/13	7.5/4	25/13
			200V	25/13	7.5/4	25/13
			100V	25/13	10/5	25/13
	GB14048.2 Icu/Ics(kA)	AC	400V	10/5	7.5/4	10/5
			230V	25/13	10/5	25/13
	UL489 CAN/CSA C22.2 NO.5 (kA)	AC	480V/Δ	—	—	—
			480V/Y	—	—	—
			240V	14	14	14
Conforming to standards	CE Marking		● (TÜV)	● (TÜV)	● (TÜV)	
	CCC certificate		●	●	●	
	UL Listed (NEMA AB1)		●	●	●	
	Electrical Appliance and Material Safety Law *1		●	●	●	
Dimensions (inch(mm))						
			a	2.953 (75)	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)			0.6	0.6	0.6	
Tripping device			Hydraulic-magnetic			
Connecting terminal			Page 07/26			
Screw			○	○	○	
Flat			○	○	○	
Block			—	—	—	
Internal accessories			Page 07/57			
Alarm switch			○	○	○	
Auxiliary switch			○	○	○	
Undervoltage trip			○	○	○	
Shunt trip			○	○	○	
Earth alarm switch			—	—	—	
External accessories			Page 07/60			
Operating handle N-type			○	○	○	
Operating handle V-type			○	○	○	
Terminal cover Short			BT□S ○*2	○	○	
Terminal cover Long			BT□L ○	○	○	
Insulation barrier Interphase			BP ○	○	○	

●: Approved ○: Available —: Not available

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

^{*2} Standard provided

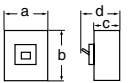
Rated voltage (V)	Operational voltage range (V)
100–230	80–264
240	80–264
100–230–440	80–484

Earth Leakage Circuit Breakers

G-TWIN series

Quick reference guide

■ G-TWIN Global Series

Ampere frame		125A	
Type		EW125JAGU	EW125RAGU
Pole		3	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
Isolation compliant			●
Rated voltage Ue (AC V)		IEC	100-230-440
		UL	240-480
Type of earth leakage trip action		AC type	
Instantaneous trip type	Rated sensitive current (mA)		30
	Tripping time (s)		0.1 or less
Instantaneous/time-delay trip type	Rated sensitive current (mA)		100/200/500/1000 changeover
	Tripping time (s)		0.1/0.4/1/2 changeover
		Inertia non-tripping time (s) (2IΔn)	0/0.2/0.5/1
Rated breaking capacity	IEC60947-2 EN60947-2 JISC8201-2-2 Icu/Ics (kA)	AC	440V 30/15
			415V 30/15
			400V 30/15
			380V 30/15
			230V 50/25
			200V 50/25
			100V 50/25
			100V 50/25
	GB14048.2 Icu/Ics (kA)	AC	400V 30/15
			230V 50/25
	UL489 CAN/CSA C22.2 NO.5 (kA)	AC	480V/Δ 30
			480V/Y 30
			240V 50
Conforming to standards	CE Marking		● (TÜV)
	CCC certificate		●
	UL Listed (NEMA AB1)		●
	Electrical Appliance and Material Safety Law *1		● (except for 125A)
Dimensions (inch(mm))		a	3.543 (90)
		b	6.732 (171)
		c	2.677 (68)
		d	3.740 (95)
Mass (kg)			1.3
Tripping device		Thermal-magnetic	
Connecting terminal		Page 07/26	
Screw		S□	○
Flat			○
Block			○
Internal accessories		Page 07/58	
Alarm switch		K	○
Auxiliary switch		W	○
Undervoltage trip		R	○
Shunt trip		F	○
Earth alarm switch		L	○
External accessories		Page 07/60	
Operating handle N-type		N	○
Operating handle V-type		V	○
Operating handle F-type		F	○
Terminal cover Short		BT□S	○ *2
Terminal cover Long		BT□L	○
Insulation barrier Interphase		BP	○

●: Approved ○: Available —: Not available

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

*2 Standard provided

Rated voltage (V)	Operational voltage range (V)
240-480	80-504
100-230-440	80-484

Earth Leakage Circuit Breakers

G-TWIN series

Quick reference guide

■ G-TWIN Global Series

Ampere frame		250A	
Type		EW250JAGU	EW250RAGU
Pole		3	3
Rated current	Reference amb. temp. (40°C)	In(A)	125, 150, 160, 175, 200, 225, 250
Rated impulse withstand voltage		Uimp(kV)	6
Isolation compliant			●
Rated voltage Ue (AC V)		IEC	100-230-440
		UL	240-480
Type of earth leakage trip action		AC type	
Instantaneous trip type	Rated sensitive current (mA)		30
	Tripping time (s)		0.1 or less
Instantaneous/time-delay trip type	Rated sensitive current (mA)		100/200/500/1000 changeover
	Tripping time (s)		0.1/0.4/1/2 changeover
		Inertia non-tripping time (s) (2IΔn)	0/0.2/0.5/1
Rated breaking capacity	IEC60947-2 EN60947-2 JISC8201-2-2 Icu/Ics (kA)	AC	440V 30/15
			415V 30/15
			400V 30/15
			380V 30/15
			230V 50/25
			200V 50/25
			100V 50/25
	GB14048.2 Icu/Ics (kA)	AC	400V 30/15
			230V 50/25
	UL489 CAN/CSA C22.2 NO.5 (kA)	AC	480V/Δ 30
			480V/Y 30
			240V 50
Conforming to standards	CE Marking		● (TÜV)
	CCC certificate		●
	UL Listed (NEMA AB1)		●
Dimensions (inch(mm))		a	4.134 (105)
		b	7.126 (181)
		c	2.677 (68)
		d	3.740 (95)
			3.740 (95)
Mass (kg)			1.8
Tripping device		Thermal-magnetic	
Connecting terminal		Page 07/26	
Screw		S□	○
Flat			○
Block			○
Internal accessories		Page 07/58	
Alarm switch		K	○
Auxiliary switch		W	○
Undervoltage trip		R	○
Shunt trip		F	○
Earth alarm switch		L	○
External accessories		Page 07/60	
Operating handle N-type		N	○
Operating handle V-type		V	○
Operating handle F-type		F	○
Terminal cover Short		BT□S	○ ^{*1}
Terminal cover Long		BT□L	○
Insulation barrier Interphase		BP	○

●: Approved ○: Available -: Not available
Note: *1 Standard provided

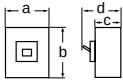
Rated voltage (V)	Operational voltage range (V)
240–480	80–504
100–230–440	80–484

Earth Leakage Circuit Breakers

G-TWIN series

Quick reference guide

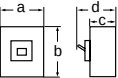
■ G-TWIN Global Series

Ampere frame				400A			
Type				EW400SAGU		EW400RAGU	EW400HAGU
Pole				3		3	3
Rated current		Reference amb. temp. (40°C)	In(A)	250, 300, 350, 400			
Rated impulse withstand voltage			Uimp(kV)	6		6	6
Isolation compliant				●		●	●
Rated voltage Ue (AC V)			IEC	100-230-440			
			UL	240-480			
Type of earth leakage trip action				AC type			
Instantaneous trip type	Rated sensitive current (mA)			30			
	Tripping time (s)			0.1 or less			
Instantaneous/time-delay trip type	Rated sensitive current (mA)			100/200/500/1000 changeover			
	Tripping time (s)			0.1/0.4/1/2 changeover			
	Inertia non-tripping time (s) (2IΔn)			0/0.2/0.5/1			
Rated breaking capacity	IEC60947-2 EN60947-2 JISC8201-2-2 Icu/Ics (kA)	AC	440V	36/18	50/25		70/35
			415V	36/18	50/25		70/35
			400V	36/18	50/25		70/35
			380V	36/18	50/25		70/35
			230V	85/43	100/50		125/63
			200V	85/43	100/50		125/63
	GB14048.2 Icu/Ics (kA)	AC	100V	85/43	100/50		125/63
			400V	36/18	50/25		70/35
	UL489 CAN/CSA C22.2 NO.5 (kA)	AC	230V	85/43	100/50		125/63
			480V/Δ	35	50		65 (with block terminal: 50)
			480V/Y	35	50		65 (with block terminal: 50)
			240V	50	100		100
Conforming to standards	CE Marking		● (TÜV)		● (TÜV)		● (TÜV)
	CCC certificate		●		●		●
	UL Listed (NEMA AB1)		●		●		●
Dimensions (inch(mm)) 			a	5.512 (140)		5.512 (140)	
			b	10.12 (257)		10.12 (257)	
			c	4.055 (103)		4.055 (103)	
			d	5.748 (146)		5.748 (146)	
			Mass (kg)		6.3		6.3
Tripping device				Thermal-magnetic			
Connecting terminal			Page 07/26				
Screw			S□	—		—	
Flat			○	○		○	
Block			○	○		○	
Internal accessories			Page 07/58				
Alarm switch			K	○		○	
Auxiliary switch			W	○		○	
Undervoltage trip			R	○		○	
Shunt trip			F	○		○	
Earth alarm switch			L	▲		▲	
External accessories			Page 07/60				
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	○		○	

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

Rated voltage (V)	Operational voltage range (V)
240–480	80–504
100–230–440	80–484

■ G-TWIN Global Series

Ampere frame			630A	
Type			EW630RAGU	
Pole			3	
Rated current		Reference amb. temp. (40°C)	In(A)	500, 600, 630* ¹
Rated impulse withstand voltage			Uimp(kV)	6
Isolation compliant			●	
Rated voltage Ue (AC V)		IEC	100-230-440	
		UL	240-480	
Instantaneous/time-delay trip type	Rated sensitive current (mA)		100/200/500/1000 changeover	
	Tripping time (s)		0.1/0.4/1/2 changeover	
	Inertia non-tripping time (s) (2IΔn)		0/0.2/0.5/1	
Rated breaking capacity	IEC60947-2 EN60947-2 JISC8201-2-2 Icu/Ics (kA)	AC	440V	50/25
			415V	50/25
			400V	50/25
			380V	50/25
			230V	100/50
			200V	100/50
			100V	100/50
			100V	100/50
	GB14048.2 Icu/Ics (kA)	AC	400V	50/25
			230V	100/50
	UL489 CAN/CSA C22.2 NO.5 (kA)	AC	480V/Δ	50
			480V/Y	50
			240V	100
Conforming to standards	CE Marking		● (TÜV)	
	CCC certificate		●	
	UL Listed (NEMA AB1)		●	
Dimensions (inch(mm)) 			a	8.268 (210)
			b	10.83 (275)
			c	4.055 (103)
			d	5.748 (146)
Mass (kg)			10.2	
Tripping device			Thermal-magnetic	
Connecting terminal			Page 07/27	
Screw			S□	—
Flat			○	
Block			○	
Internal accessories			Page 07/59	
Alarm switch			K	○* ²
Auxiliary switch			W	○* ²
Undervoltage trip			R	○* ²
Shunt trip			F	○* ²
Earth alarm switch			L	▲
External accessories			Page 07/60	
Operating handle N-type			N	○
Operating handle V-type			V	○
Terminal cover Short			BT□S	○
Terminal cover Long			BT□L	○
Insulation barrier Interphase			BP	○

●: Approved ○: Available –: Not available ▲: Factory-mounted accessory
Note: *¹ Breakers for 630A cannot be manufactured with block terminals.
*² Block terminals are not available.

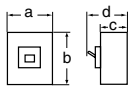
Rated voltage (V)	Operational voltage range (V)
240–480	80–504
100–230–440	80-484

Earth Leakage Circuit Breakers

G-TWIN series

Quick reference guide

■ G-TWIN Standard Series / Motor protection

Ampere frame				32A						
Type				EW32EAM		EW32SAM				
Pole				3		3				
Rated current		Reference amb. temp. (40°C)		In(A)		1.4, 2.6, 4, 5, 8, 10, 16, 24, 32		0.7, 1.4, 2, 2.6, 4, 5, 8, 10, 12, 16, 24, 32		
Rated impulse withstand voltage			Uimp(kV)			4		4		
Isolation compliant				●		●				
Rated voltage Ue(AC V)				100-230-440		100-230-440				
Rated sensitive current (mA)				30, 100		30, 100/200/500 changeover				
Tripping time (s)				0.1 or less		0.1 or less				
Rated breaking capacity Icu/Ics (kA)	IEC 60947-2 EN 60947-2 JIS C 8201-2-2	AC	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				
			230V	2.5/2		5/3				
			200V	2.5/2		5/3				
			100V	5/3		5/3				
			GB14048.2	AC	400V	1.5/1		2.5/2		
	230V	2.5/2			5/3					
	Conforming to standards	CE Marking			●		●			
CCC certificate			●		●					
Electrical Appliance and Material Safety Law [※]			●		●					
Dimensions (mm) 			a	75		75				
			b	100		100				
			c	60		60				
			d	84		84				
			Mass (kg)	0.5		0.5				
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		No-mark	○					○		
Internal accessories			Page 07/57							
Alarm switch		K	○					○		
Auxiliary switch		W	○					○		
Undervoltage trip		R	○					○		
Shunt trip		F	○					○		
Earth alarm switch		L	—					—		
External accessories			Page 07/60							
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	○					○	
Insulation barrier		Earth	BL	○					○	
Handle locking cover			L1	○					○	
Flat terminal			SS	○					○	
Block terminal			SL	—					—	

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

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

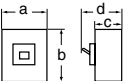
Rated voltage (V)	Operational voltage range (V)
100–230–440	80–484

Earth Leakage Circuit Breakers

G-TWIN series

Quick reference guide

■ G-TWIN Standard Series / Motor protection

Ampere frame				50A									
Type				EW50EAM		EW50SAM							
Pole				3		3							
Rated current		Reference amb. temp. (40°C)		In(A)		45		0.7, 1.4, 2, 2.6, 4, 5, 8, 10, 12, 16, 24, 32, 40, 45					
Rated impulse withstand voltage			Uimp(kV)			4			6				
Isolation compliant				●		●							
Rated voltage Ue (AC V)				100-230-440				100-230-440					
Rated sensitive current (mA)				30, 100/200 changeover				30, 100/200/500 changeover					
Tripping time (s)				0.1 or less				0.1 or less					
Rated breaking capacity Icu/Ics (kA)	IEC 60947-2 EN 60947-2 JIS C 8201-2-2	AC	440V	2.5/2				7.5/4					
			415V	2.5/2				7.5/4					
			400V	2.5/2				7.5/4					
			380V	2.5/2				7.5/4					
			230V	5/3				10/5					
			200V	5/3				10/5					
			100V	5/3				10/5					
	GB14048.2	AC	400V	2.5/2				7.5/4					
			230V	5/3				10/5					
Conforming to standards	CE Marking			●				●					
	CCC certificate			●				●					
	Electrical Appliance and Material Safety Law ^{※1}			●				●					
Dimensions (mm) 			a	75				75					
			b	100				100					
			c	60				60					
			d	84				84					
			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		No-mark		○				○					
Internal accessories			Page 07/57										
Alarm switch		K		○				○					
Auxiliary switch		W		○				○					
Undervoltage trip		R		○				○					
Shunt trip		F		○				○					
Earth alarm switch		L		—				—					
External accessories			Page 07/60										
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		○				○			
Insulation barrier		Earth		BL		○				○			
Handle locking cover				L1		○				○			
Flat terminal				SS		○				○			
Block terminal				SL		—				—			

●: Approved ○: Available —: Not available ▲: Factory-mounted accessory
Note: ^{*1} Electrical Appliance and Material Safety Law of Japan

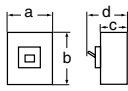
Rated voltage (V)	Operational voltage range (V)
100–230–440	80–484

Earth Leakage Circuit Breakers

G-TWIN series

Quick reference guide

■ G-TWIN Standard Series / Motor protection

Ampere frame				63A		100A	
Type				EW63EAM		EW63SAM	
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 voltage Ue (AC V)				100-230-440		100-230-440	
Rated sensitive current (mA)				30, 100/200 changeover		30, 100/200/500 changeover	
Tripping time (s)				0.1 or less		0.1 or less	
Rated breaking capacity Icu/Ics (kA)	IEC 60947-2 EN 60947-2 JIS C 8201-2-2	AC	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	
			230V	5/3	10/5	25/13	
			200V	5/3	10/5	25/13	
			100V	5/3	10/5	25/13	
			GB14048.2	AC	400V	2.5/2	7.5/4
	230V	5/3	10/5		25/13		
Conforming to standards	CE Marking			●	●	●	
	CCC certificate			●	●	●	
	Electrical Appliance and Material Safety Law ¹			●	●	●	
Dimensions (mm) 			a	75	75	75	
			b	100	100	100	
			c	60	60	60	
			d	84	84	84	
			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		No-mark	○	○		○	
Internal accessories				Page 07/57			
Alarm switch		K	○	○		○	
Auxiliary switch		W	○	○		○	
Undervoltage trip		R	○	○		○	
Shunt trip		F	○	○		○	
Earth alarm switch		L	—	—		—	
External accessories				Page 07/60			
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	○	○	○	
Insulation barrier		Earth	BL	○	○	○	
Handle locking cover			L1	○	○	○	
Flat terminal			SS	○	○	○	
Block terminal			SL	—	—	—	

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

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

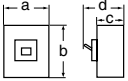
Rated voltage (V)	Operational voltage range (V)
100–230–440	80–484

Earth Leakage Circuit Breakers

G-TWIN series

Quick reference guide

■ G-TWIN Standard Series / Motor protection

Ampere frame				125A		250A									
Type				EW125JAM		EW125RAM		EW250EAM		EW250JAM		EW250RAM			
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 voltage Ue (AC V)						100-230-440		100-230-440		100-230-440		100-230-440		100-230-440	
Type of earth leakage trip action						AC type				AC type					
Instantaneous trip type	Rated sensitive current (mA)					30				30					
	Tripping time (s)					0.1 or less				0.1 or less					
Instantaneous/ time-delay trip type	Rated sensitive current (mA)					100/200/500/1000 changeover				100/200/500/1000 changeover					
	Tripping time (s)					0.1/0.4/1/2 changeover				0.1/0.4/1/2 changeover					
Inertia non-tripping time (s) (2IΔn)						0/0.2/0.5/1				0/0.2/0.5/1					
Rated breaking capacity Icu/Ics (kA)	IEC 60947-2 EN 60947-2 JIS C 8201-2-2	AC	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							
			230V	50/25	100/50	36/18	50/25	100/50							
			200V	50/25	100/50	36/18	50/25	100/50							
			100V	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 ^{*1}			●		●		—		—		—			
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)			1.3		1.3		1.8		1.8		1.8	
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		○		○		○		○		○			
Internal accessories		Page 07/58													
Alarm switch		K		○		○		○		○		○			
Auxiliary switch		W		○		○		○		○		○			
Undervoltage trip		R		○		○		○		○		○			
Shunt trip		F		○		○		○		○		○			
Earth alarm switch		L		○		○		○		○		○			
External accessories		Page 07/60													
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

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

Rated voltage (V)	Operational voltage range (V)
100-230-440	80-484

Earth Leakage Circuit Breakers

G-TWIN series

Mounting modifications

■ Mounting modifications

• Standard series

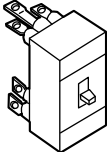
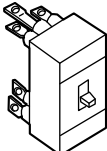
Standard type FUJI breakers are front mounting with front connections. The standard breaker can easily be modified to become front mounting rear connection type, flush mounting type and plug-in type. The additional parts such as insulation bases, barriers, covers and similar parts are added as required.

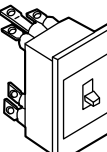
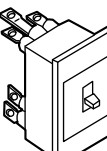
Front mounting
Front connection

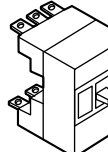
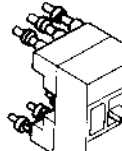
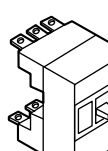


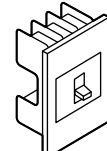
BASIC DESIGN



Additional main parts	Front mounting Rear connection (X type)
Bar stud terminal 	EW32 EW50 EW63 EW100
Bar stud terminal 	EW125 EW160 EW250 EW400 EW630 EW800 Each stud can be turned by 90°

Additional main parts	Flush mounting Rear connection (E type)
Bar stud terminal 	EW32 EW50 EW63 EW100
Bar stud terminal 	EW125 EW160 EW250 EW400 EW630 EW800 Each stud can be turned by 90°

Additional main parts	Plug-in mounting (P type)
Bar stud terminal 	EW32 EW50 EW63 EW100
Round stud terminal 	EW125
Bar stud terminal 	EW160 EW250 EW400 EW630 EW800 Each stud can be turned by 90°

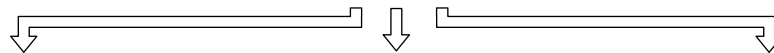
Additional main parts	Flush mounting Top and bottom connection (Y type)
Decorative flush plate 	EW32 EW50 EW63 EW100

• Global series

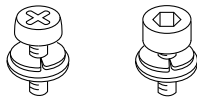
Front mounting
Front connection



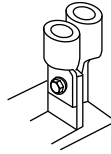
BASIC DESIGN



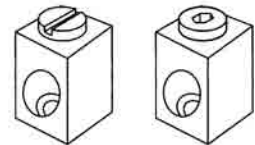
Screw



Flat terminal



Block terminal



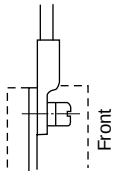
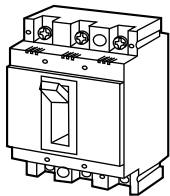
Earth Leakage Circuit Breakers

G-TWIN series

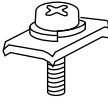
Terminal connection

■ Terminal connection/Front mounting, front connection

• 32AF to 100AF

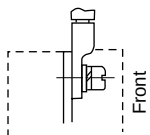
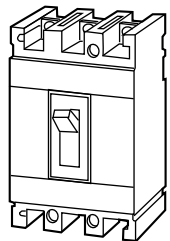


Flat terminal

Self lifting screw	Breaker type	Tightening torque (N•m)	Size
	EW32 EW50 EW100*	2.3 to 2.8	M5 × 14
Pan-head screw	EW63 EW100	5.5 to 7.5	M8 × 15
			

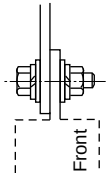
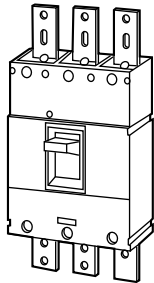
* Breaker of rated current : 50A

• 125AF to 250AF



Pan-head screw	Breaker type	Tightening torque (N•m)	Size (mm)
	EW125	5.5 to 7.5	M8 × 16
Hexagonal socket head bolt	EW160 EW250	8.0 to 13.0	M8 × 16
			

• 400AF to 800AF



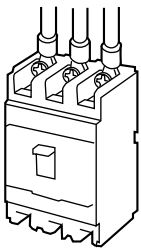
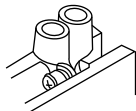
Flat terminal

Hexagonal head bolt	Breaker type	Tightening torque (N•m)	Size (mm)
	EW400	40 to 50	M12 × 35
	EW630 EW800	40 to 50	M12 × 40

Type of connection/up to 250AF

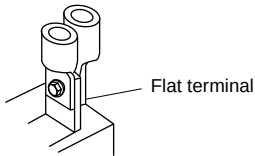
Front mounting front connection

Direct connection



Flat terminal connection

Flat terminals are required.



Flat bar studs/1-hole type

Breaker type	Pole	Type of flat terminal
EW32 EW50	2 3	BZ6S10C502 BZ6S10C503
EW63 EW100*	2 3	BZ6S10C1002 BZ6S10C1003
EW125	3 4	BW9SS0CA-3 BW9SS0CA-4
EW160 EW250	3 4	BW9SS0GA-3 BW9SS0GA-4

* EW100 breaker of rated current 50A: BZ6S10C502 or 503.

Earth Leakage Circuit Breakers

G-TWIN series

Wire size and terminal

■ Wire size and crimp terminal

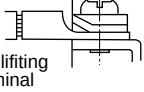
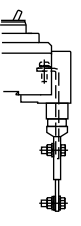
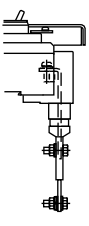
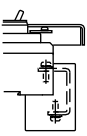
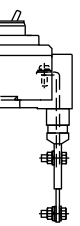
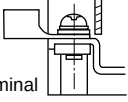
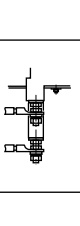
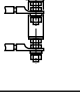
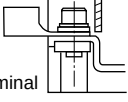
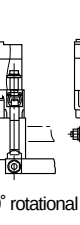
The following is the size recommendations for crimp terminals.

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	EW32	R2-5	R5.5-5	R8-5	R14-5							
50	EW50	R2-5	R5.5-5	R8-5	R14-5							
63	EW63	R2-8	R5.5-8	R8-8	R14-8	JST22-S8						
100	EW100	R2-8	R5.5-8	R8-8	R14-8	JST22-S8	JST38-S8					
125	EW125	R2-8	R5.5-8	R8-8	R14-8	R22-8	JST38-S8	CB60-8				
160 250	EW160 EW250					R22-8	R38-8	R60-8	CB100-8			
400	EW400						R38-12	R60-12	R100-12	R150-12	R200-12	JST325-12
630	EW630								R100-12	R150-12	R200-12	JST325-12
800	EW800								R100-12	R150-12	R200-12	JST325-12

■ Breaker termination

• Standard

ELCB type	Front connection	Rear connection X	Flush mounting E	Y	Plug-in mounting P
EW32 EW50	 Self-lifting terminal				
EW63 EW100					
EW125					
EW160 EW250					
EW400 EW630 EW800	 Flat terminal	90° rotational stud	90° rotational stud		90° rotational stud

07

Earth Leakage Circuit Breakers

G-TWIN series

Wire size and terminal

■ Notes on wiring (global 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.

Code	Terminal position		Applicable breaker type		
	Line	Load	EW50, 100	EW125, 250	EW400, 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	—	●	●

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.

Wire size and crimp terminal

• Crimp terminal connection

ELCB	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.	75°C wire		
EW50RAGU	3	R2-5		R2-5M	2-S5, 2-5	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		
	30						
EW100EAGU	40	R8-5		R8-5S, R8-5	8-S5, 8-5	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		
	75	22-S8		R22-8S, R22-8	R22-S8, 22-8		
	100	38-S8		R38-8S	38-S8		
EW125JAGU EW125RAGU	15	R2-8		R2-8	2-8, 2-B8	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		
	30			R5.5-8	5.5-8		
	40	8-8NS, R8-8		R8-8	8-8		
	50						
	60	14-8NS, 14-S8, R14-8		R14-8S, R14-8	14-S8, 14-8		
	70	22-S8, R22-8, CB22-S8		R22-8S, R22-8, CB22-8S	22-S8, 22-8, CB22-8		
	75						
	80						
	90	38-S8		R38-8S	38-S8		
	100						
	125				1AWG		
EW250JAGU EW250RAGU	125	38-S8, R38-8		R38-8S, R38-8	38-S8, 38-8	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		
	175	70-8		R70-8	70-8		
	200	CB80-S8			CB80-8		
	225	CB100-S8			CB100-8		
	250	CB150-S8		CB150-8	CB150-8		

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.

Earth Leakage Circuit Breakers

G-TWIN series

Wire size and terminal

• Flat terminal connection

ELCB	Rated current (A)	Applicable crimp terminal 75°C wire			Connectable wire size (AWG) 75°C wire	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	
EW50RAGU	3	R2-5	R2-5M R2-5	2-S5, 2-5	14AWG	3.5 to 4.5	2.3 to 2.8	Hexagon socket head bolt M5 x 16
	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			
	40	R8-5	R8-5S, R8-5	8-S5, 8-5	8AWG			
	50							
EW100EAGU	60	R14-8	R14-8S, R14-8	R14-S8, R14-8	6AWG	8 to 10	5.5 to 7.5	Hexagon socket head bolt M8 x 22
	75	22-S8	R22-8S, R22-8	R22-S8, 22-8	4AWG			
	100	38-S8	R38-8S	38-S8	3AWG			
EW125JAGU EW125RAGU	15	R2-8	R2-8	2-8, 2-B8	14AWG	9 (8 to 10)	5.8 (5.3 to 6.4)	Cross/straight slotted pan-head screw M8 x 16
	20	5.5-S8, R5.5-8	R3.5-8, R5.5-8 R5.5-8	3.5-8, 5.5-8 5.5-8	12AWG			
	30				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			
	75	22-S8, R22-8, CB22-S8	R22-8S, R22-8, CB22-8S	22-S8, 22-8, CB22-8	4AWG			
	100	38-S8	R38-8S	38-S8	3AWG			
EW250JAGU EW250RAGU	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			
EW400SAGU EW400RAGU EW400HAGU	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 R80-12	R325-12N R80-12		500MCM 3/0AWG(x2)			
EW630RAGU	500	R150-12		R150-12	250MCM(x2)	47.04 (42.4 to 51.7)	47.04 (42.4 to 51.7)	Hexagon head bolt M12 x 40
	600	180-12		R180-12	350MCM(x2)			
	630	325-12	R325-12N	R325-12 □	500MCM(x2)			

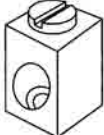
Notes: • AWG/MCM is the UL approved wire unit.
• The allowable temperature of wire is 75°C. (UL CSA approved)

Earth Leakage Circuit Breakers

G-TWIN series

Wire size and terminal

• Block terminal connection

ELCB	Rated current (A)	Connectable wire size (AWG)	Tightening torque (N•m)	Type of screw head and size (mm)	Figure
EW125JAGU EW125RAGU	15 20 30 40 50 60 75 100 125	14AWG 12AWG 10AWG 8AWG 6AWG 4AWG 3AWG 1AWG	5.8 (5.8 to 6.4)	Slotted set screw	
EW250JAGU EW250RAGU	125 150 175 200 225 250	1AWG 1/0AWG 2/0AWG 3/0AWG 4/0AWG 250MCM	23 (23 to 25.3)	Hexagon socket head setscrew: 8 mm (5/16 inch)	
EW400SAGU EW400RAGU EW400HAGU	250 300 350 400	250MCM 350MCM 500MCM 3/0AWG(x2)	43.5 (43.5 to 48)	Hexagon socket head setscrew: 9.53 mm (3/8 inch)	
EW630RAGU	500 600	250MCM(x2) 350MCM(x2)	31.9 (31.9 to 35.1) 31.1 (31.1 to 34.2)	Hexagon socket head setscrew: 8 mm (5/16 inch) Hexagon socket head setscrew: 8 mm (5/16 inch)	

Notes: • AWG/MCM is the UL approved wire unit.
• The allowable temperature of wire is 75°C. (UL CSA approved)

Earth Leakage 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	■: Rated sensitive current	□: Available mounting and connection
32	5	EW32AAG-2P005■□	A, B, C	Blank, X, E, Y, P
	10	EW32AAG-2P010■□		
	15	EW32AAG-2P015■□		
	20	EW32AAG-2P020■□		
	30	EW32AAG-2P030■□		
	32	EW32AAG-2P032■□		
50	5	EW50AAG-2P005■□	A, B, C	Blank, X, E, Y, P
	10	EW50AAG-2P010■□		
	15	EW50AAG-2P015■□		
	20	EW50AAG-2P020■□		
	30	EW50AAG-2P030■□		
	32	EW50AAG-2P032■□		
	40	EW50AAG-2P040■□		
	50	EW50AAG-2P050■□		

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

Breaker ampere frame	Rated current (A)	Type	■: Rated sensitive current	□: Available mounting and connection
100	50	EW100EAG-2P050■□	B, K	Blank, X, E, Y, P
	60	EW100EAG-2P060■□		
	63	EW100EAG-2P063■□		
	75	EW100EAG-2P075■□		
	100	EW100EAG-2P100■□		

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

Breaker ampere frame	Rated current (A)	Type	■: Rated sensitive current	□: Available mounting and connection
32	5	EW32AAG-3P005■□	A, B, C	Blank, X, E, Y, P
	10	EW32AAG-3P010■□		
	15	EW32AAG-3P015■□		
	20	EW32AAG-3P020■□		
	30	EW32AAG-3P030■□		
	32	EW32AAG-3P032■□		
50	5	EW50AAG-3P005■□	A, B, C	Blank, X, E, Y, P
	10	EW50AAG-3P010■□		
	15	EW50AAG-3P015■□		
	20	EW50AAG-3P020■□		
	30	EW50AAG-3P030■□		
	32	EW50AAG-3P032■□		
	40	EW50AAG-3P040■□		
	50	EW50AAG-3P050■□		
100	60	EW100AAG-3P060■□	B, K	Blank, X, E, Y, P
	63	EW100AAG-3P063■□		
	75	EW100AAG-3P075■□		
	100	EW100AAG-3P100■□		

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

Breaker ampere frame	Rated current (A)	Type	■: Rated sensitive current	□: Available mounting and connection
125	15	EW125JAG-3P015■□	B, J	Blank, X, E, P
	20	EW125JAG-3P020■□		
	30	EW125JAG-3P030■□		
	40	EW125JAG-3P040■□		
	50	EW125JAG-3P050■□		
	60	EW125JAG-3P060■□		
	75	EW125JAG-3P075■□		
	100	EW125JAG-3P100■□		
	125	EW125JAG-3P125■□		
160	125	EW160JAG-3P125■□	B, J	Blank, X, E, P
	150	EW160JAG-3P150■□		
	160	EW160JAG-3P160■□		
250	175	EW250JAG-3P175■□	B, J	Blank, X, E, P
	200	EW250JAG-3P200■□		
	225	EW250JAG-3P225■□		
	250	EW250JAG-3P250■□		

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

Rated sensitive current	■
15mA	A
30mA	B
100mA	C
50mA	D
100/300/500/1000mA changeover	J
100/200mA, 100/200/500mA changeover	K
100/200/500/1000mA changeover	K

Earth Leakage Circuit Breakers

G-TWIN series

Type number/Line protection

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

Breaker ampere frame	Rated current (A)	Type	■: Rated sensitive current *	□: Available mounting and connection *
32	5	EW32EAG-3P005■□	A, B, C	Blank, X, E, Y, P
	10	EW32EAG-3P010■□		
	15	EW32EAG-3P015■□		
	20	EW32EAG-3P020■□		
	30	EW32EAG-3P030■□		
	32	EW32EAG-3P032■□		
50	5	EW50EAG-3P005■□	A, B, K	Blank, X, E, Y, P
	10	EW50EAG-3P010■□		
	15	EW50EAG-3P015■□		
	20	EW50EAG-3P020■□		
	30	EW50EAG-3P030■□		
	32	EW50EAG-3P032■□		
	40	EW50EAG-3P040■□		
63	50	EW50EAG-3P050■□		
	60	EW63EAG-3P060■□	A, B, K	Blank, X, E, Y, P
	63	EW63EAG-3P063■□		
100	50	EW100EAG-3P050■□	B, K	Blank, X, E, Y, P
	60	EW100EAG-3P060■□		
	63	EW100EAG-3P063■□		
	75	EW100EAG-3P075■□		
	100	EW100EAG-3P100■□		
160	125	EW160EAG-3P125■□	B, J	Blank, X, E, P
	150	EW160EAG-3P150■□		
	160	EW160EAG-3P160■□		
250	175	EW250EAG-3P175■□	B, J	Blank, X, E, P
	200	EW250EAG-3P200■□		
	225	EW250EAG-3P225■□		
	250	EW250EAG-3P250■□		
400	250	EW400EAG-3P250■□	B, J	Blank, X, E, P
	300	EW400EAG-3P300■□		
	350	EW400EAG-3P350■□		
	400	EW400EAG-3P400■□		
630	500	EW630EAG-3P500■□	J	Blank, X, E, P
	600	EW630EAG-3P600■□		
	630	EW630EAG-3P630■□		
800	700	EW800EAG-3P700■□	J	Blank, X, E, P
	800	EW800EAG-3P800■□		

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

Breaker ampere frame	Rated current (A)	Type	■: Rated sensitive current *	□: Available mounting and connection *
32	3	EW32SAG-3P003■□	B, K	Blank, X, E, Y, P
	5	EW32SAG-3P005■□		
	10	EW32SAG-3P010■□		
	15	EW32SAG-3P015■□		
	20	EW32SAG-3P020■□		
	30	EW32SAG-3P030■□		
	32	EW32SAG-3P032■□		
	40	EW32SAG-3P040■□		
50	5	EW50SAG-3P005■□	B, K	Blank, X, E, Y, P
	10	EW50SAG-3P010■□		
	15	EW50SAG-3P015■□		
	20	EW50SAG-3P020■□		
	30	EW50SAG-3P030■□		
	32	EW50SAG-3P032■□		
	40	EW50SAG-3P040■□		
	50	EW50SAG-3P050■□		
63	60	EW63SAG-3P060■□	B, K	Blank, X, E, Y, P
	63	EW63SAG-3P063■□		
125	15	EW125SAG-3P015■□	B, J	Blank, X, E, P
	20	EW125SAG-3P020■□		
	30	EW125SAG-3P030■□		
	40	EW125SAG-3P040■□		
	50	EW125SAG-3P050■□		
	60	EW125SAG-3P060■□		
	75	EW125SAG-3P075■□		
	100	EW125SAG-3P100■□		
160	125	EW125SAG-3P125■□	B, J	Blank, X, E, P
	150	EW160SAG-3P150■□		
	160	EW160SAG-3P160■□		
	175	EW160SAG-3P175■□		
250	200	EW250SAG-3P200■□	B, J	Blank, X, E, P
	225	EW250SAG-3P225■□		
	250	EW250SAG-3P250■□		
	275	EW250SAG-3P275■□		
400	250	EW400SAG-3P250■□	B, J	Blank, X, E, P
	300	EW400SAG-3P300■□		
	350	EW400SAG-3P350■□		
	400	EW400SAG-3P400■□		

* See page 07/29.

Earth Leakage Circuit Breakers

G-TWIN series

Type number/Line protection

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

Breaker ampere frame	Rated current (A)	Type	■: Rated sensitive current *	□: Available mounting and connection *
50	10	EW50RAG-3P010■□	B, K	Blank, X, E, Y, P
	15	EW50RAG-3P015■□		
	20	EW50RAG-3P020■□		
	30	EW50RAG-3P030■□		
	32	EW50RAG-3P032■□		
	40	EW50RAG-3P040■□		
	50	EW50RAG-3P050■□		
63	60	EW63RAG-3P060■□	B, K	Blank, X, E, Y, P
	63	EW63RAG-3P063■□		
125	15	EW125RAG-3P015■□	B, J	Blank, X, E, P
	20	EW125RAG-3P020■□		
	30	EW125RAG-3P030■□		
	40	EW125RAG-3P040■□		
	50	EW125RAG-3P050■□		
	60	EW125RAG-3P060■□		
	75	EW125RAG-3P075■□		
	100	EW125RAG-3P100■□		
160	125	EW125RAG-3P125■□	B, J	Blank, X, E, P
	150	EW160RAG-3P150■□		
	160	EW160RAG-3P160■□		
250	175	EW250RAG-3P175■□	B, J	Blank, X, E, P
	200	EW250RAG-3P200■□		
	225	EW250RAG-3P225■□		
	250	EW250RAG-3P250■□		
400	250	EW400RAG-3P250■□	B, J	Blank, X, E, P
	300	EW400RAG-3P300■□		
	350	EW400RAG-3P350■□		
	400	EW400RAG-3P400■□		
630	500	EW630RAG-3P500■□	J	Blank, X, E, P
	600	EW630RAG-3P600■□		
	630	EW630RAG-3P630■□		
800	700	EW800RAG-3P700■□	J	Blank, X, E, P
	800	EW800RAG-3P800■□		

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

Breaker ampere frame	Rated current (A)	Type	■: Rated sensitive current *	□: Available mounting and connection *
400	250	EW400HAG-3P250■□	B, J	Blank, X, E, P
	300	EW400HAG-3P300■□		
	350	EW400HAG-3P350■□		
	400	EW400HAG-3P400■□		
630	500	EW630HAG-3P500■□	J	Blank, X, E, P
	600	EW630HAG-3P600■□		
	630	EW630HAG-3P630■□		
800	700	EW800HAG-3P700■□	J	Blank, X, E, P
	800	EW800HAG-3P800■□		

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

Breaker ampere frame	Rated current (A)	Type	■: Rated sensitive current *	□: Available mounting and connection *
125	15	EW125JAG-4P015■□	B, J	Blank, X, E
	20	EW125JAG-4P020■□		
	30	EW125JAG-4P030■□		
	40	EW125JAG-4P040■□		
	50	EW125JAG-4P050■□		
	60	EW125JAG-4P060■□		
	75	EW125JAG-4P075■□		
	100	EW125JAG-4P100■□		
160	125	EW125JAG-4P125■□	B, J	Blank, X, E
	150	EW160JAG-4P150■□		
	160	EW160JAG-4P160■□		
250	175	EW250JAG-4P175■□	B, J	Blank, X, E
	200	EW250JAG-4P200■□		
	225	EW250JAG-4P225■□		
	250	EW250JAG-4P250■□		

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

Breaker ampere frame	Rated current (A)	Type	■: Rated sensitive current *	□: Available mounting and connection *
125	15	EW125SAG-4P015■□	B, J	Blank, X, E
	20	EW125SAG-4P020■□		
	30	EW125SAG-4P030■□		
	40	EW125SAG-4P040■□		
	50	EW125SAG-4P050■□		
	60	EW125SAG-4P060■□		
	75	EW125SAG-4P075■□		
	100	EW125SAG-4P100■□		
160	125	EW125SAG-4P125■□	B, J	Blank, X, E
	150	EW160SAG-4P150■□		
	160	EW160SAG-4P160■□		
	175	EW160SAG-4P175■□		
250	200	EW250SAG-4P200■□	B, J	Blank, X, E
	225	EW250SAG-4P225■□		
	250	EW250SAG-4P250■□		

* See page 07/29.

Earth Leakage Circuit Breakers

G-TWIN series

Type number/Line protection

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

Breaker ampere frame	Rated current (A)	Type	■: Rated sensitive current *	□: Available mounting and connection *
125	15	EW125RAG-4P015■□	B, J	Blank, X, E
	20	EW125RAG-4P020■□		
	30	EW125RAG-4P030■□		
	40	EW125RAG-4P040■□		
	50	EW125RAG-4P050■□		
	60	EW125RAG-4P060■□		
	75	EW125RAG-4P075■□		
	100	EW125RAG-4P100■□		
	125	EW125RAG-4P125■□		
160	125	EW160RAG-4P125■□	B, J	Blank, X, E
	150	EW160RAG-4P150■□		
	160	EW160RAG-4P160■□		
250	175	EW250RAG-4P175■□	B, J	Blank, X, E
	200	EW250RAG-4P200■□		
	225	EW250RAG-4P225■□		
400	250	EW400RAG-4P250■□	B, J	Blank, X, E
	300	EW400RAG-4P300■□		
	350	EW400RAG-4P350■□		
	400	EW400RAG-4P400■□		

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

Breaker ampere frame	Rated current (A)	Type	■: Rated sensitive current *	□: Available mounting and connection*
400	250	EW400HAG-4P250■□	B, J	Blank, X, E
	300	EW400HAG-4P300■□		
	350	EW400HAG-4P350■□		
	400	EW400HAG-4P400■□		

* See page 07/29.

Earth Leakage 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	■: Rated sensitive current *	□: Available mounting and connection
100	60	EW100EAGU-2P060	■ □	B, K Blank, SF, S3, S4
	63	EW100EAGU-2P063	■ □	
	70	EW100EAGU-2P070	■ □	
	75	EW100EAGU-2P075	■ □	
	80	EW100EAGU-2P080	■ □	
	90	EW100EAGU-2P090	■ □	
	100	EW100EAGU-2P100	■ □	

● EAGU series, 3-pole UL489 Listed

Breaker ampere frame	Rated current (A)	Type	■: Rated sensitive current *	□: Available mounting and connection
100	60	EW100EAGU-3P060	■ □	B, D, K Blank, SF, S3, S4
	63	EW100EAGU-3P063	■ □	
	70	EW100EAGU-3P070	■ □	
	75	EW100EAGU-3P075	■ □	
	80	EW100EAGU-3P080	■ □	
	90	EW100EAGU-3P090	■ □	
	100	EW100EAGU-3P100	■ □	

● JAGU series, 3-pole UL489 Listed

Breaker ampere frame	Rated current (A)	Type	■: Rated sensitive current *	□: Available mounting and connection
125	15	EW125JAGU-3P015	■ □	B, K Blank, SB, SF, S3 S4, S5, S6, S7, S8
	20	EW125JAGU-3P020	■ □	
	30	EW125JAGU-3P030	■ □	
	40	EW125JAGU-3P040	■ □	
	50	EW125JAGU-3P050	■ □	
	60	EW125JAGU-3P060	■ □	
	75	EW125JAGU-3P075	■ □	
	100	EW125JAGU-3P100	■ □	
	125	EW125JAGU-3P125	■ □	
250	125	EW250JAGU-3P125	■ □	B, K Blank, SB, SF, S3 S4, S5, S6, S7, S8
	150	EW250JAGU-3P150	■ □	
	160	EW250JAGU-3P160	■ □	
	175	EW250JAGU-3P175	■ □	
	200	EW250JAGU-3P200	■ □	
	225	EW250JAGU-3P225	■ □	
	250	EW250JAGU-3P250	■ □	

● SAGU series, 3-pole UL489 Listed

Breaker ampere frame	Rated current (A)	Type	■: Rated sensitive current *	□: Available mounting and connection
400	250	EW400SAGU-3P250	■ □	B, K Blank, SB, S7, S8
	300	EW400SAGU-3P300	■ □	
	350	EW400SAGU-3P350	■ □	
	400	EW400SAGU-3P400	■ □	

* See page 07/29.

● RAGU series, 3-pole UL489 Listed

Breaker ampere frame	Rated current (A)	Type	■: Rated sensitive current *	□: Available mounting and connection
50	3	EW50RAGU-3P003	■ □	B, D, K Blank, SF, S3, S4
	5	EW50RAGU-3P005	■ □	
	10	EW50RAGU-3P010	■ □	
	15	EW50RAGU-3P015	■ □	
	20	EW50RAGU-3P020	■ □	
	30	EW50RAGU-3P030	■ □	
	32	EW50RAGU-3P032	■ □	
	40	EW50RAGU-3P040	■ □	
	50	EW50RAGU-3P050	■ □	
125	15	EW125RAGU-3P015	■ □	B, K Blank, SB, SF, S3 S4, S5, S6, S7, S8
	20	EW125RAGU-3P020	■ □	
	30	EW125RAGU-3P030	■ □	
	40	EW125RAGU-3P040	■ □	
	50	EW125RAGU-3P050	■ □	
	60	EW125RAGU-3P060	■ □	
	75	EW125RAGU-3P075	■ □	
	100	EW125RAGU-3P100	■ □	
250	125	EW250RAGU-3P125	■ □	B, K Blank, SB, SF, S3 S4, S5, S6, S7, S8
	150	EW250RAGU-3P150	■ □	
	160	EW250RAGU-3P160	■ □	
	175	EW250RAGU-3P175	■ □	
	200	EW250RAGU-3P200	■ □	
	225	EW250RAGU-3P225	■ □	
	250	EW250RAGU-3P250	■ □	
400	250	EW400RAGU-3P250	■ □	B, K Blank, SB, S7, S8
	300	EW400RAGU-3P300	■ □	
	350	EW400RAGU-3P350	■ □	
	400	EW400RAGU-3P400	■ □	
630	500	EW630RAGU-3P500	■ □	K Blank, SB, S7, S8
	600	EW630RAGU-3P600	■ □	
	630	EW630RAGU-3P630	■ □	

● HAGU series, 3-pole UL489 Listed

Breaker ampere frame	Rated current (A)	Type	■: Rated sensitive current *	□: Available mounting and connection
400	250	EW400HAGU-3P250	■ □	B, K Blank, SB, S7, S8
	300	EW400HAGU-3P300	■ □	
	350	EW400HAGU-3P350	■ □	
	400	EW400HAGU-3P400	■ □	

Terminal combination

□:	Terminal position		Breaker type		
Code	Line	Load	EW50, 100	EW125, 250	EW400, 630
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	—	●	●

Earth Leakage Circuit Breakers

G-TWIN series

Type number/Motor protection

■ Type number, Standard series (Motor protection)

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

Breaker ampere frame	Rated current (A)	Type	■: Rated sensitive current	□: Available mounting and connection
32	1.4	EW32EAM-3P1P4■□	B, C	Blank, X, E, Y, P
	2.6	EW32EAM-3P2P6■□		
	4	EW32EAM-3P004■□		
	5	EW32EAM-3P005■□		
	8	EW32EAM-3P008■□		
	10	EW32EAM-3P010■□		
	16	EW32EAM-3P016■□		
	24	EW32EAM-3P024■□		
	32	EW32EAM-3P032■□		
50	45	EW50EAM-3P045■□	B,K	Blank, X, E, Y, P
63	63	EW63EAM-3P063■□	B,K	Blank, X, E, Y, P
100	63	EW100EAM-3P063■□	B,K	Blank, X, E, Y, P
	75	EW100EAM-3P075■□		
	90	EW100EAM-3P090■□		
	100	EW100EAM-3P100■□		
250	125	EW250EAM-3P125■□	B,K	Blank, X, E, P
	150	EW250EAM-3P150■□		
	175	EW250EAM-3P175■□		
	225	EW250EAM-3P225■□		

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

Breaker ampere frame	Rated current (A)	Type	■: Rated sensitive current	□: Available mounting and connection
125	75	EW125JAM-3P075■□	B,K	Blank, X, E, P
	90	EW125JAM-3P090■□		
250	125	EW250JAM-3P125■□	B,K	Blank, X, E, P
	150	EW250JAM-3P150■□		
	175	EW250JAM-3P175■□		
	225	EW250JAM-3P225■□		

* See page 07/29.

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

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

Breaker ampere frame	Rated current (A)	Type	■: Rated sensitive current	□: Available mounting and connection
32	0.7	EW32SAM-3P0P7■□	B,K	Blank, X, E, Y, P
	1.4	EW32SAM-3P1P4■□		
	2	EW32SAM-3P002■□		
	2.6	EW32SAM-3P2P6■□		
	4	EW32SAM-3P004■□		
	5	EW32SAM-3P005■□		
	8	EW32SAM-3P008■□		
	10	EW32SAM-3P010■□		
	12	EW32SAM-3P012■□		
	16	EW32SAM-3P016■□		
	24	EW32SAM-3P024■□		
	32	EW32SAM-3P032■□		
50	0.7	EW50SAM-3P0P7■□	B,K	Blank, X, E, Y, P
	1.4	EW50SAM-3P1P4■□		
	2	EW50SAM-3P002■□		
	2.6	EW50SAM-3P2P6■□		
	4	EW50SAM-3P004■□		
	5	EW50SAM-3P005■□		
	8	EW50SAM-3P008■□		
	10	EW50SAM-3P010■□		
	12	EW50SAM-3P012■□		
	16	EW50SAM-3P016■□		
	24	EW50SAM-3P024■□		
	32	EW50SAM-3P032■□		
63	63	EW63SAM-3P063■□	B,K	Blank, X, E, Y, P

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

Breaker ampere frame	Rated current (A)	Type	■: Rated sensitive current	□: Available mounting and connection
125	45	EW125RAM-3P045■□	B,K	Blank, X, E, P
	60	EW125RAM-3P060■□		
	75	EW125RAM-3P075■□		
	90	EW125RAM-3P090■□		
250	125	EW250RAM-3P125■□	B,K	Blank, X, E, P
	150	EW250RAM-3P150■□		
	175	EW250RAM-3P175■□		
	225	EW250RAM-3P225■□		

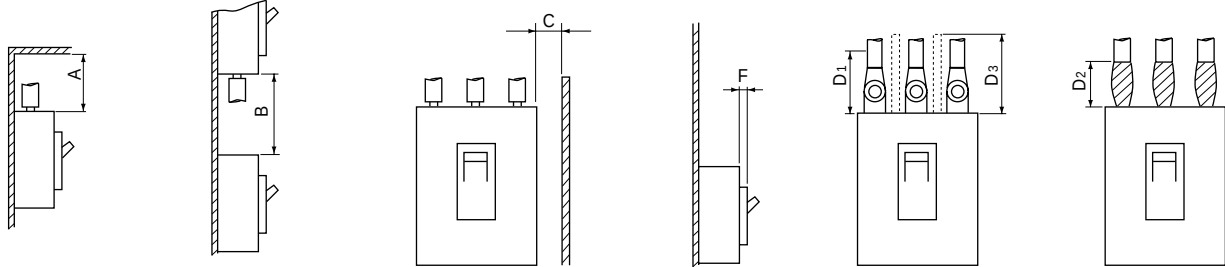
Rated sensitive current	■
30mA	B
100mA	C
100/200mA changeover	K
100/200/500mA changeover	K
100/200/500/1000mA changeover	K

Earth Leakage Circuit Breakers

G-TWIN series

Arc space

■ Arc space, mm



Frame size	ELCB 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	EW32A	—	10	—	10	—	10	—	0	—	0	Exposed live part dimension +20	10	10
	EW32E	10	10	30	10	20	15	0	0	0	0		30	30
	EW32S	10	10	30	30	20	15	0	0	0	0		30	30
50A	EW50A	—	10	—	10	—	10	—	0	—	0		10	10
	EW50E	10	10	30	30	25	15	0	0	0	0		30	30
	EW50S	30	10	40	40	25	15	0	0	0	0		30	30
	EW50R	50	25	50	50	25	15	0	0	10	5		50	50
63A	EW63E	10	10	30	30	25	15	0	0	0	0		30	30
	EW63S	30	10	40	40	25	15	0	0	0	0		30	30
	EW63R	50	25	50	50	25	15	0	0	10	5		50	50
100A	EW100A	—	10	—	20	—	15	—	0	—	0		50	50
	EW100E	50	25	50	50	25	15	0	0	10	5		50	50
125A	EW125J	40	40	50	50	25	20	0	0	10	5		50	50
	EW125S	40	40	60	60	25	20	5	0	10	5		50	50
	EW125R	40	40	60	60	25	20	5	0	10	5		50	50
160A	EW160E	40	40	50	50	50	15	0	0	10	5		80	80
	EW160J	40	40	60	60	50	20	0	0	10	5		80	80
	EW160S	40	40	80	80	50	20	5	0	10	10		80	80
	EW160R	40	40	80	80	50	20	5	0	10	10		80	80
250A	EW250E	40	40	50	50	50	15	0	0	10	5		80	80
	EW250J	40	40	60	60	50	20	0	0	10	5		80	80
	EW250S	40	40	80	80	50	20	5	0	10	10		80	80
	EW250R	40	40	80	80	50	20	5	0	10	10		80	80
400A	EW400E	100	80	100	80	50	20	0	0	10	5		100	100
	EW400S	100	80	100	80	50	20	0	0	10	5	100	100	
	EW400R	100	80	100	80	80	40	5	0	20	10	100	100	
	EW400H	100	80	100	80	80	40	5	0	20	10	100	100	
630A	EW630E	100	80	100	80	80	40	0	0	10	5	100	100	
	EW630R	100	80	100	80	80	40	5	0	20	10	100	100	
	EW630H	120	100	120	100	80	40	5	0	20	10	120	120	
800A	EW800E	100	80	100	80	80	40	0	0	10	5	100	100	
	EW800R	100	80	100	80	80	40	5	0	20	10	100	100	
	EW800H	120	100	120	100	80	40	5	0	20	20	120	120	

Earth Leakage Circuit Breakers

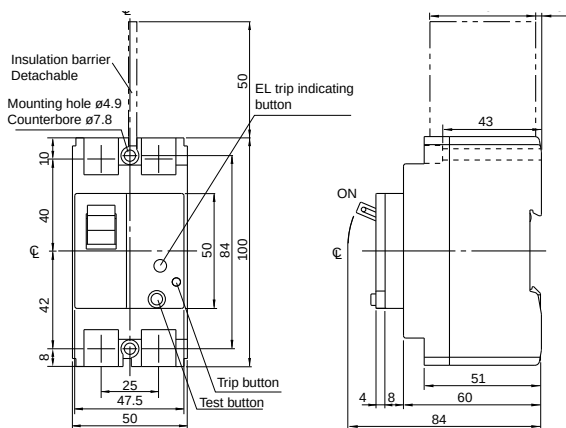
G-TWIN series

Dimensions / Standard

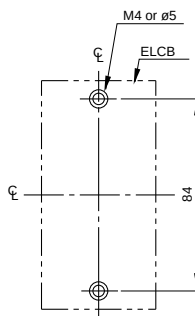
■ Dimensions, mm

● Front mounting, front connection

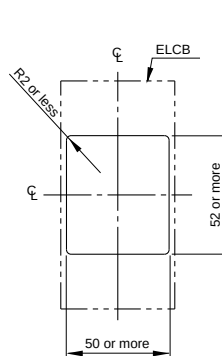
EW32□-2P, EW50□-2P



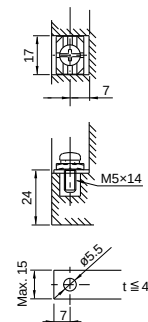
Panel drilling



Front panel cutting

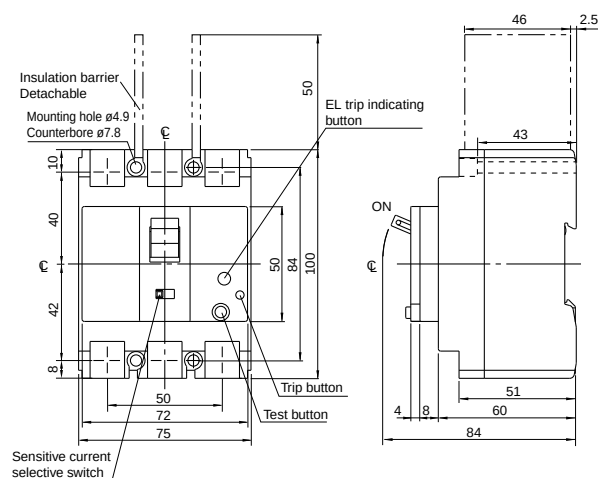


Terminal section

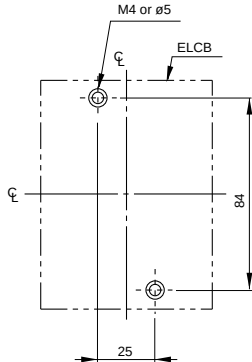


Insulation barriers
Standard provided: EW50SAG, EW50RAG
Optional: EW32AAG, EW50EAG

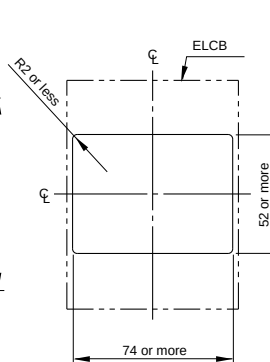
EW32□-3P, EW50□-3P



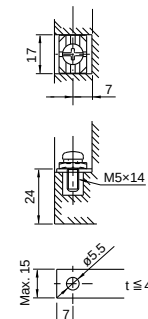
Panel drilling



Front panel cutting

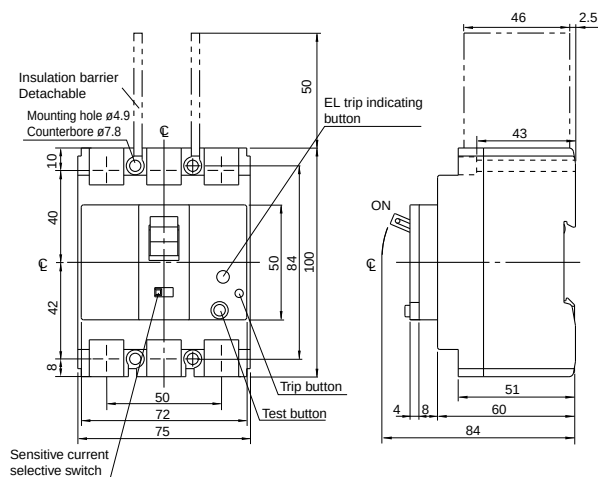


Terminal section

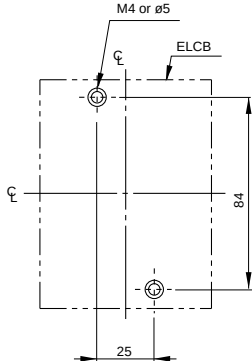


Insulation barriers
Standard provided: EW50SAG, EW50RAG
Optional: EW32AAG, EW32SAG, EW50EAG

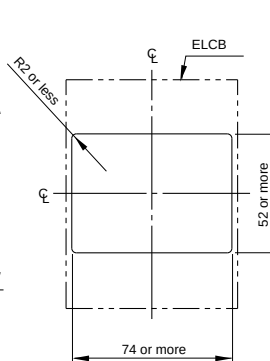
EW63□-3P



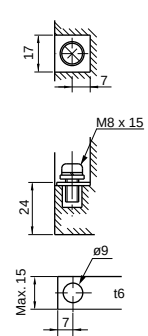
Panel drilling



Front panel cutting



Terminal section



Earth Leakage Circuit Breakers

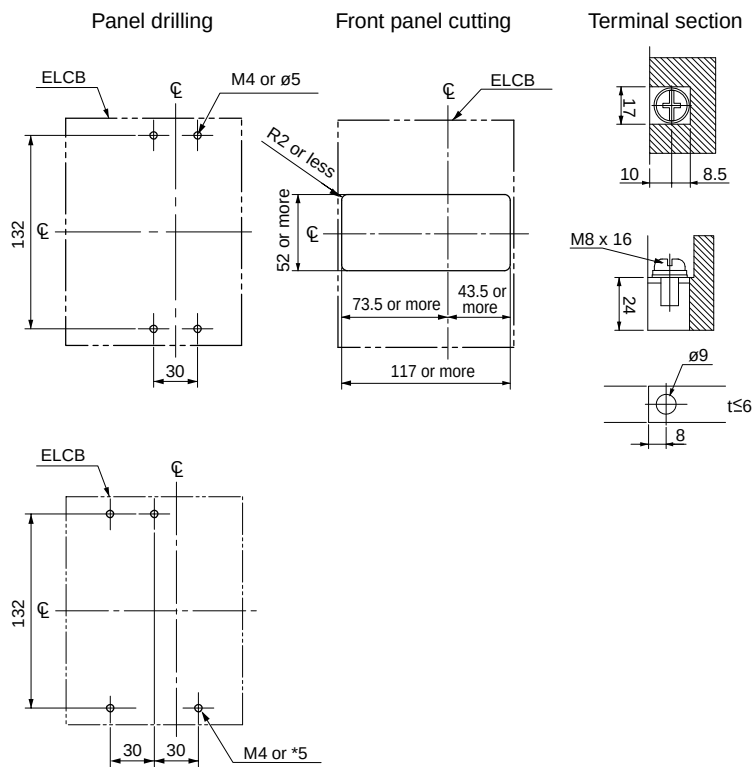
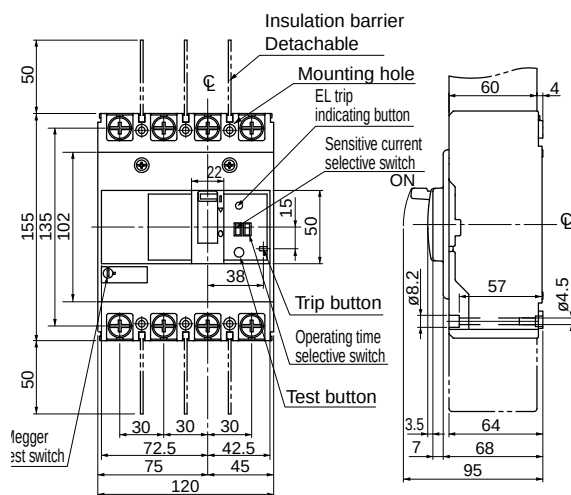
G-TWIN series

Dimensions / Standard

■ Dimensions, mm

● Front mounting, front connection

EW125□-4P



For N, V type handle

Earth Leakage Circuit Breakers

G-TWIN series

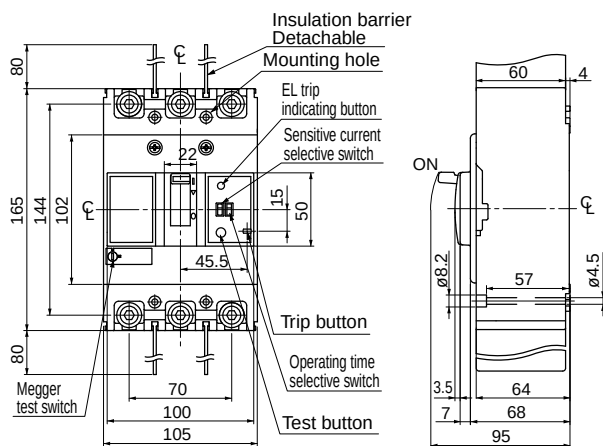
Dimensions / Standard

■ Dimensions, mm

● Front mounting, front connection

EW160□-3P

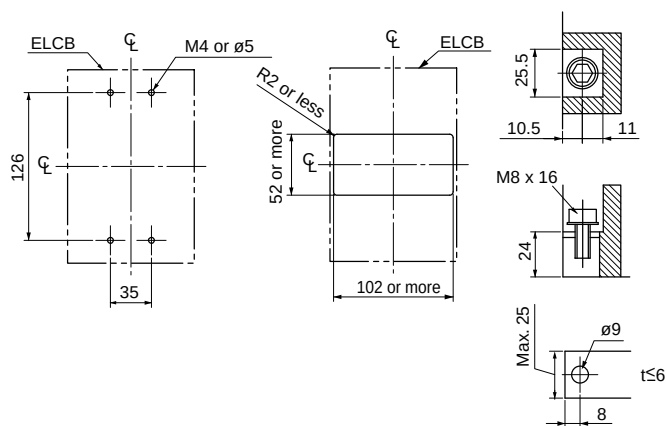
EW250□-3P



Panel drilling

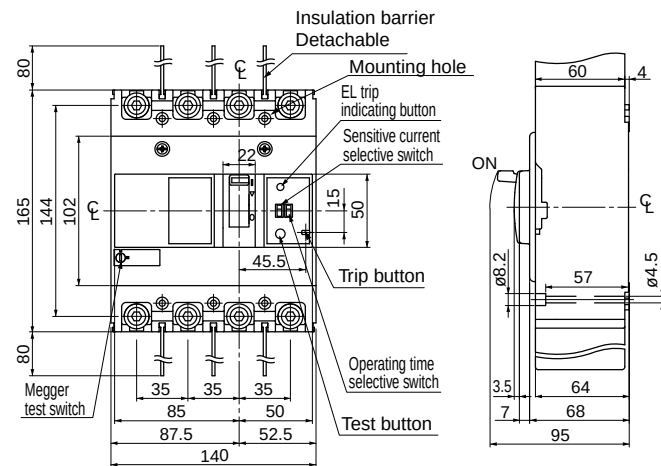
Front panel cutting

Terminal section



EW160□-4P

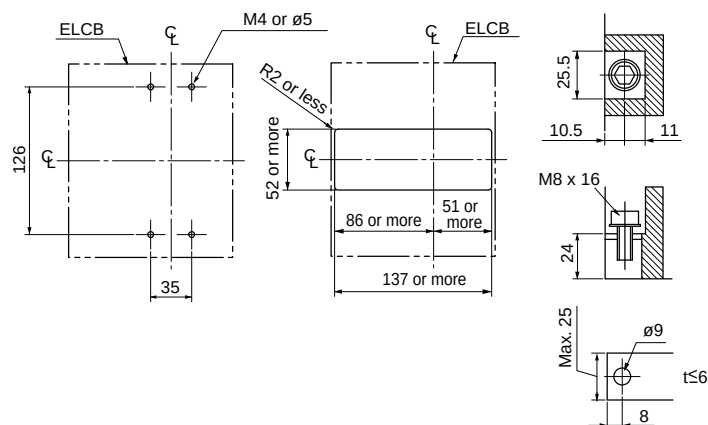
EW250□-4P



Panel drilling

Front panel cutting

Terminal section



Earth Leakage Circuit Breakers

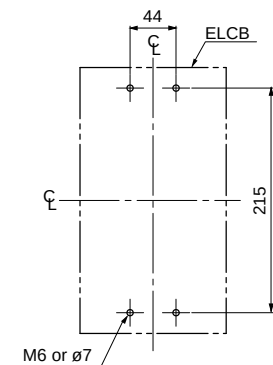
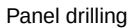
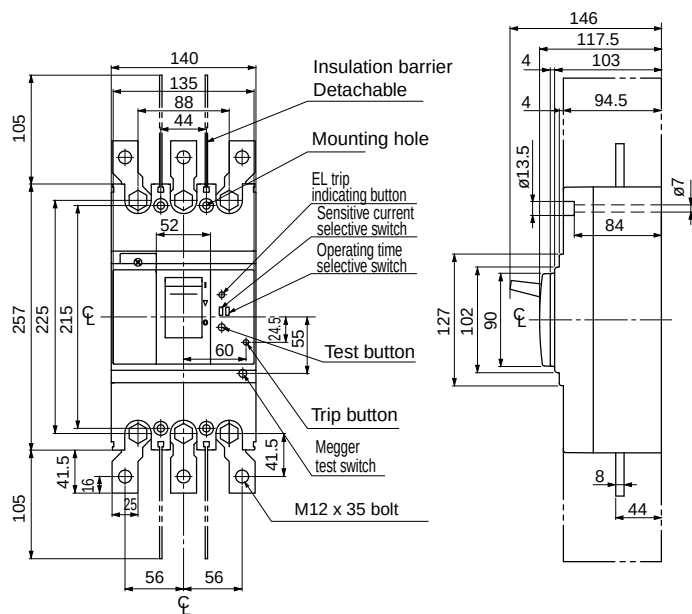
G-TWIN series

Dimensions / Standard

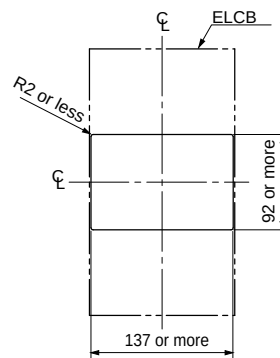
■ Dimensions, mm

- **Front mounting, front connection**

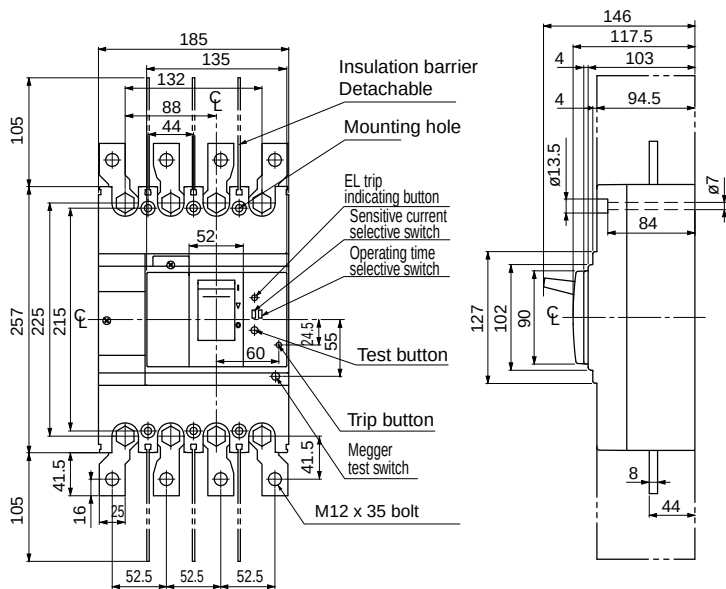
EW400□-3P



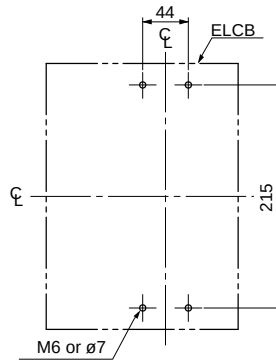
Front panel cutting



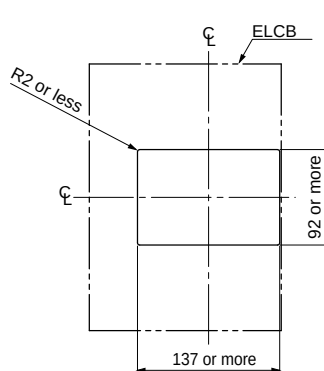
EW400□-4P



Panel drilling



Front panel cutting



Earth Leakage Circuit Breakers

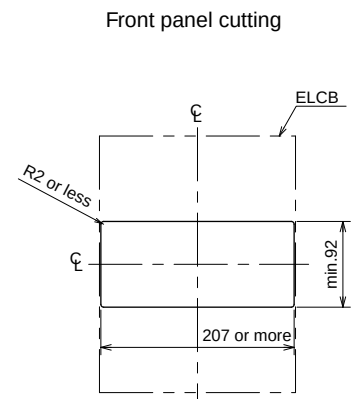
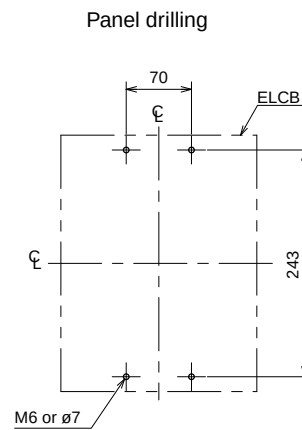
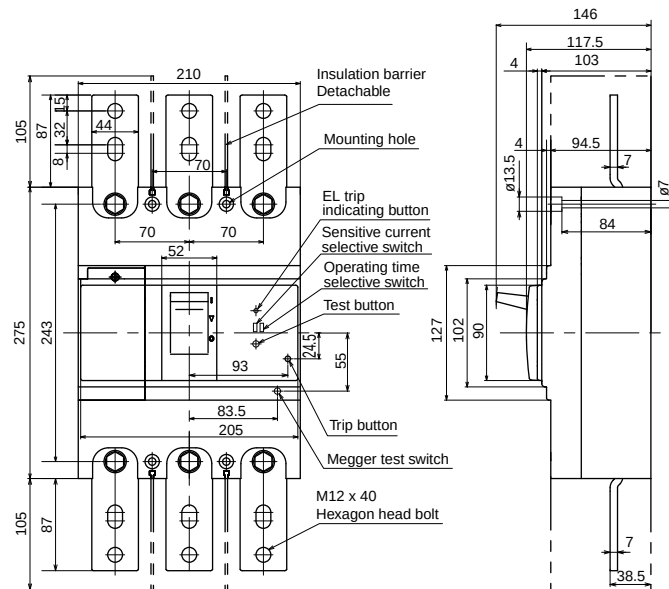
G-TWIN series

Dimensions / Standard

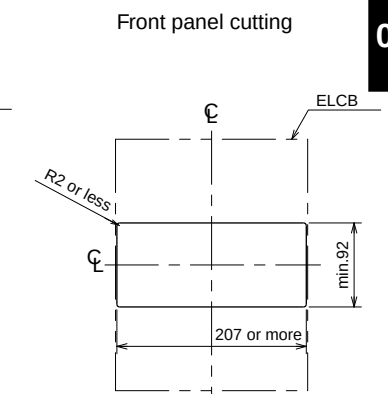
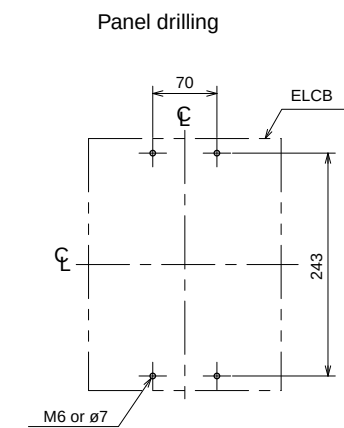
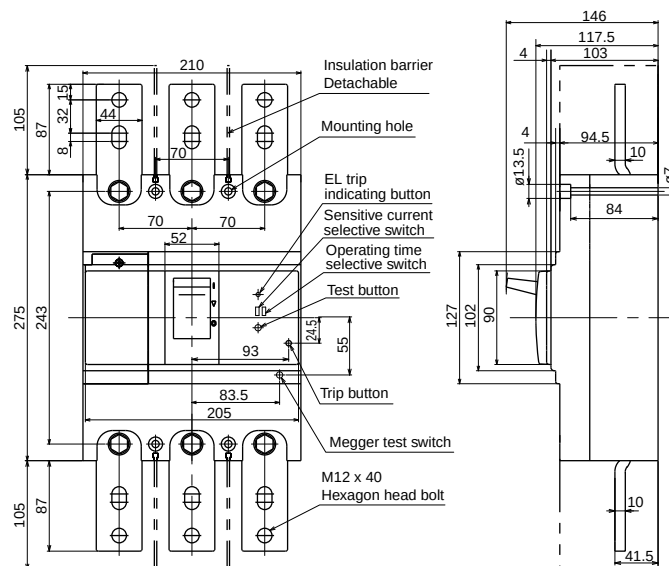
■ Dimensions, mm

● Front mounting, front connection

EW630□-3P



EW800□-3P



07

Earth Leakage Circuit Breakers

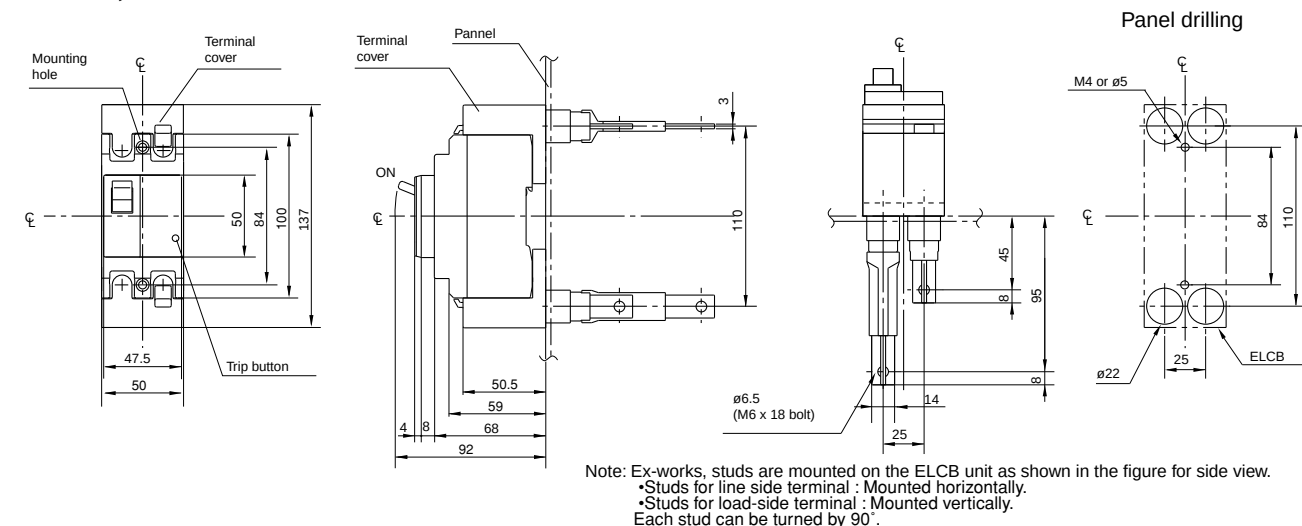
G-TWIN series

Dimensions / Standard

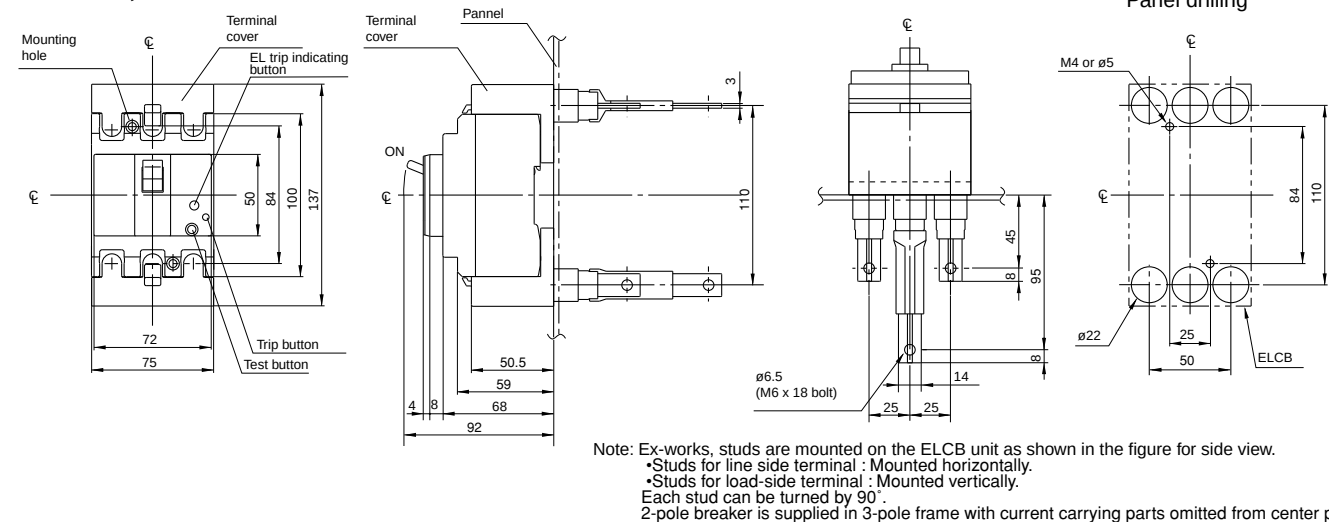
■ Dimensions, mm

● Front mounting, rear connection (type X)

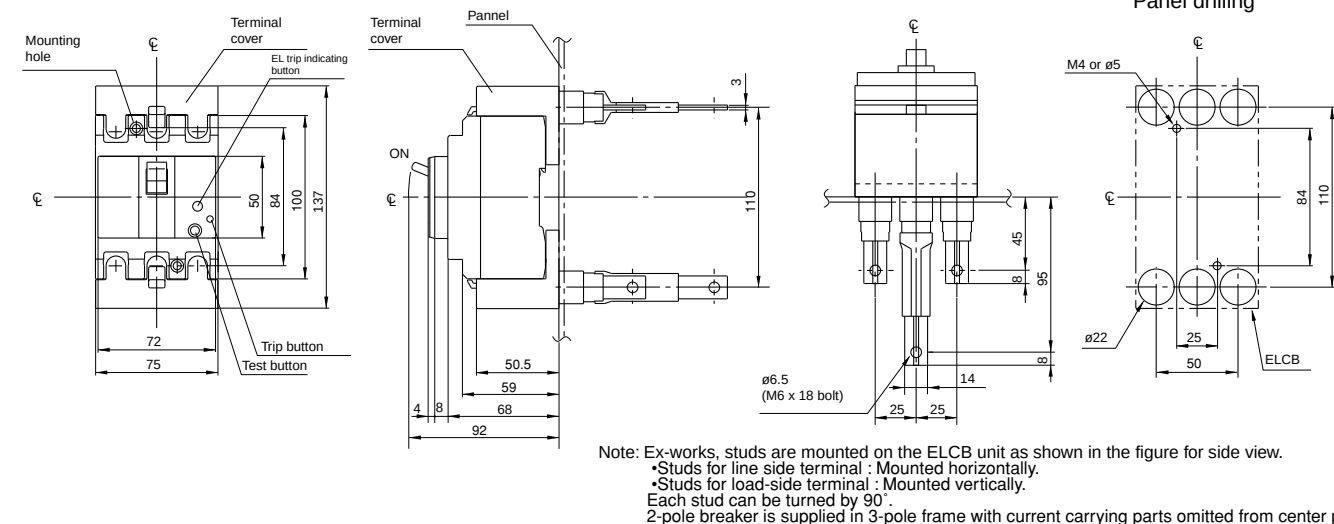
EW32□-2P, EW50□-2P



EW32□-3P, EW50□-3P



EW63□-3P



Each stud can be turned by 90°.

Earth Leakage Circuit Breakers

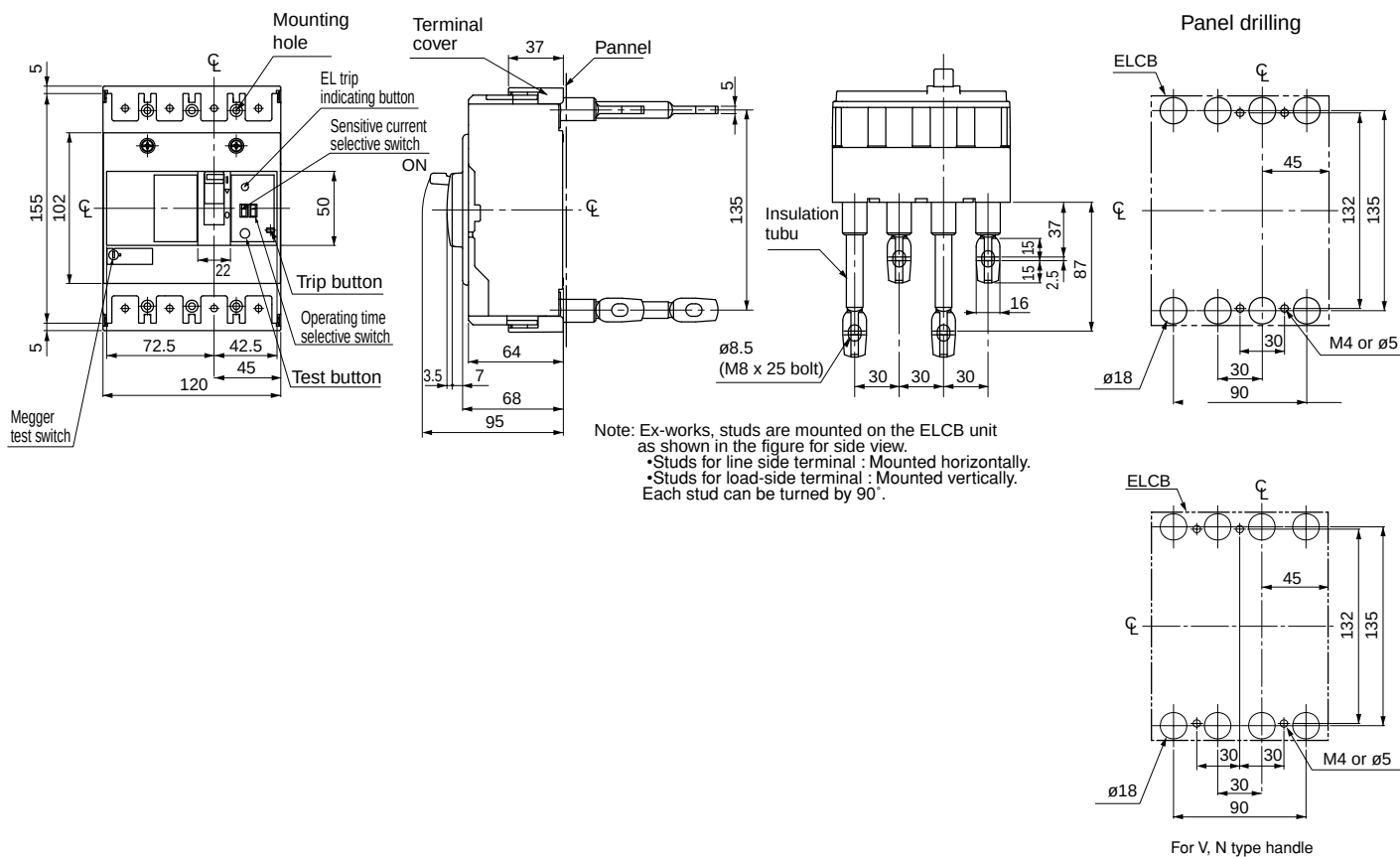
G-TWIN series

Dimensions / Standard

■ Dimensions, mm

● Front mounting, rear connection (type X)

EW125□-4P

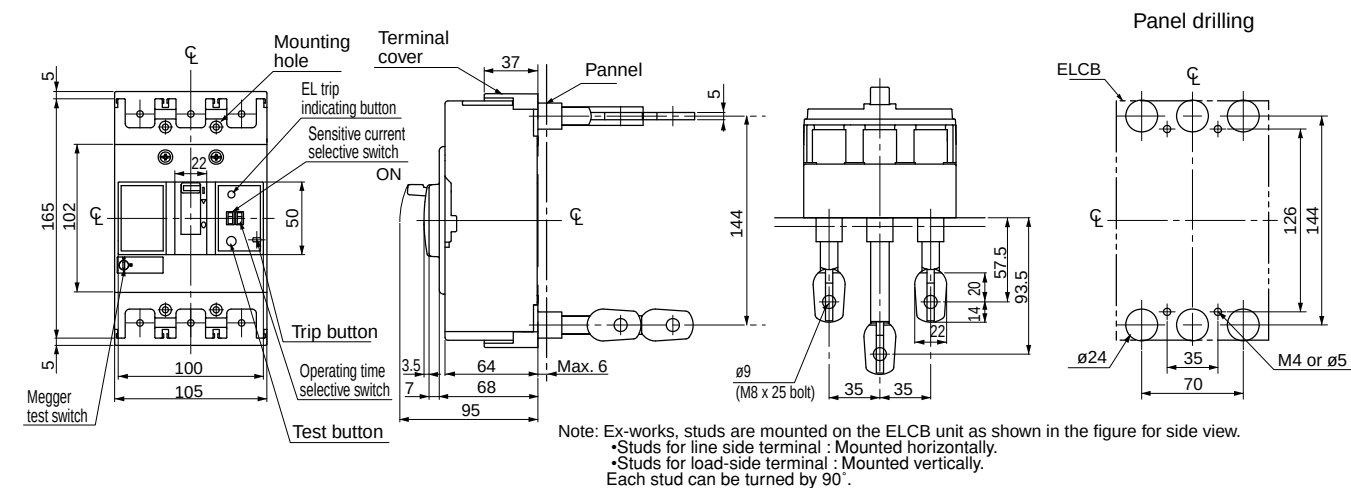


■ Dimensions, mm

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

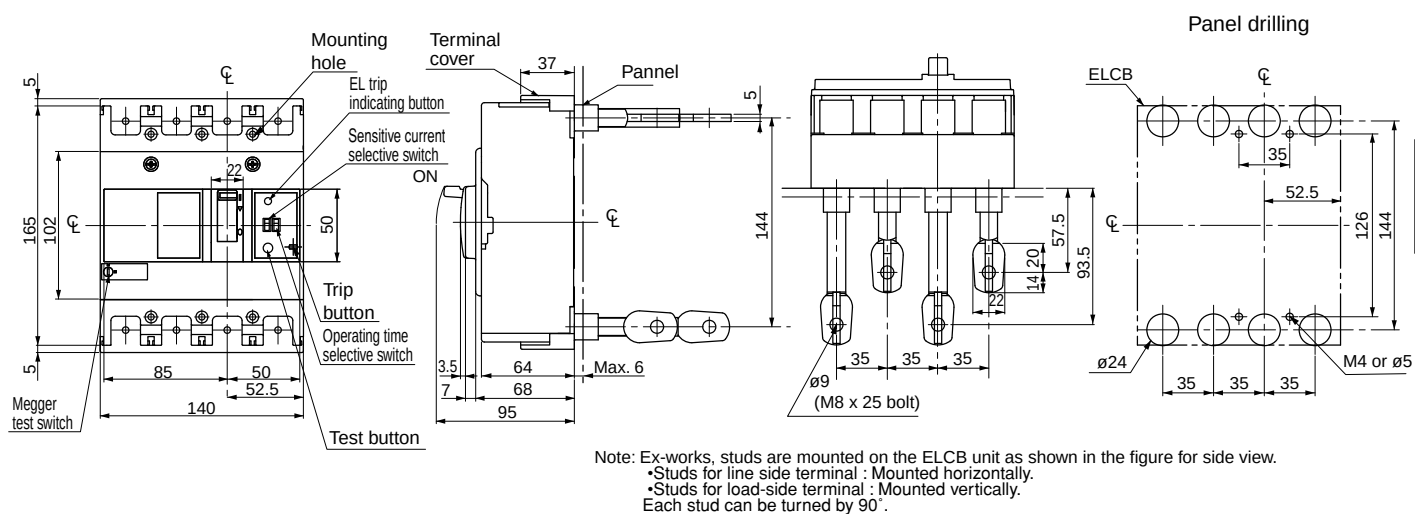
EW160□-3P

EW250□-3P



EW160□-4P

EW250□-4P



Earth Leakage Circuit Breakers

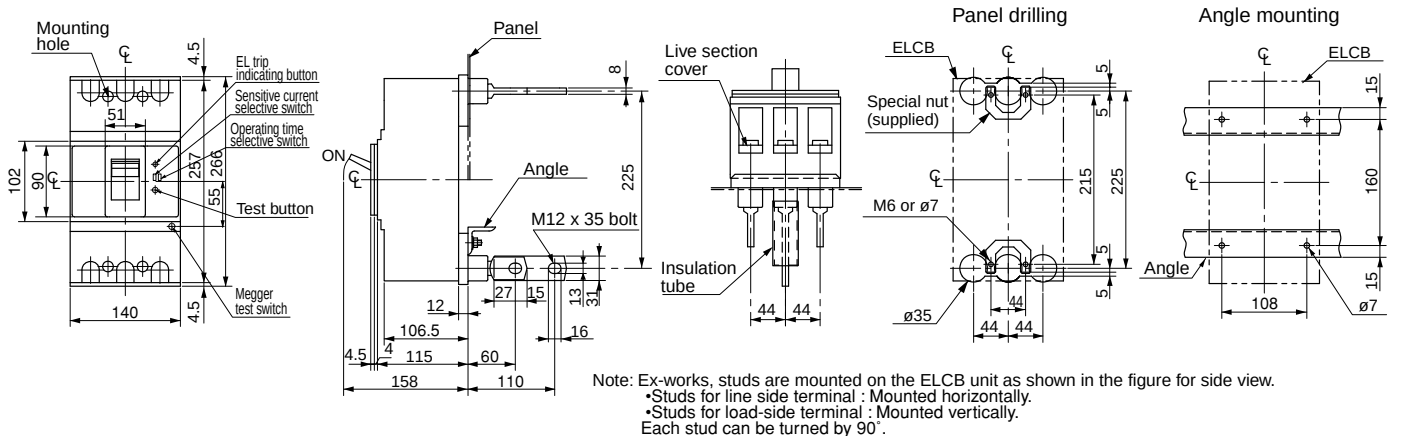
G-TWIN series

Dimensions / Standard

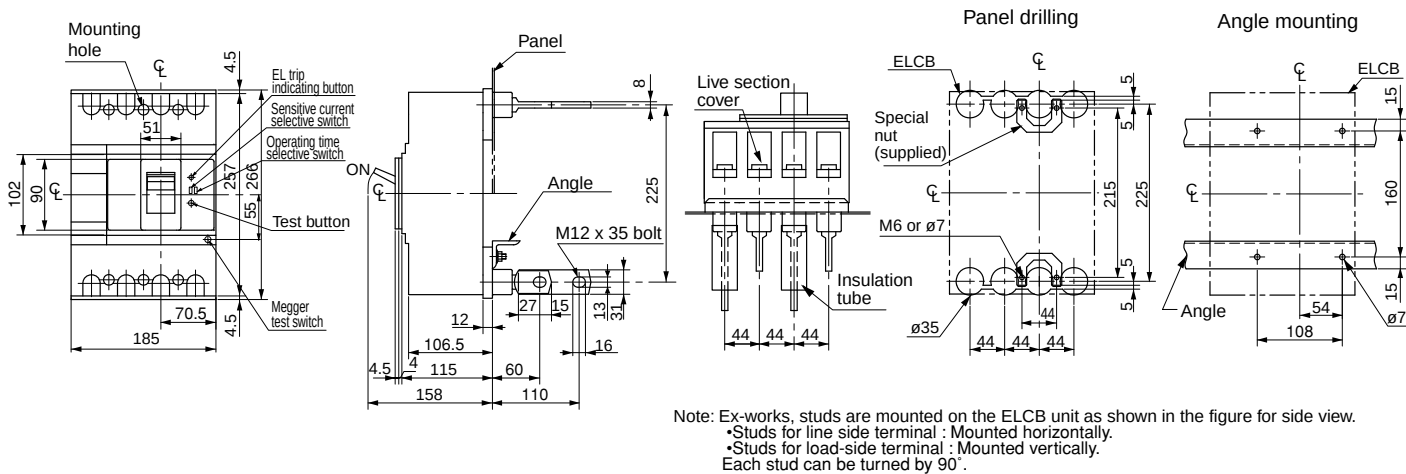
■ Dimensions, mm

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

EW400□-3P



EW400□-4P



Earth Leakage Circuit Breakers

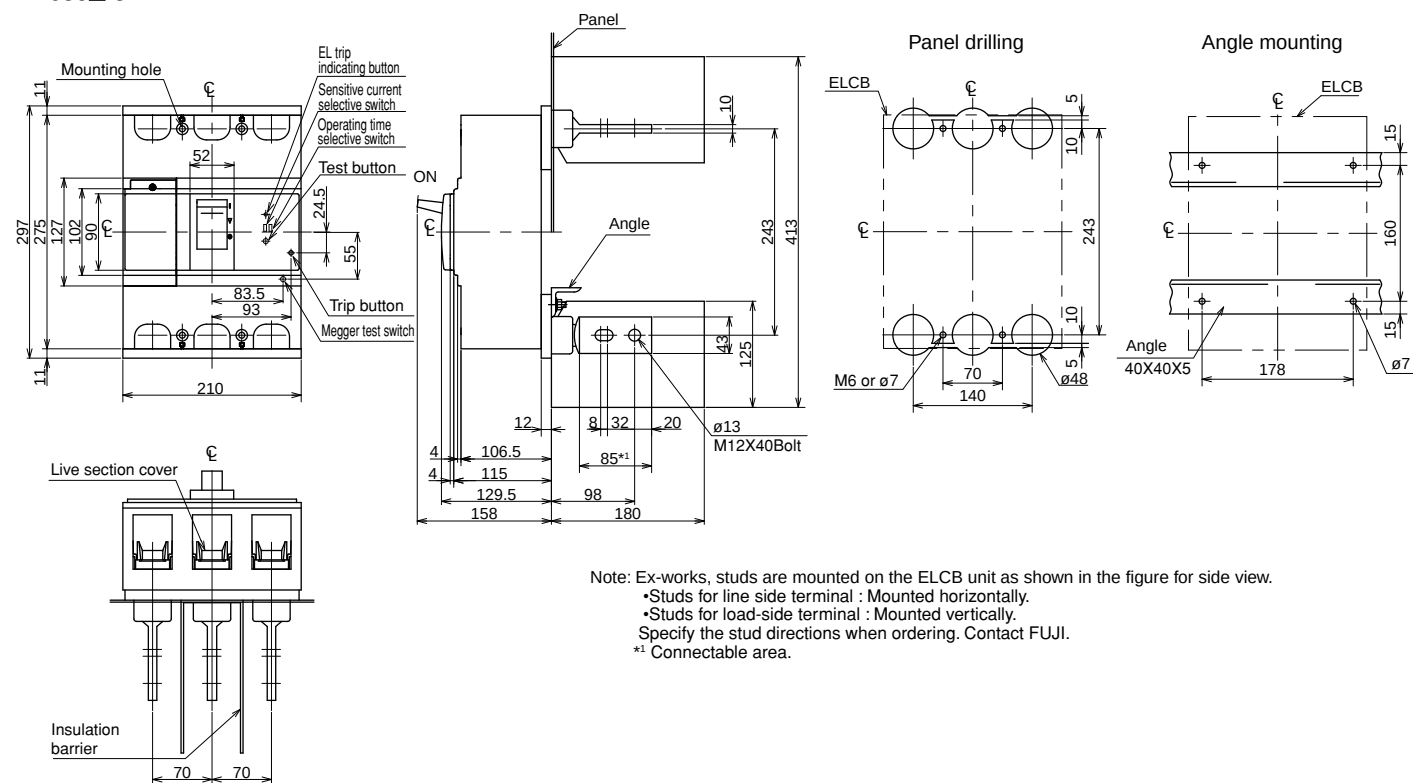
G-TWIN series

Dimensions / Standard

■ Dimensions, mm

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

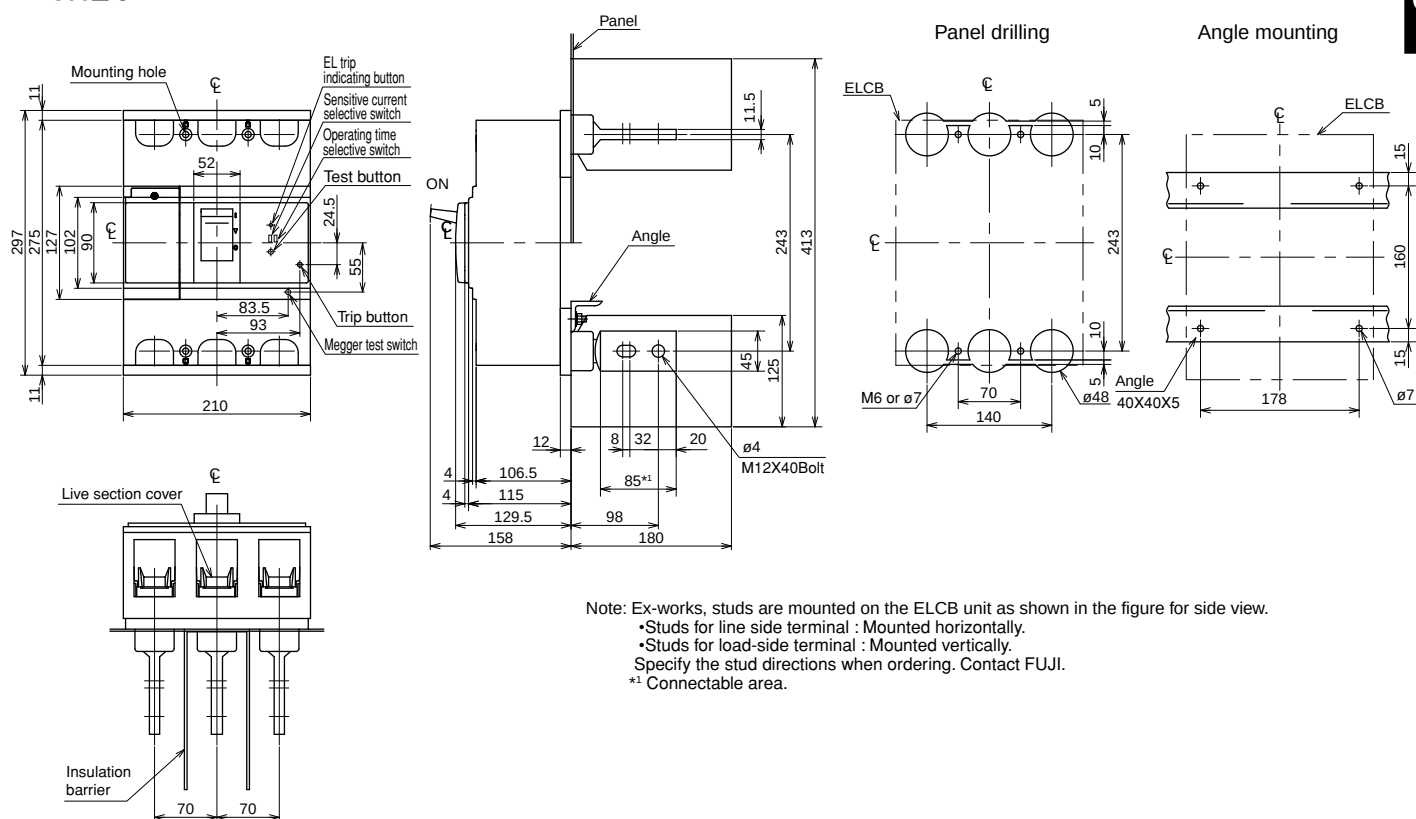
EW630□-3P



Note: Ex-works, studs are mounted on the ELCB 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 FUJIKURA.
- *1 Connectable area.

EW800□-3P



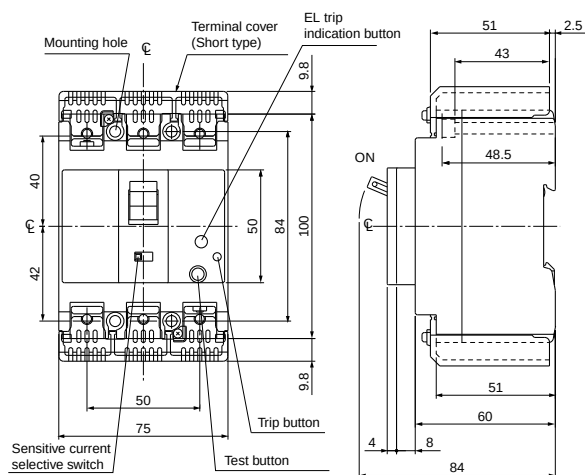
Note: Ex-works, studs are mounted on the ELCB unit as shown in the figure for side view.

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

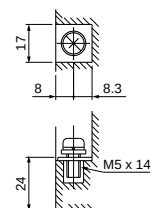
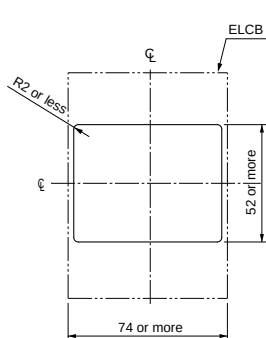
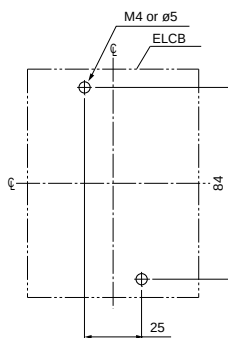
■ Dimensions, mm
● Front mounting, front connection

■ Dimensions, mm

- **Front mounting, front connection**

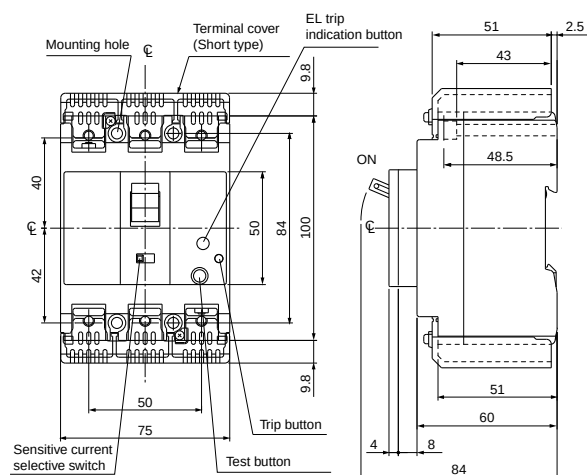


Terminal section

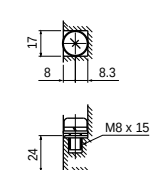
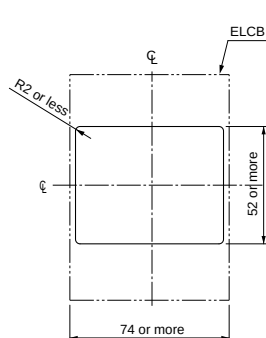
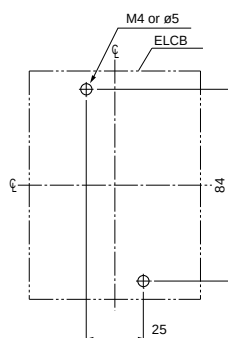


■ Dimensions, mm

- **Front mounting, front connection**



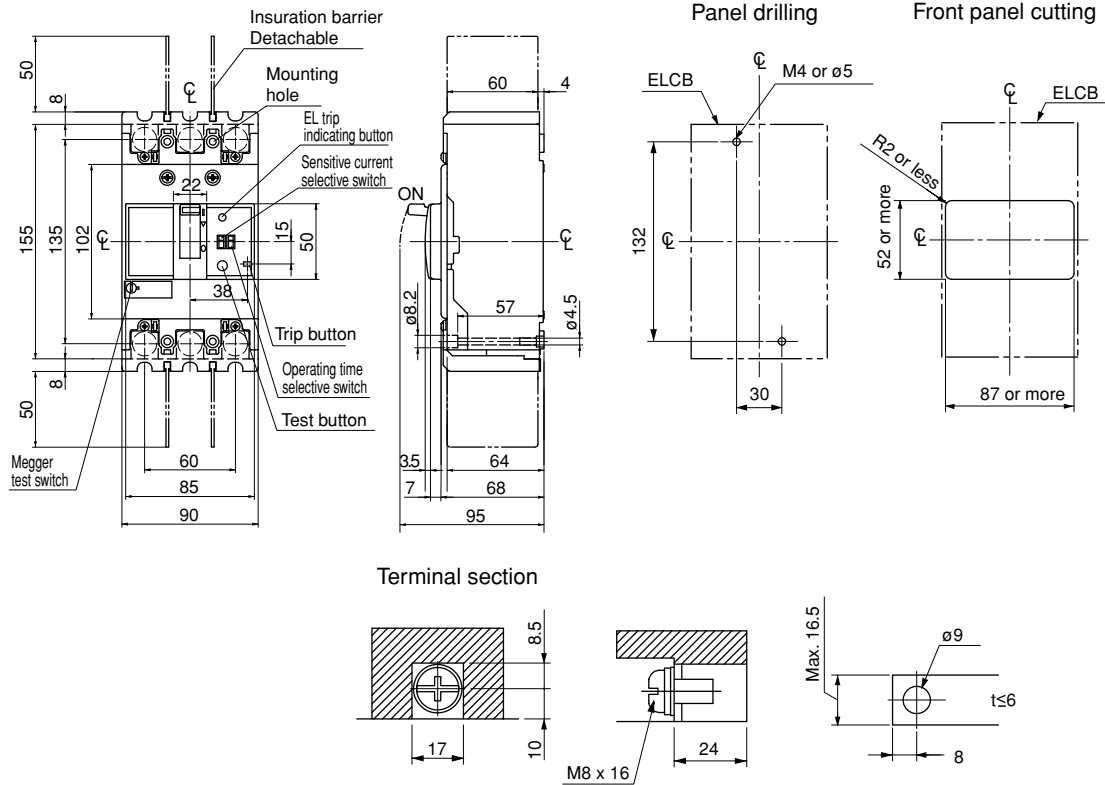
Terminal section



■ Dimensions, mm

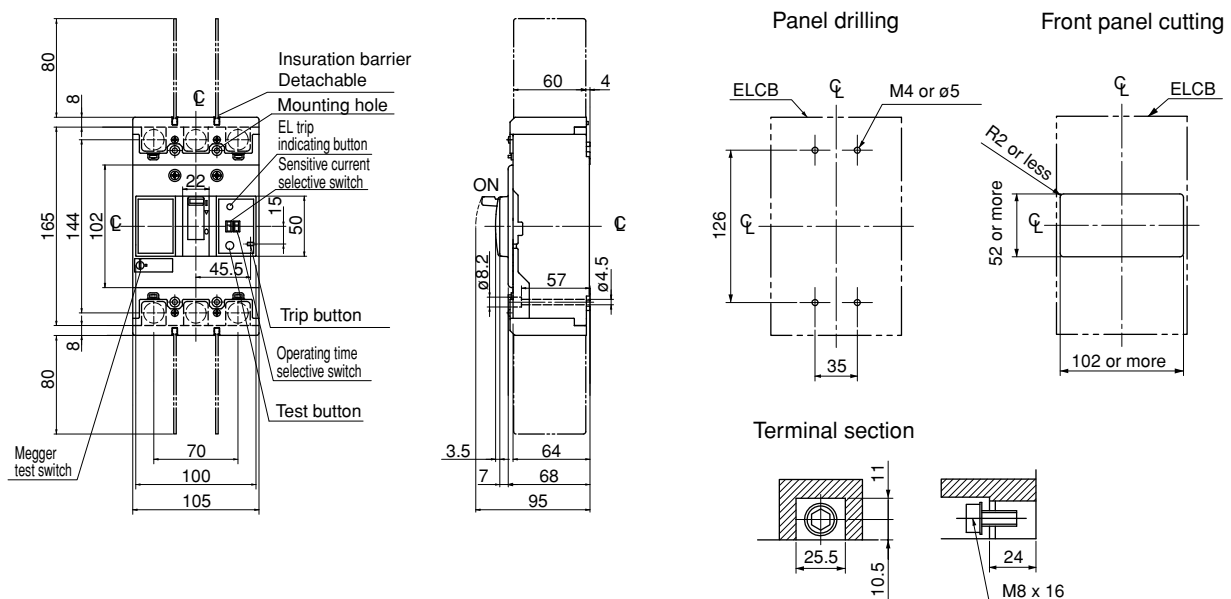
● Front mounting, front connection

EW125□U-3P



07

EW250□U-3P



Earth Leakage Circuit Breakers

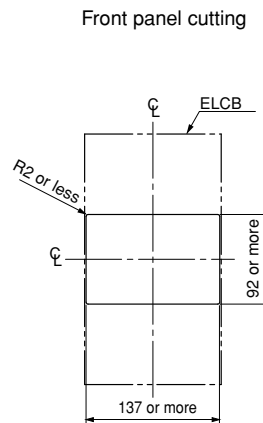
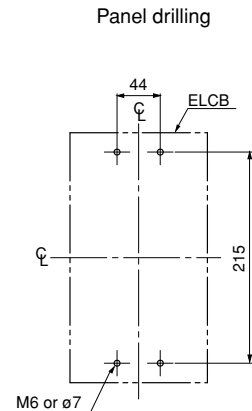
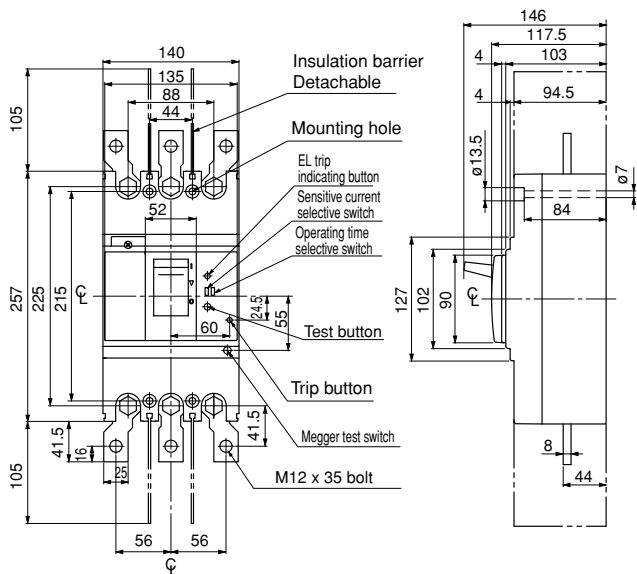
G-TWIN series

Dimensions / Global

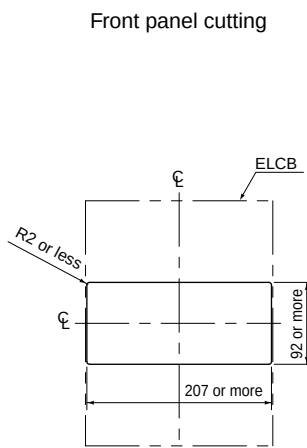
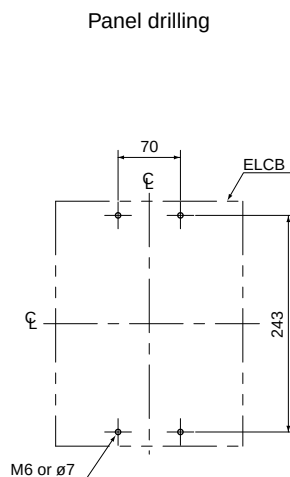
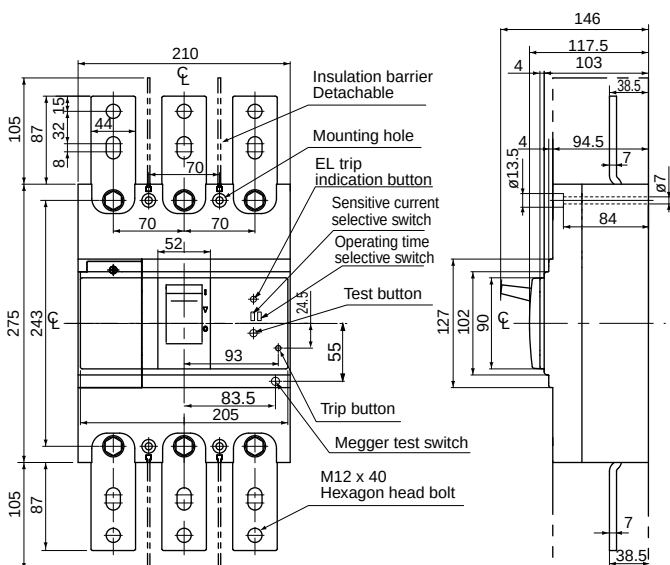
■ Dimensions, mm

- **Front mounting, front connection**

EW400□U-3P



EW630□U-3P



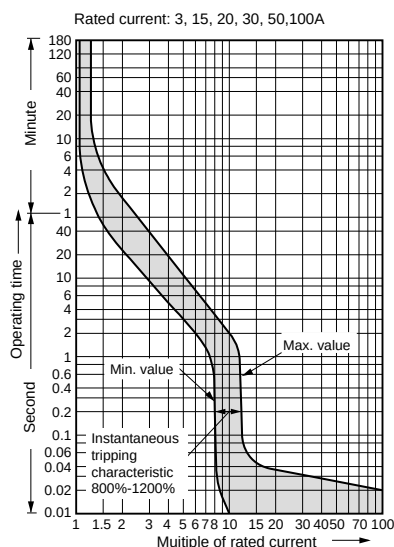
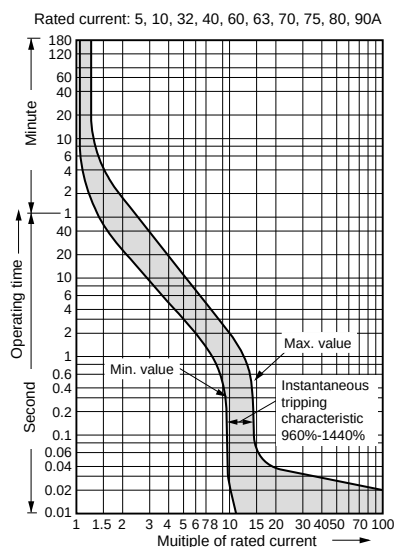
Earth Leakage Circuit Breakers

G-TWIN series

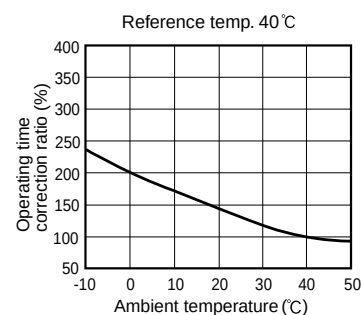
Characteristic curves

■ Characteristic curves / Line protection

EW32/50/63/100

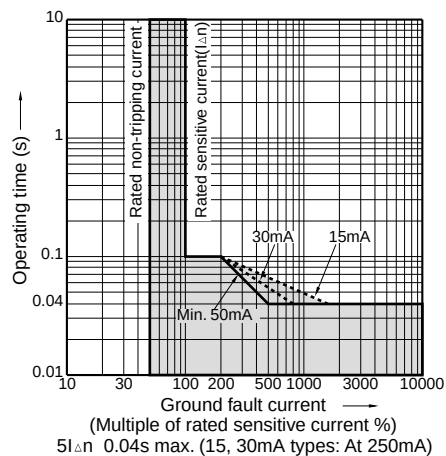


Temperature correction curve



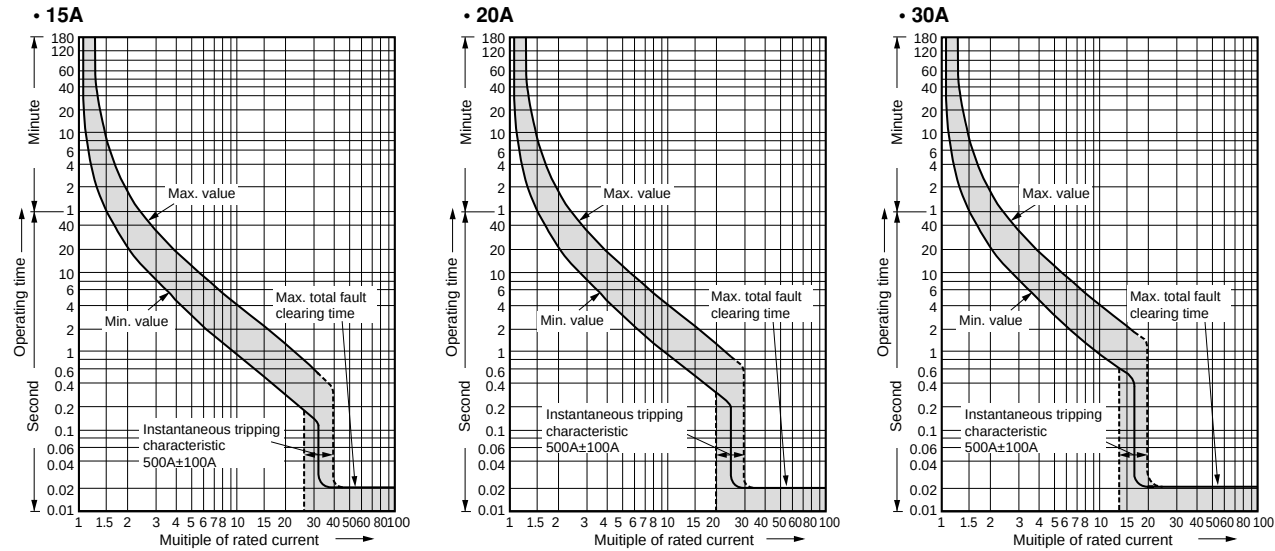
Earth leakage tripping

EW32/50/63/100A

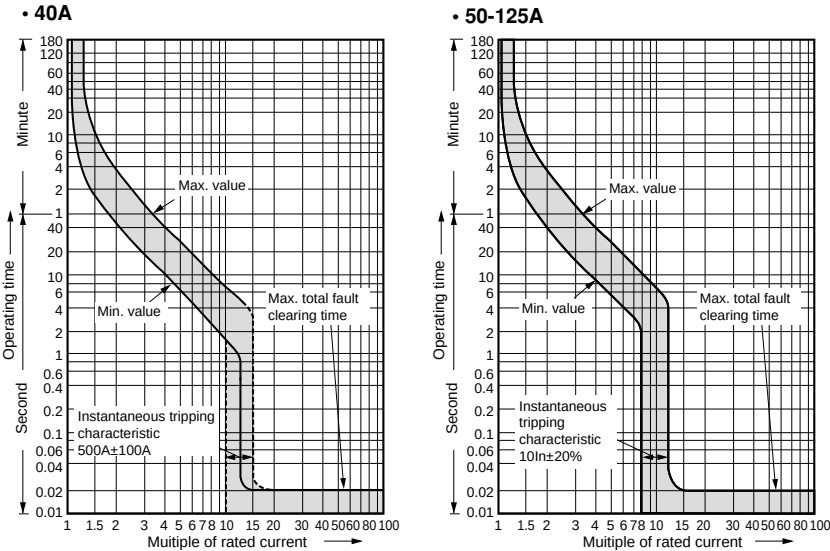
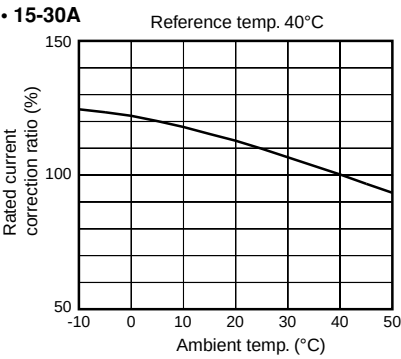


Earth Leakage Circuit Breakers
G-TWIN series
Characteristic curves

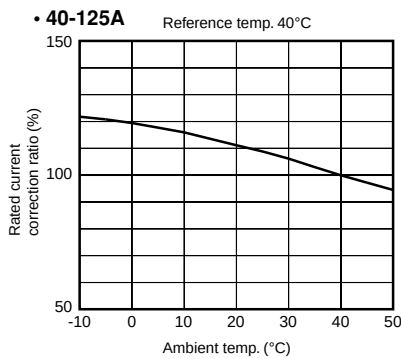
■ Characteristic curves / Line protection
EW125



Temperature correction curve

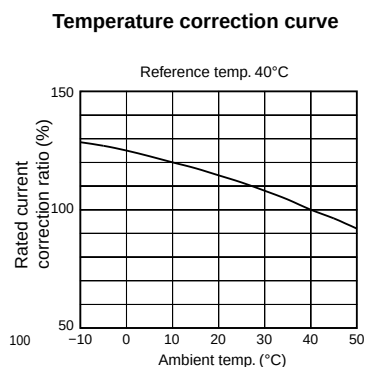
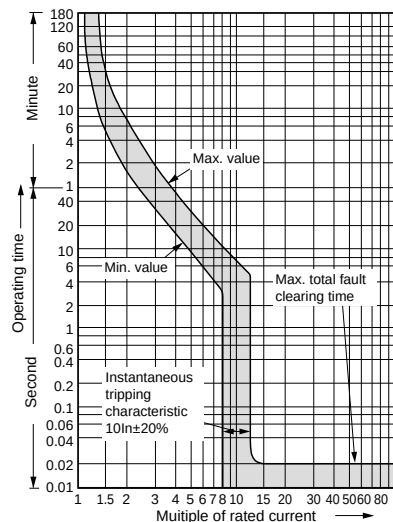


Temperature correction curve

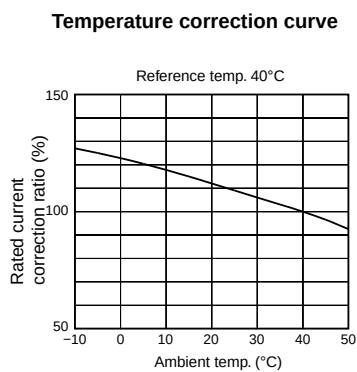
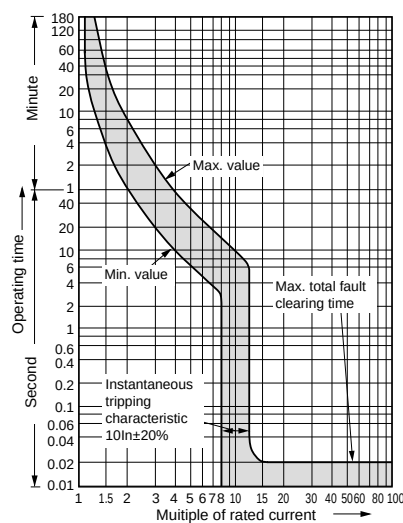


■ Characteristic curves / Line protection

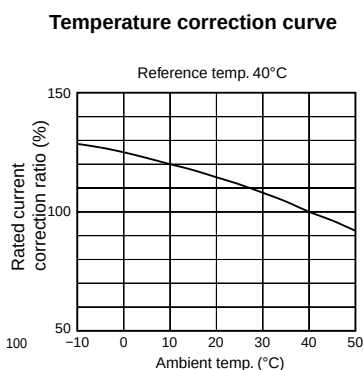
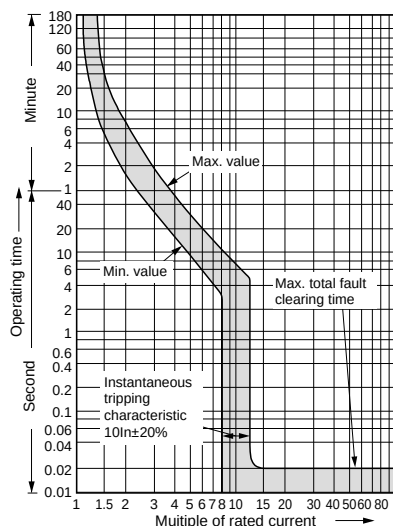
EW160/250



EW400

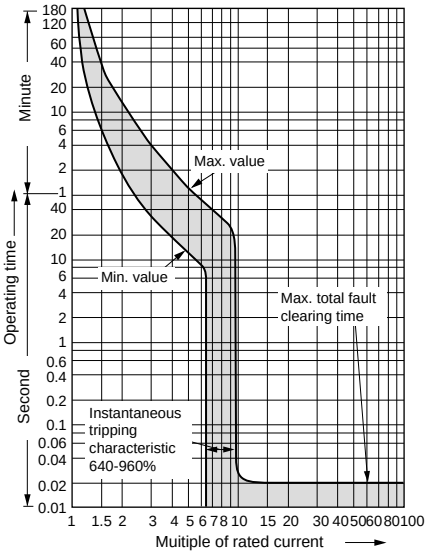


EW630

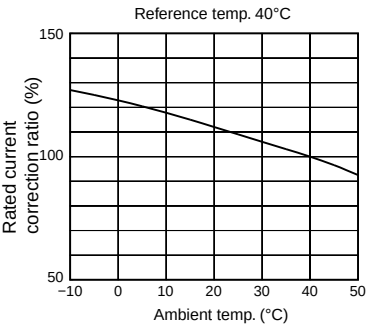


Earth Leakage Circuit Breakers
G-TWIN series
Characteristic curves

■ Characteristic curves / Line protection
EW800

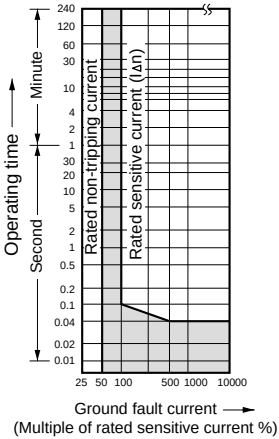


Temperature correction curve

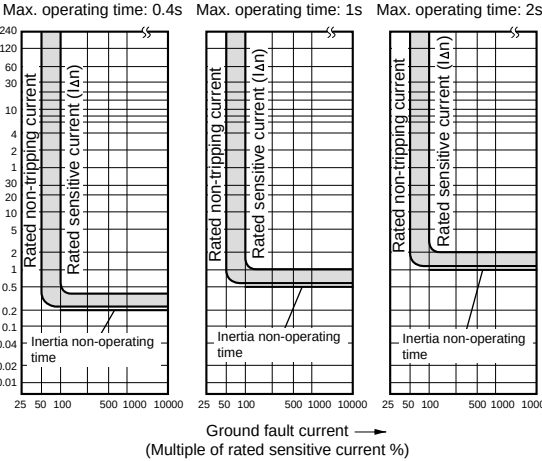


Earth leakage tripping
EW125/160/250/400/630/800

Instantaneous trip type

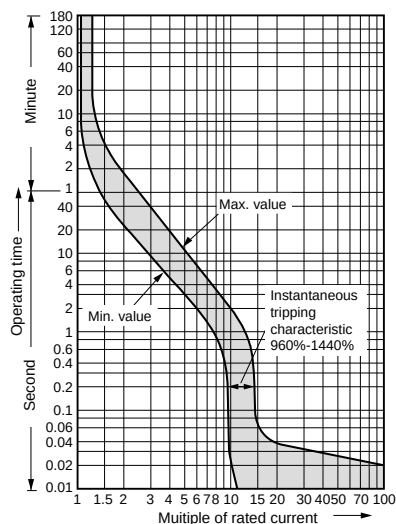


Time-delay trip type

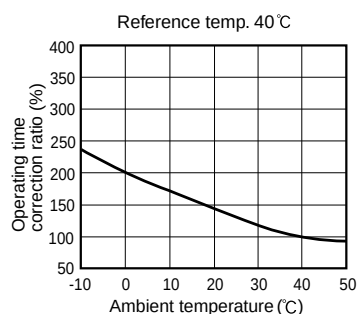


■ Characteristic curves / Motor protection

EW32/50/63/100

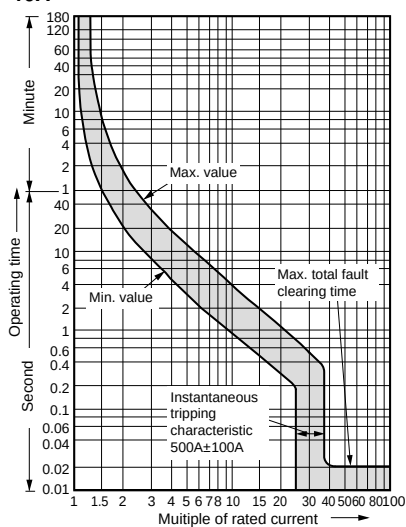


Temperature correction curve

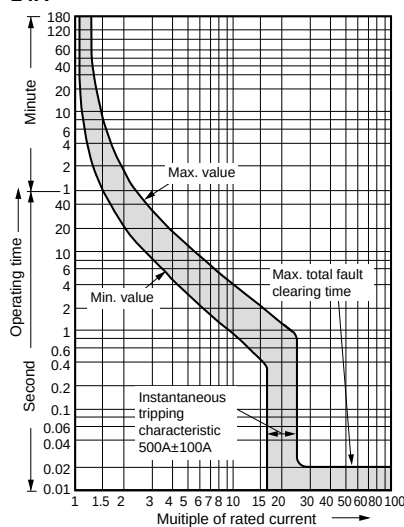


EW125

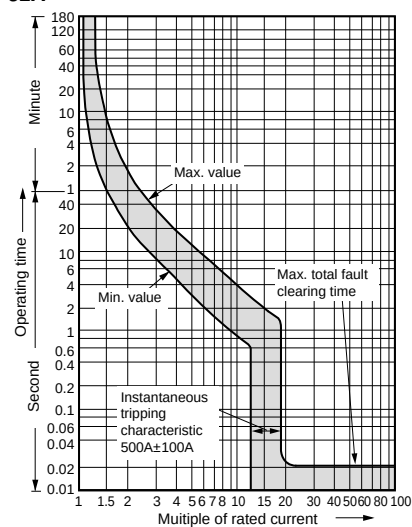
• 16A



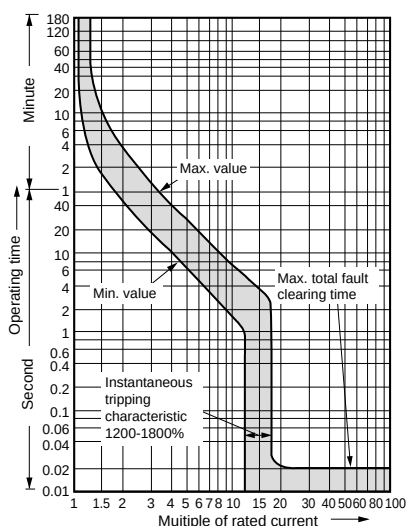
• 24A



• 32A

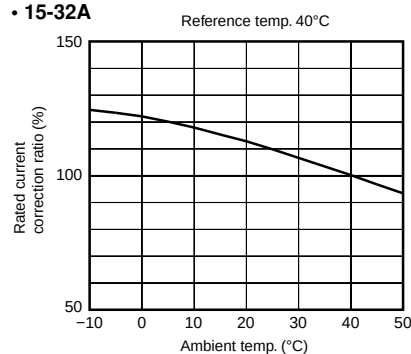


• 40-90A

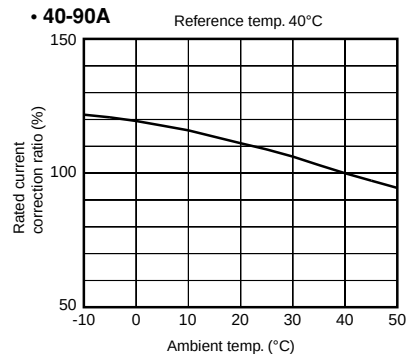


Temperature correction curve

• 15-32A

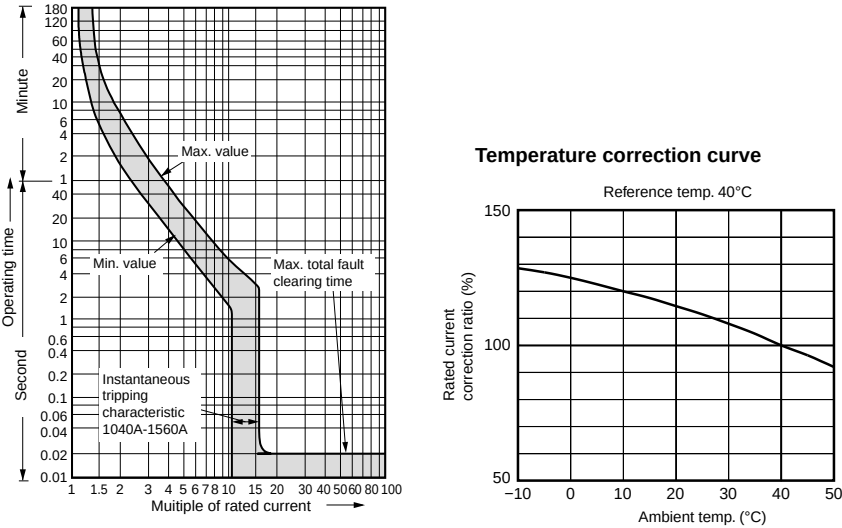


• 40-90A

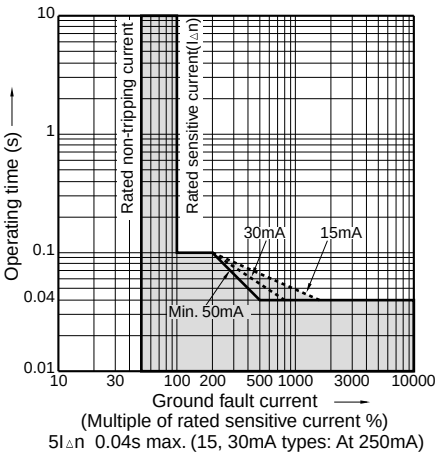


Earth Leakage Circuit Breakers
G-TWIN series
Characteristic curves

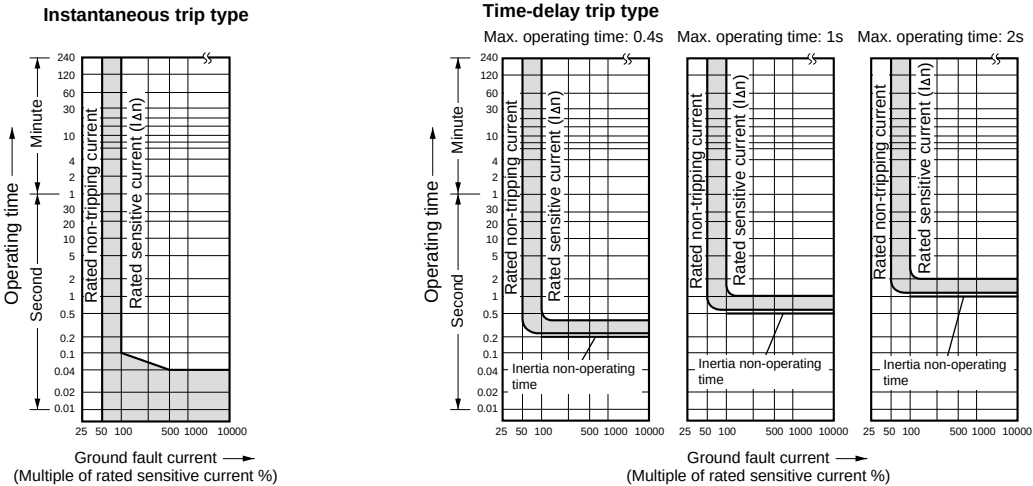
■ Characteristic curves / Motor protection
EW250



Earth leakage tripping
EW32/50/63



EW125/250



■ Variation of internal accessory
• 32 to 100AF

Auxiliary switch (Type W)



This switch is used for indicator lamp or control circuit.
See page 07/63.

Alarm switch (Type K)

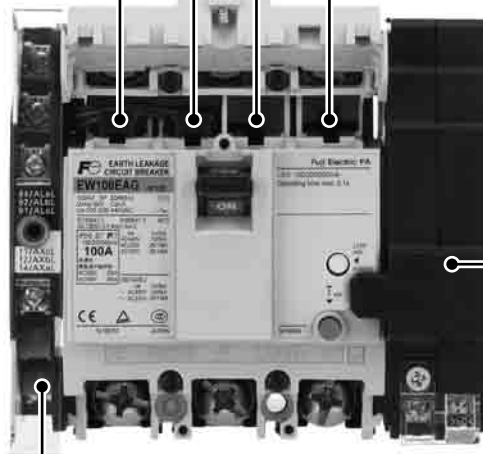


This switch can be connected to a warning lamp or buzzer to indicate when the breaker has been tripped.
See page 07/63.

Shunt trip device (Type F)



The purpose of this accessory is to trip the breaker from a distance.
See page 07/64.



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 07/65.

Terminal block (Type A)



A wiring terminal for internal accessories (Order with W, K or F)
See page 07/66.

Earth Leakage 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 07/63.

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 07/63.

Shunt trip device (Type F)

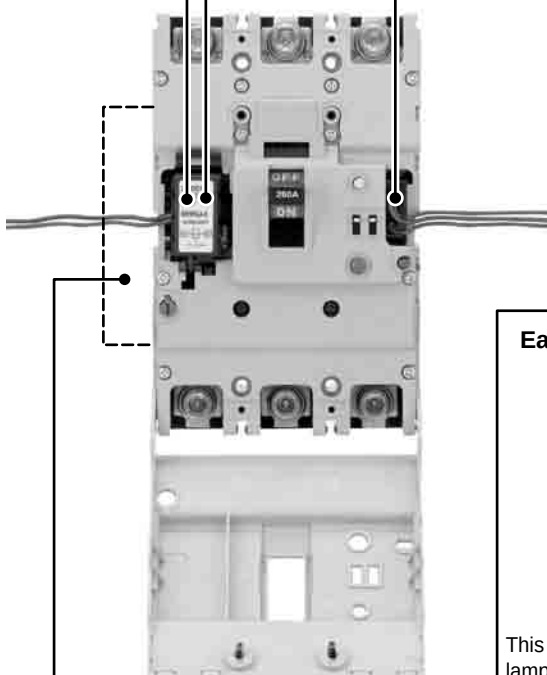


The purpose of this accessory is to trip the breaker from a distance.
See page 07/64.

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 07/65.



Earth alarm switch (Type L)



This switch can be connected to a warning lamp or buzzer to indicate when the breaker has been tripped by leakage current.
See page 07/63.

Terminal block (Type A)



A wiring terminal for internal accessories (Factory-mounted)
See page 07/66.

■ 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 07/63.

Shunt trip device (Type F)



The purpose of this accessory is to trip the breaker from a distance. See page 07/64.

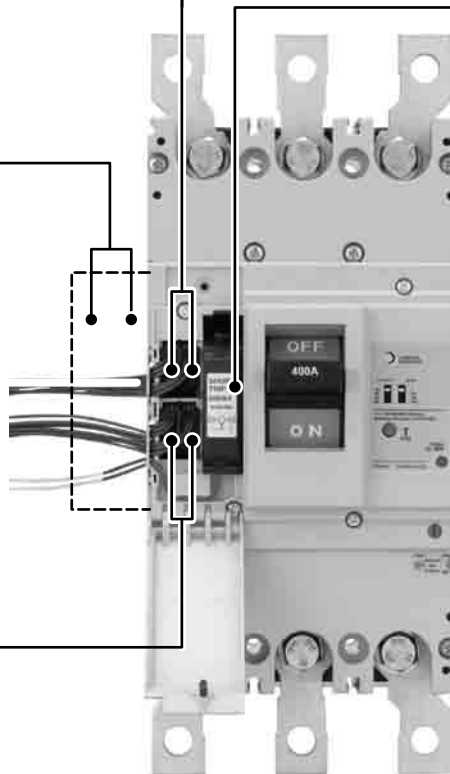
Terminal block (Type A)

A wiring terminal for internal accessories (Factory-mounted)
See page 07/66.

Auxiliary switch (Type W)



This switch is used for indicator lamp or control circuit. See page 07/63.



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 07/65.

Earth alarm switch (Type L)

This switch can be connected to a warning lamp or buzzer to indicate when the breaker has been tripped by leakage current. See page 07/63. (Factory-mounted)

Earth Leakage Circuit Breakers

G-TWIN series

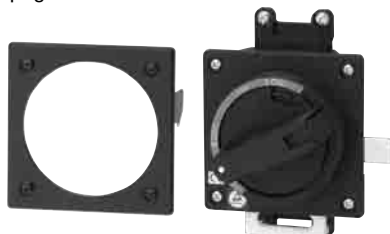
Accessories

■ Variation of external accessory

External operating handles

• N-type

See page 07/74.



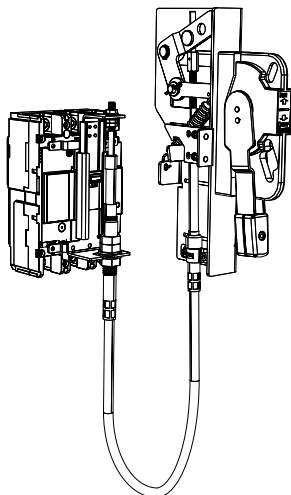
• V-type

See page 07/74.



• F-type

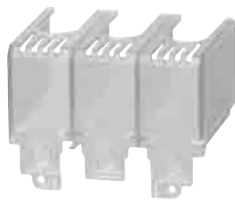
See page 07/74.



Terminal cover

Long type

See page 07/85.



Interphase barrier

See page 07/86.



Terminal cover

Short type

See page 07/85.

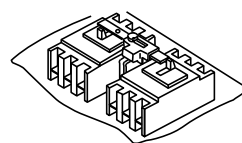
Steel enclosures

See page 07/83.



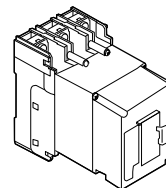
Mechanical interlock device

See page 07/70.



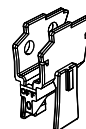
Motor-operating mechanism

See page 07/69.



Handle locking cover (L1)

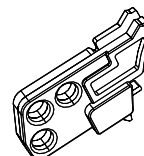
See page 07/87.



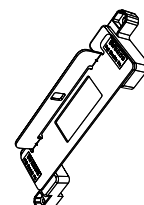
Padlocking device

See page 07/87.

• Cap type (Q1, QN)

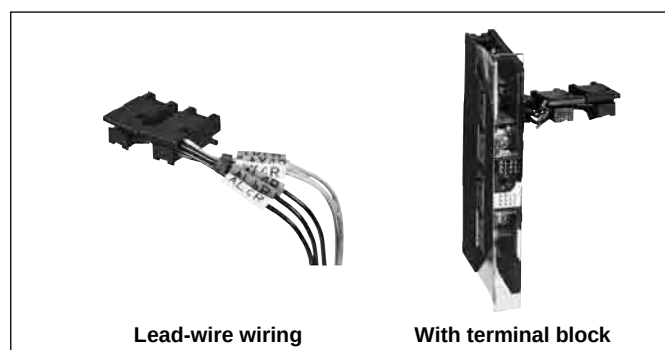


• Plate type (Q2)



■ 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 07/62.



• 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				
Earth alarm switch (125 to 800AF)				

Note: * () Code of Low level circuit

Earth Leakage Circuit Breakers
G-TWIN series
Internal accessories

Available configurations

2-pole Handle Right 3-pole Left Handle Right 4-pole Left Handle Right Undervoltage trip : R (Internal) Undervoltage trip : R (External) Shunt trip: F (Internal) Shunt trip: F (External) Auxiliary switch: W Alarm switch: K Lead wire Earth alarm switch					
ECCB	EW32AAG-2P EW50AAG-2P	EW32□-3P EW50□-3P EW63□-3P EW100□-2P EW100□-3P	EW125 EW160 EW250		EW400 EW630 EW800
Pole	2	2, 3	3	4	3, 4
Auxiliary switch SPDT: W (1)*					
Alarm switch SPDT: K (8)*					
Shunt trip: F					
Undervoltage trip: R					
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)					
K+F (8+F)					
K+R (8+R)					
W+K+F (1+8+F)					
W+K+R (1+8+R)					
V+F (2+F)					
V+R (2+R)					
J+F (9+F)					
J+R (9+R)					
V+K+F (2+8+F)					
V+K+R (2+8+R)					
W+J+F (1+9+F)					
W+J+R (1+9+R)					
V+J+F (2+9+F)					
V+J+R (2+9+R)					
L					

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 07/2.

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

Accessory	Handle position		
	ON	OFF	Trip
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

■ Operation of earth alarm switch (L)

Accessory	Handle position	
	ON/OFF/Overcurrent trip	EL trip
Earth alarm switch L		

■ 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			
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

Earth Leakage Circuit Breakers

G-TWIN series

Internal accessories

■ Rating of shunt trip (F)

ELCB type	Installation	AC		DC		Code	Time rating of coil	Opearting time (ms)
		V	VA	V	W			
EW32 EW50 EW63 EW100	External	100(50Hz)/ 100-110(60Hz)	16	—	—	FAC100V(50Hz)/ 100-110V(60Hz)	Continuous	7-13
		200(50Hz)/ 200-220(60Hz)	16	—	—	FAC200V(50Hz)/ 200-220V(60Hz)		
		400(50Hz)/ 400-440(60Hz)	22	—	—	FAC400V(50Hz)/ 400-440V(60Hz)		
		—	—	24	36	FDC24V		
		—	—	100-110	23	FDC100-110V	Continuous (With 1NO contact to prevent coil burn-out)	
EW125 EW160 EW250	Internal	24	50	24	50	FAC/DC24V	Continuous (With 1NO contact to prevent coil burn-out)	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		
EW400 EW630 EW800	Internal	500-550	50	—	—	FAC500-550V		
		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)

ELCB type	Installation	AC		DC		Code
		V	VA	V	W	
EW32 *2 EW50 *2 EW63 *2 EW100 *2	External	100 (50Hz)/ 100-110(60Hz)	2.8	–	–	RAC100V(50Hz)/ 100-110V(60Hz)
		200 (50Hz)/ 200-220 (60Hz)	3.4	–	–	RAC200V(50Hz)/ 200-220V(60Hz)
		400 (50Hz)/ 400-440 (60Hz)	4.4	–	–	RAC400V(50Hz)/ 400-440V(60Hz)
		–	–	24 100-110	40	RDC24V RDC100-110V
		–	–	24	5	RDC24V
EW125 *1 EW160 *1 EW250 *1	Internal	–	–	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
		24	2	24	2	RAC/DC24V
EW400 *2 EW630 *2 EW800 *2	Internal	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.

Earth Leakage Circuit Breakers

G-TWIN series

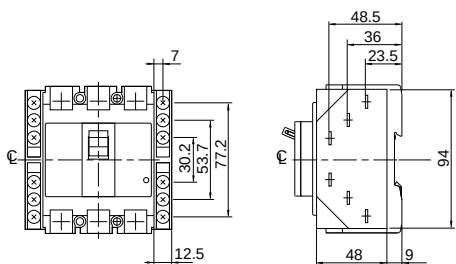
Internal accessories

■ Lead wire specification

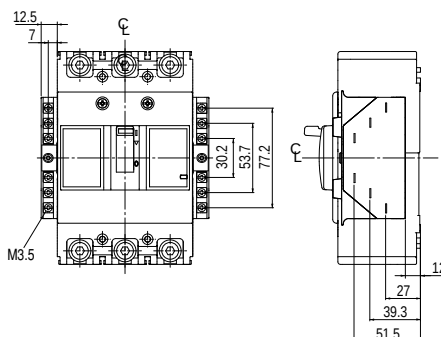
AF		Pole	wire size	Wire length
32 to 100AF	Standard	2P, 3P	0.4mm ² (AWG22)	Ca 500mm
	Global		0.5mm ² (AWG20)	
125 to 250AF		2P, 3P	0.5mm ² (AWG20)	
		4P		
400 to 800AF		2P, 3P	0.5mm ² (AWG20)	Ca 500mm
		4P		Ca 400 to 450mm

■ Terminal blocks

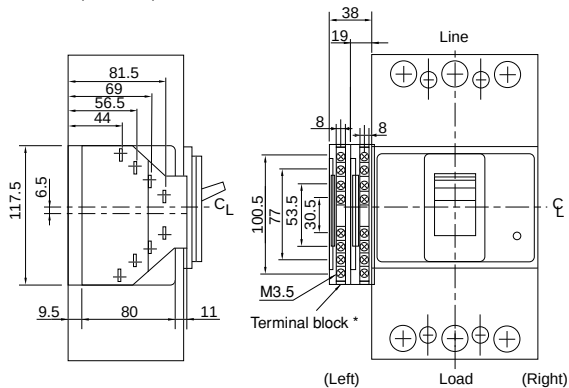
32AF, 50AF, 63AF, 100AF



125AF, 160AF, 250AF



400AF, 630AF, 800AF

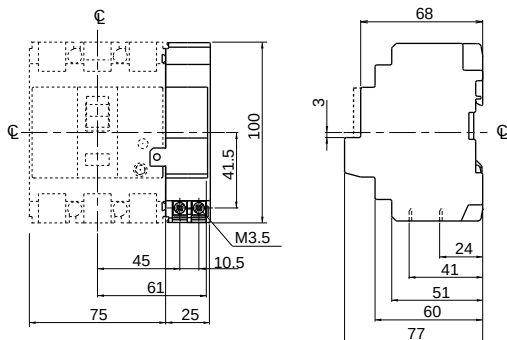


Notes:

- * 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 07/62. 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, Shunt trip device

32AF, 50AF, 63AF, 100AF



Mass: 0.15kg

Earth Leakage 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 vltage	
	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					BZ6F210C	100V AC 50Hz/100-110V AC 60Hz
					BZ6F110C	110V AC 50Hz/100-127V AC 60Hz
					BZ6F710C	200V AC 50Hz/200-220V AC 60Hz
					BZ6F410C	220V AC 50Hz/220-240V AC 60Hz
					BZ6F510C	230V AC 50Hz/230-240V AC 60Hz
					BZ6FB10C	240V AC 50Hz
					BZ6F010C	380V AC 50Hz 380-415V AC 60Hz
					BZ6F810C	400V AC 50Hz 400-440V AC 60Hz
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

• 32, 50, 63, 100AF IEC/EN/GB/JIS/UL/CSA conformed

Accessory	Type				Operating vltage
	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	—	—	—	BZ6F210CAU	100V AC 50Hz/100-110V AC 60Hz
	—	—	—	BZ6F710CAU	200V AC 50Hz/200-220V AC 60Hz
	—	—	—	BZ6F810CAU	400V AC 50Hz/400-440V AC 60Hz
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

07

Earth leakage Circuit Breakers

G-TWIN series

Internal accessories

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

Accessory	Type				Operating vltg	
	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	BW9WKSG0	BW9WK1SG0-R	BW9WKSG0-A			
Auxiliary switch + Alarm switch (low level circuit)	BW9WKDG0	BW9WK1DG0-R	- *			
Earth alarm switch	-	BW9L1SGA	-			
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

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

ELCB type	Motor rating			Power source capacity	Mass (kg)
	Operating voltage	Operating time	Time rating		
EW32□-3P□M, EW50□-3P□M, EW63□-3P□M, EW100□-2P□M, EW100□-3P□M	100V DC	0.1s	15s per on-off operation	500VA	1.2
	100/110V AC 200/220V AC				1.3

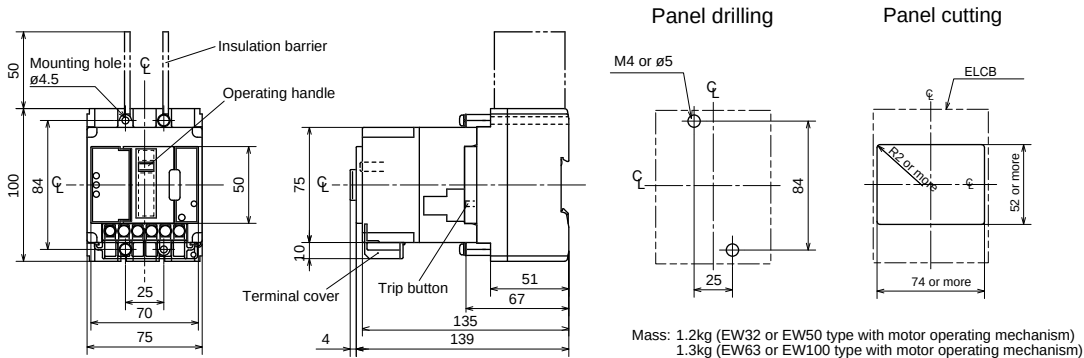
■ Ordering information

Specify the following:

1. Type number
2. Motor operating voltage

■ Dimensions, mm / Front mounting, front connection

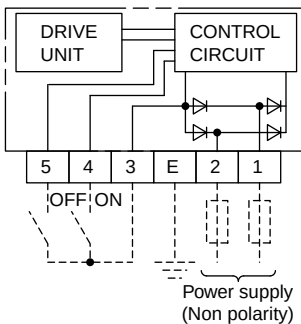
EW32□-3P, EW50□-3P, EW63□-3P, EW100□-2P, EW100□-3P



- 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



Earth leakage Circuit Breakers

G-TWIN series

External accessories

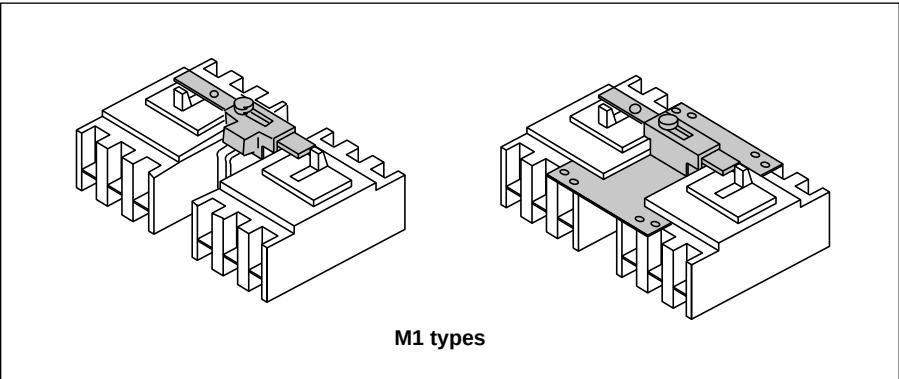
Mechanical interlocking devices

■ **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.

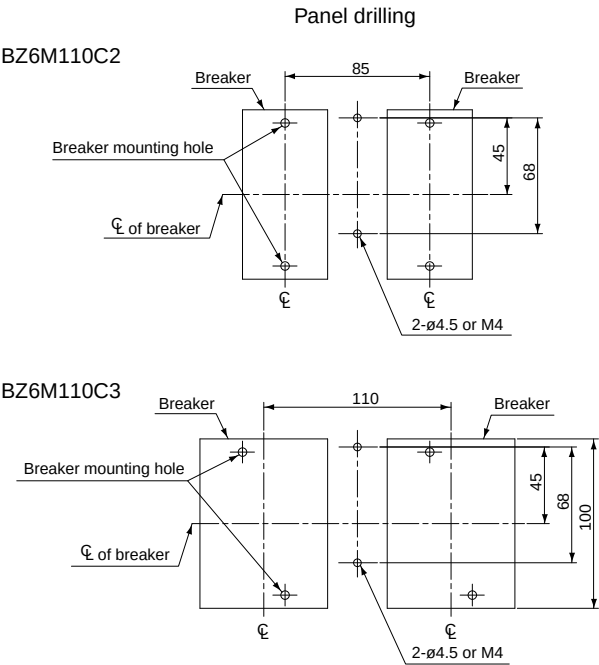
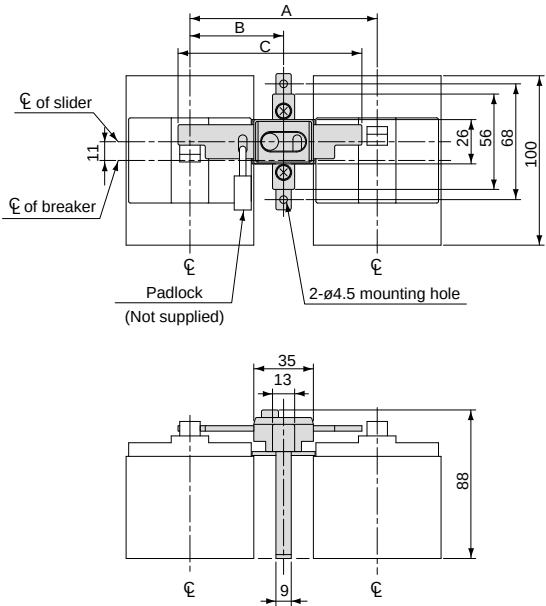
These can be mounted to 3 types of breakers: front-mounting front-connection type, front-mounting rear-connection type (type X), and plug-in mounting type (type P). Interlock devices for flush mounting type breakers (type E, Y) are also available.



■ **Type and applicable breakers**

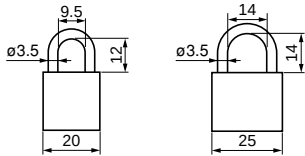
Type	Breaker type
BZ6M110C2	EW32AAG-2P, EW50AAG-2P
BZ6M110C3	EW32□-3P, EW50□-3P, EW63□-3P, EW100□-2P, EW100□-3P
BW9M1CA-3	EW125□-3P
BW9M1CA-4	EW125□-4P
BW9M1GA-3	EW250□-3P
BW9M1GA-4	EW250□-4P
BW9M1HA-3	EW400□-3P
BW9M1HA-4	EW400□-4P
BW9M1JA-3	EW630□-3P, EW800□-3P

■ Dimensions, mm
• 32AF to 100AF



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 ELCB on the left of the diagram.



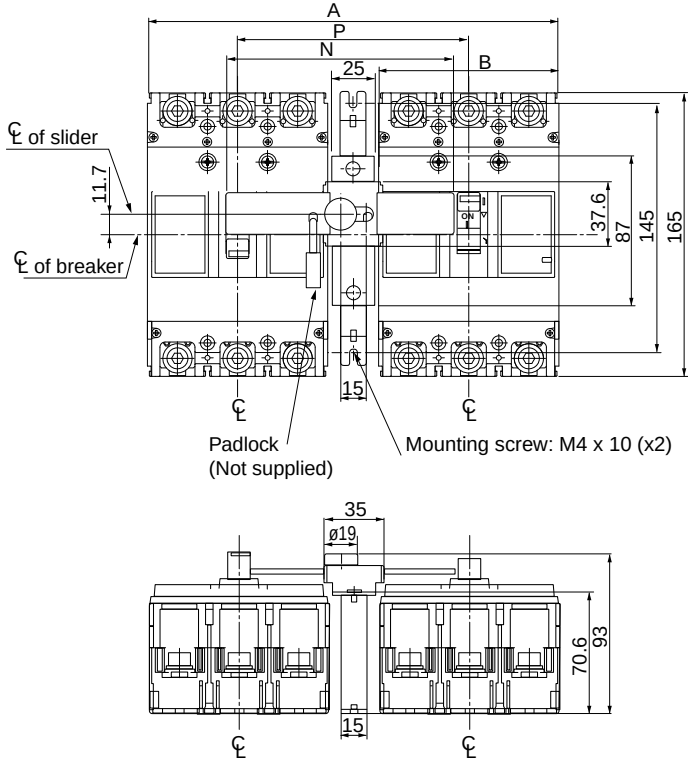
Earth leakage Circuit Breakers

G-TWIN series

External accessories

■ Dimensions, mm

• 125AF to 250AF



Panel drilling

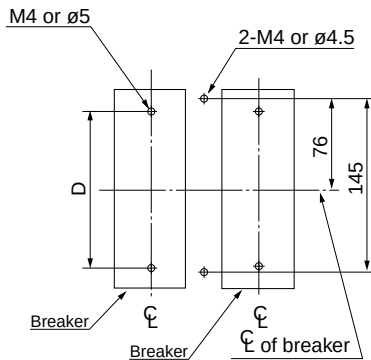


Fig.1

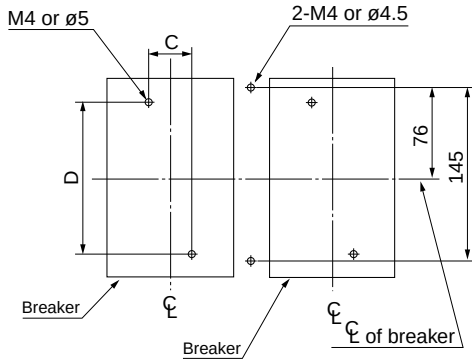


Fig.2

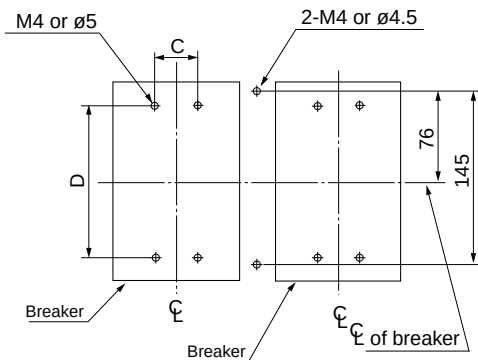


Fig.3

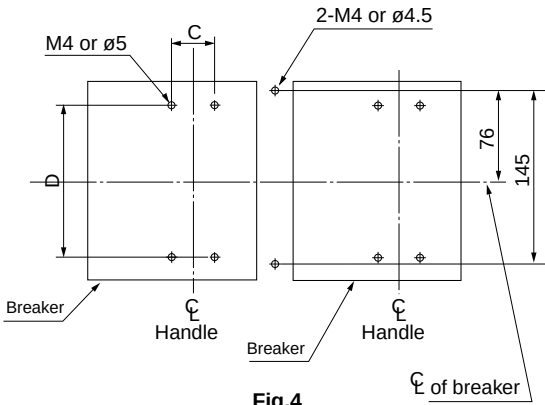


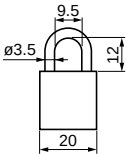
Fig.4

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	

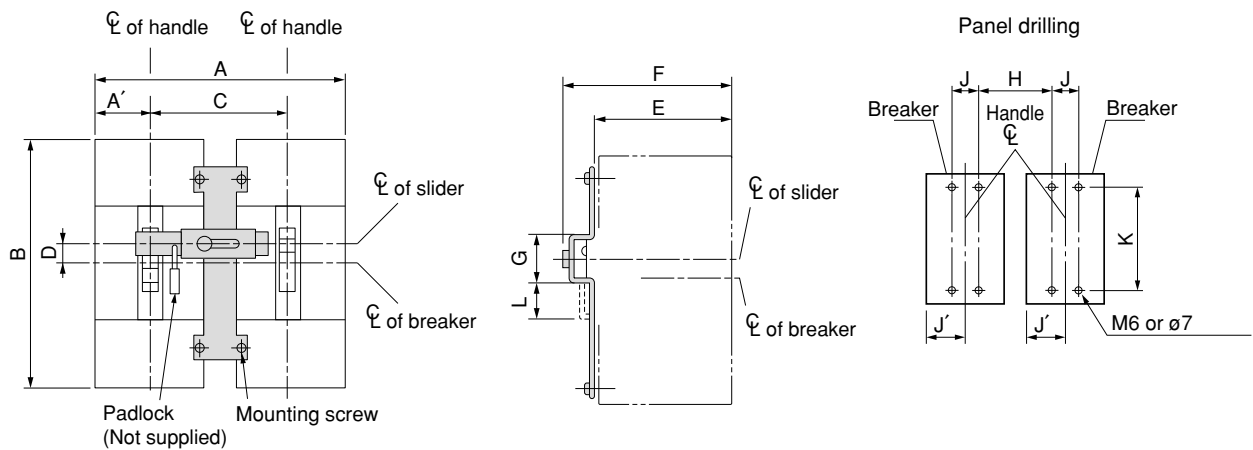
Notes: • The dimensions and Breaker mounting holes for back surface mounting are different from those given above. Inquire for details.

• 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 ELCB on the left of the diagram.

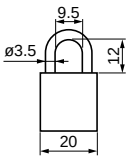


■ Dimensions, mm
• 400AF to 800AF



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 ELCB on the left of the diagram.



Earth leakage 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)

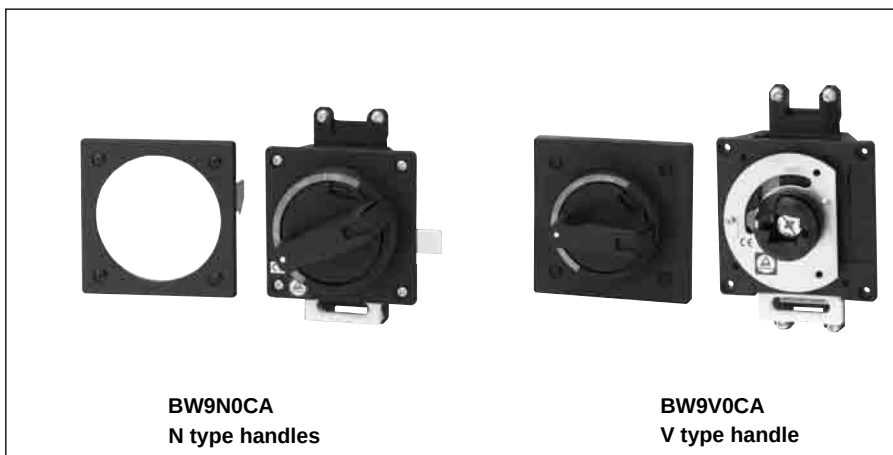
V type handle

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)

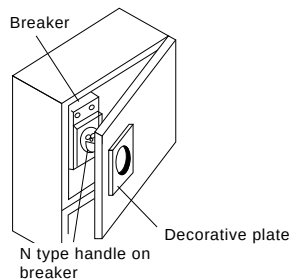
F type handle

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.

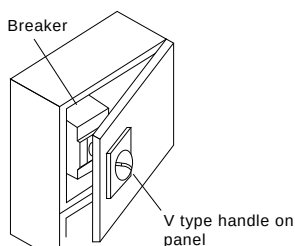
Conformed to UL489 (File No.E93289)



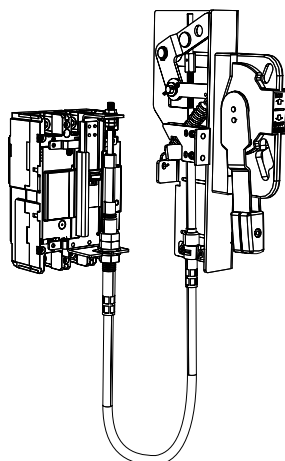
N type handles



V type handles



F type handles



N type handles

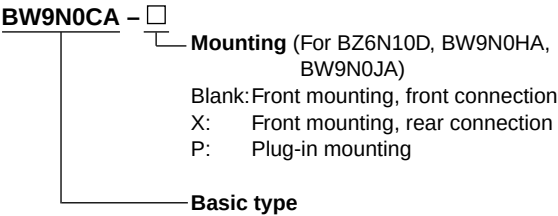
ELCB	N type handle
EW32	BZ6N10D
EW50	
EW63	
EW100	
EW125	BW9N0CA
EW160	BW9N0GA
EW250	
EW400	BW9N0HA
EW630	BW9N0JA
EW800	

V type handles

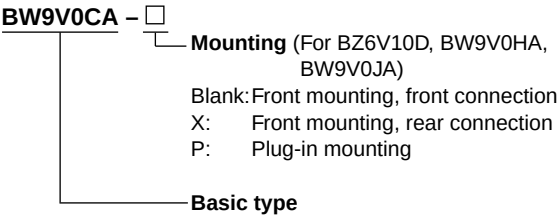
ELCB	V type handle
EW32	BZ6V10D
EW50	
EW63	
EW100	
EW125	BW9V0CA
EW160	BW9V0GA
EW250	
EW400	BW9V0HA
EW630	BW9V0JA
EW800	

■ Type number nomenclature

• N type handle



• V type handle

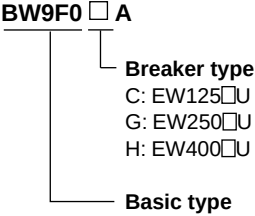


Note:
To order a V handle for front-mounting rear connection breakers, add “-X” to the type number; for plug-in mounting breakers, add “-P” to the type number.

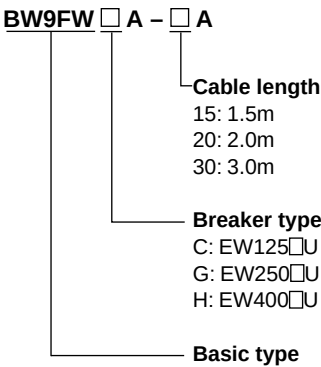
F type handles

ELCB	F type handle
EW125	BW9F0CA
EW250	BW9F0GA
EW400	BW9F0HA

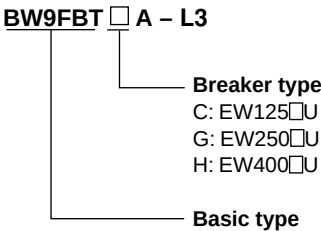
• F type handle



Cable (For F type)



Terminal cover (For F type)



Earth leakage Circuit Breakers

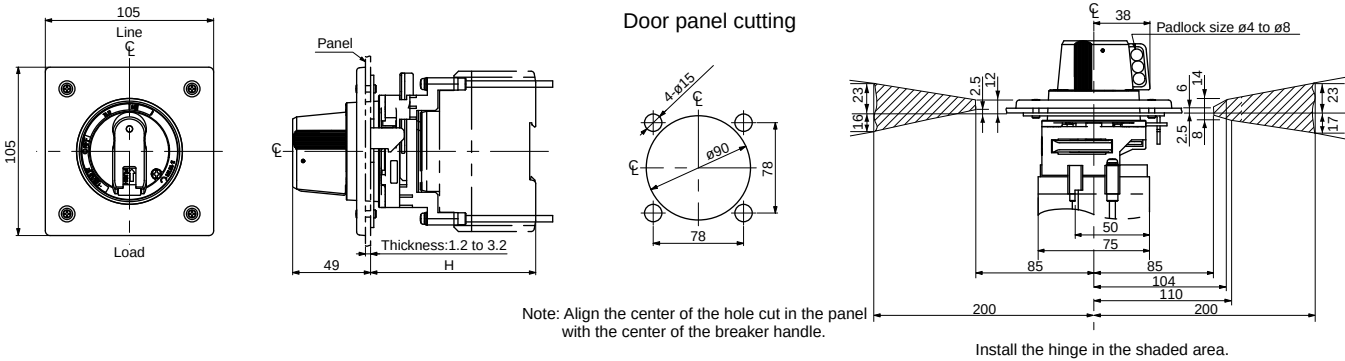
G-TWIN series

External accessories

■ Dimensions, mm

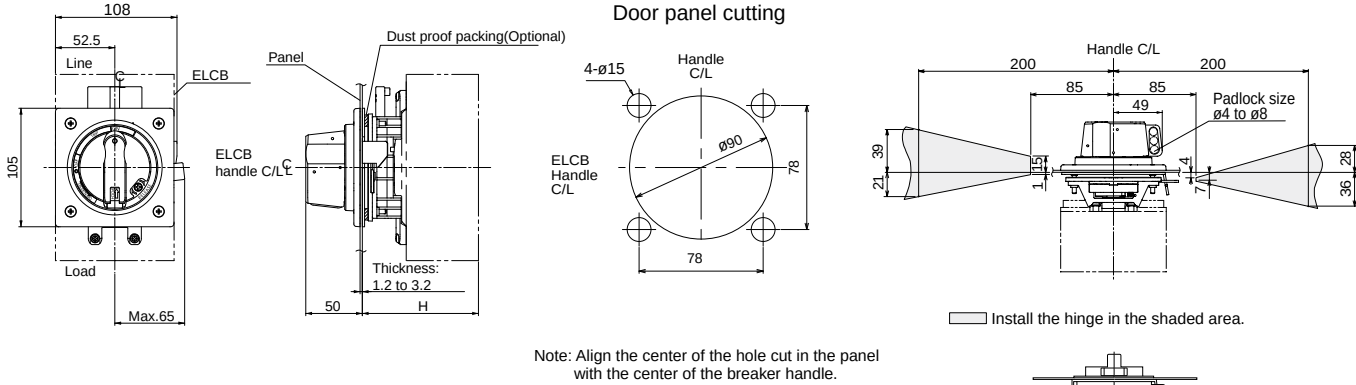
N type handle

• BZ6N10D



ELCB	Handle type	Dust proof packing	Mounting screw	H (mm)	Mass (kg)
EW32	BZ6N10D	Provided	M4 x 85	103±2	0.47
EW50	BZ6N10D-X	Provided	Contact FUJI.	111±2	
EW63	BZ6N10D-P			111±2	
EW100					

• BW9N0CA, BW9N0GA

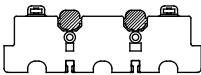


ELCB	Handle type	Dust proof packing	Mounting screw	H (mm)	Mass (kg)
EW125	BW9N0CA	BZ-NP-1C	M4 x 85	103±2	0.56
EW160	BW9N0GA*1	BZ-NP-1C	M4 x 85	103±2	0.56
EW250					

Notes:

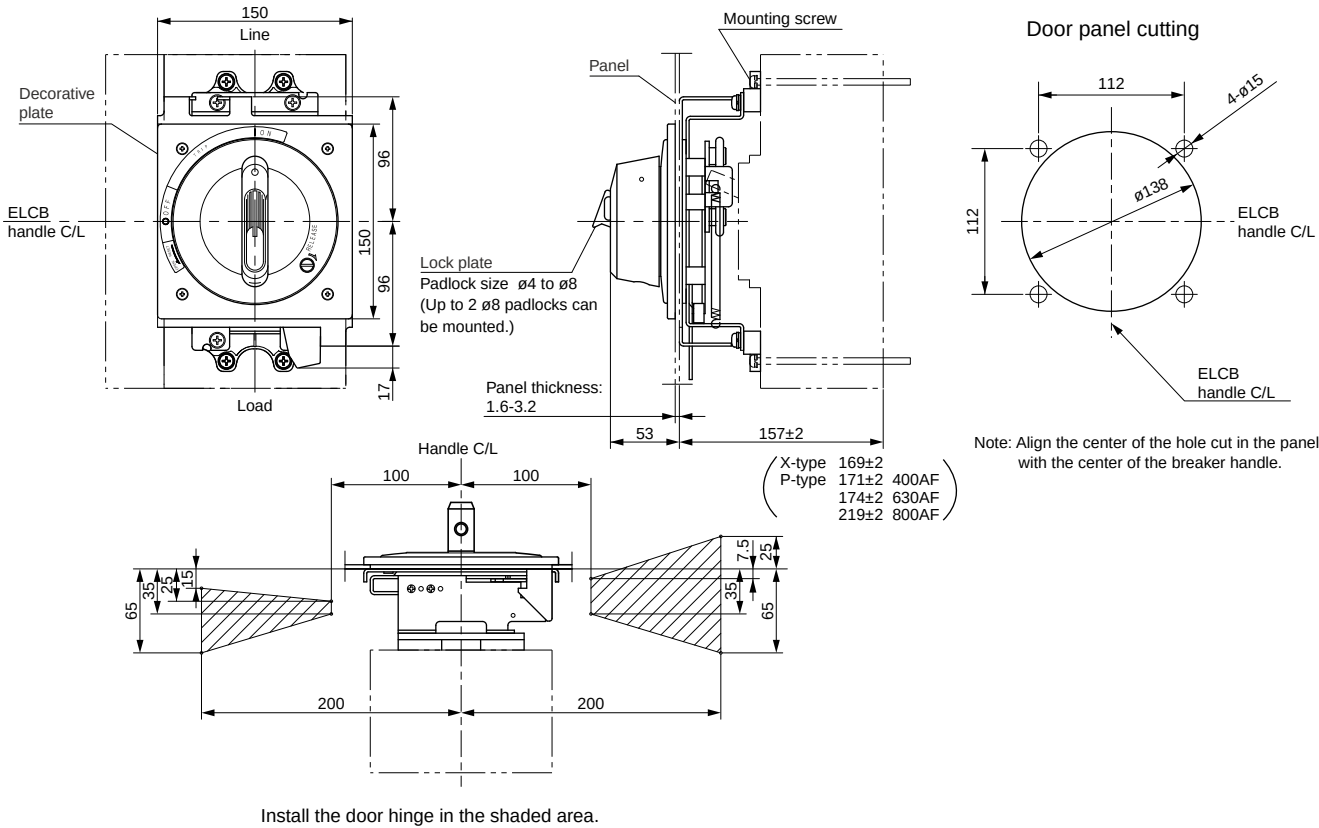
- The handle lock bars do not hold the entire door. Obtain a support bracket for the panel separately.
- Remove the handle lock bar before opening the door. (Turn the handle in the open direction.)
The lock bar will be damaged if the door is opened with force while the lock bar is engaged.
- Engage the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

*1 The terminal cover 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  in the following diagram.



Earth leakage Circuit Breakers
G-TWIN series
External accessories

• **BW9N0HA, BW9N0JA**



ELCB	Handle type	Dust proof packing	Mounting screw	Mass (kg)
EW400	BW9N0HA BW9N0HA-X BW9N0HA-P	BZ-NP-2	M6 x 110 M6 x 115 Contact FUJI.	1.9
EW630 EW800	BW9N0JA BW9N0JA-X BW9N0JA-P	BZ-NP-2	M6 x 110 M6 x 115 Contact FUJI.	1.9

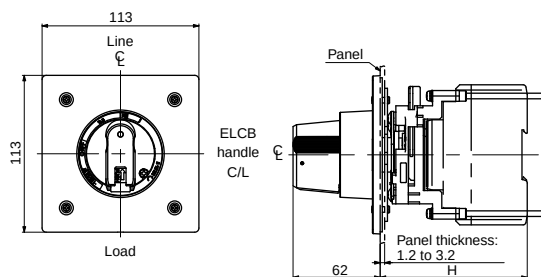
- Notes:
- The handle lock bars do not hold the entire door. Obtain a support bracket for the panel separately.
 - Remove the handle lock bar before opening the door. (Turn the handle in the open direction.)
The lock bar will be damaged if the door is opened with force while the lock bar is engaged.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

Earth leakage Circuit Breakers

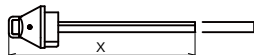
G-TWIN series

External accessories

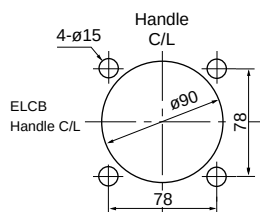
- Dimensions, mm
- V type handle
- BW6V10D



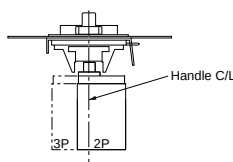
Optional shaft BZ6VS1D
 $X = H - 105$



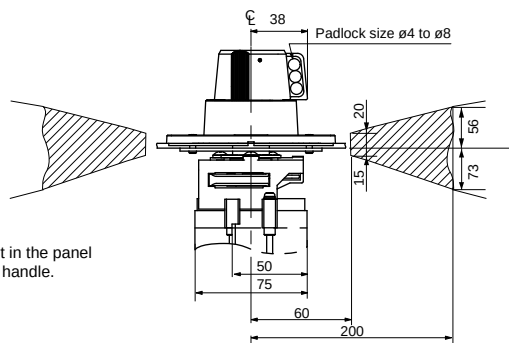
Door panel cutting



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

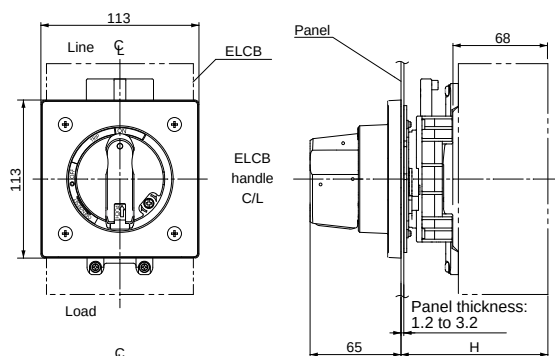


Door hinge installation area

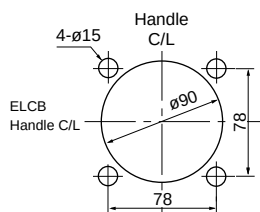


Install the door hinge in the shaded area.

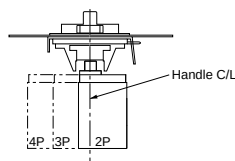
- BW9V0CA, BW9V0GA



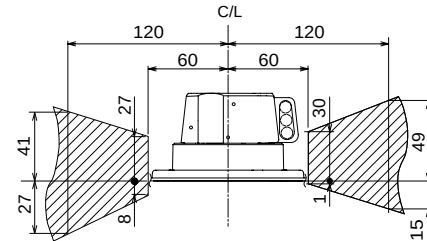
Door panel cutting



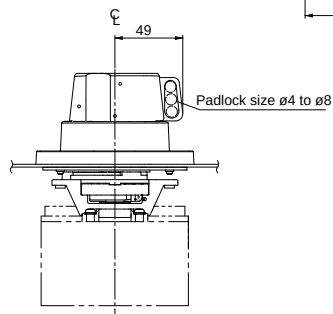
Note: Align the center of the hole cut in the panel with the center of the breaker handle.



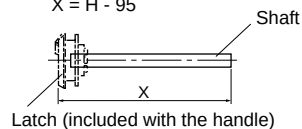
Door hinge installation area



Install the door hinge in the shaded area.



Optional shaft BW9VSG0
 $X = H - 95$



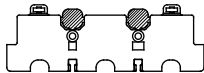
Earth leakage Circuit Breakers

G-TWIN series

External accessories

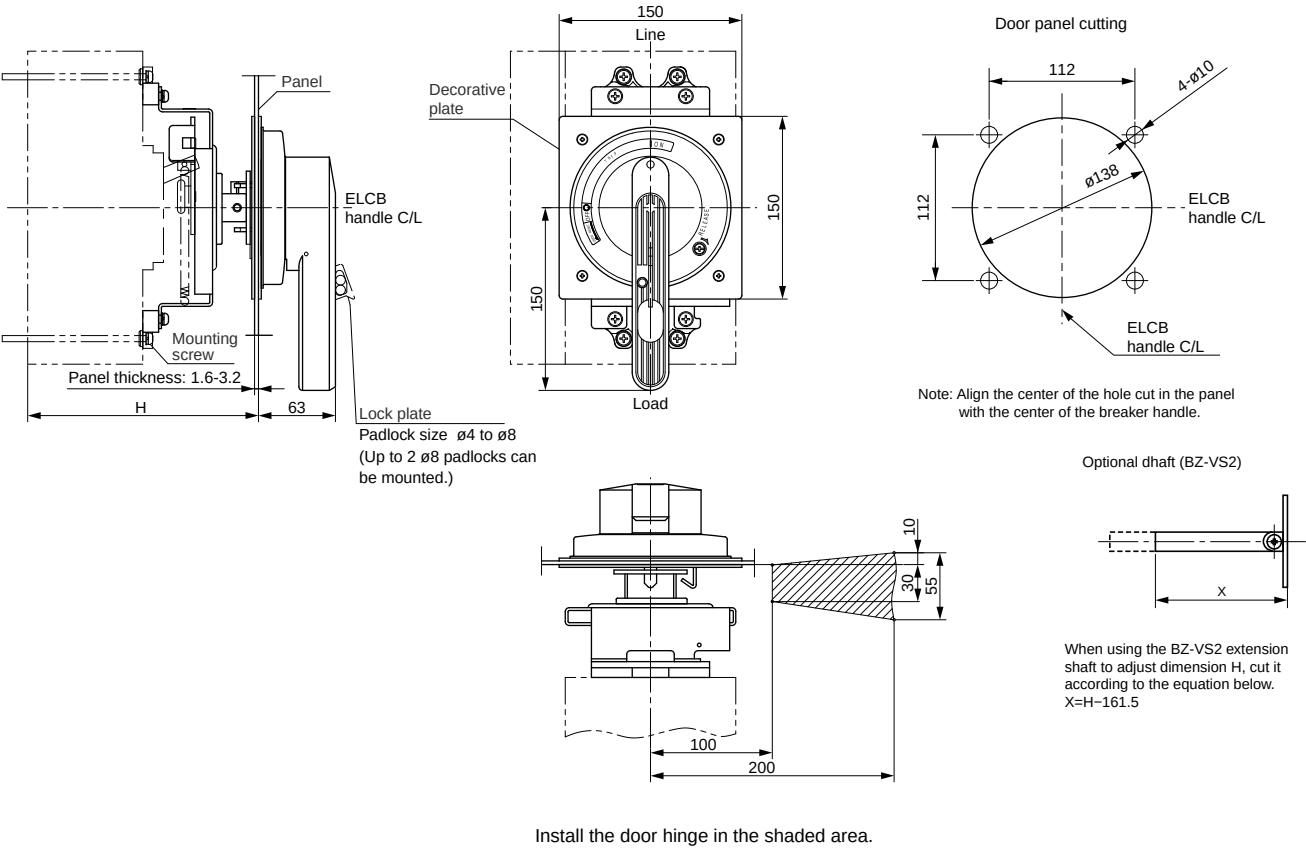
ELCB	Handle type	Optional shaft	Standard type H	With the optional shaft (X=154)		Mounting screw	Mass (kg)
				H	Area in which the hinge with H can be installed		
EW32	BZ6V10D	BZ6VS1D	105±2	250±2	140 to 250	M4 x 80	0.64
EW50	BZ6V10D-X		113±2	258±2	150 to 258	Contact FUJI.	0.64
EW63			113±2	258±2	150 to 258	Contact FUJI.	0.64
EW100	BZ6V10D-P						
EW125	BW9V0CA	BW9VSG0	105±2	250±2	140 to 250	M4 x 85	0.67
EW160	BW9V0GA ^{*1}		105±2	250±2	140 to 250	M4 x 85	0.67
EW250							

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 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.



Earth leakage Circuit Breakers
G-TWIN series
External accessories

• BW9V0HA, BW9V0JA



ELCB	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	
EW400	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	
EW630	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	
EW800	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.

Earth leakage Circuit Breakers

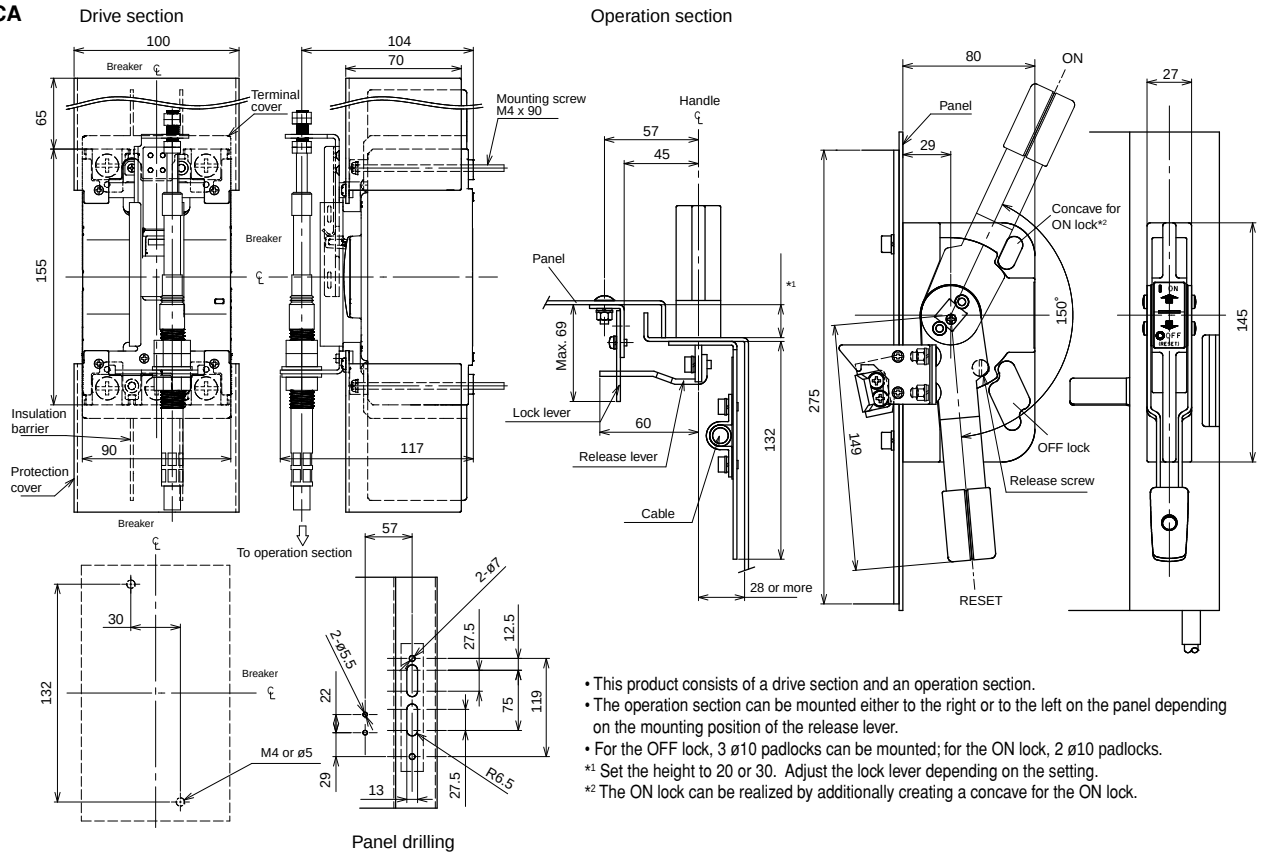
G-TWIN series

External accessories

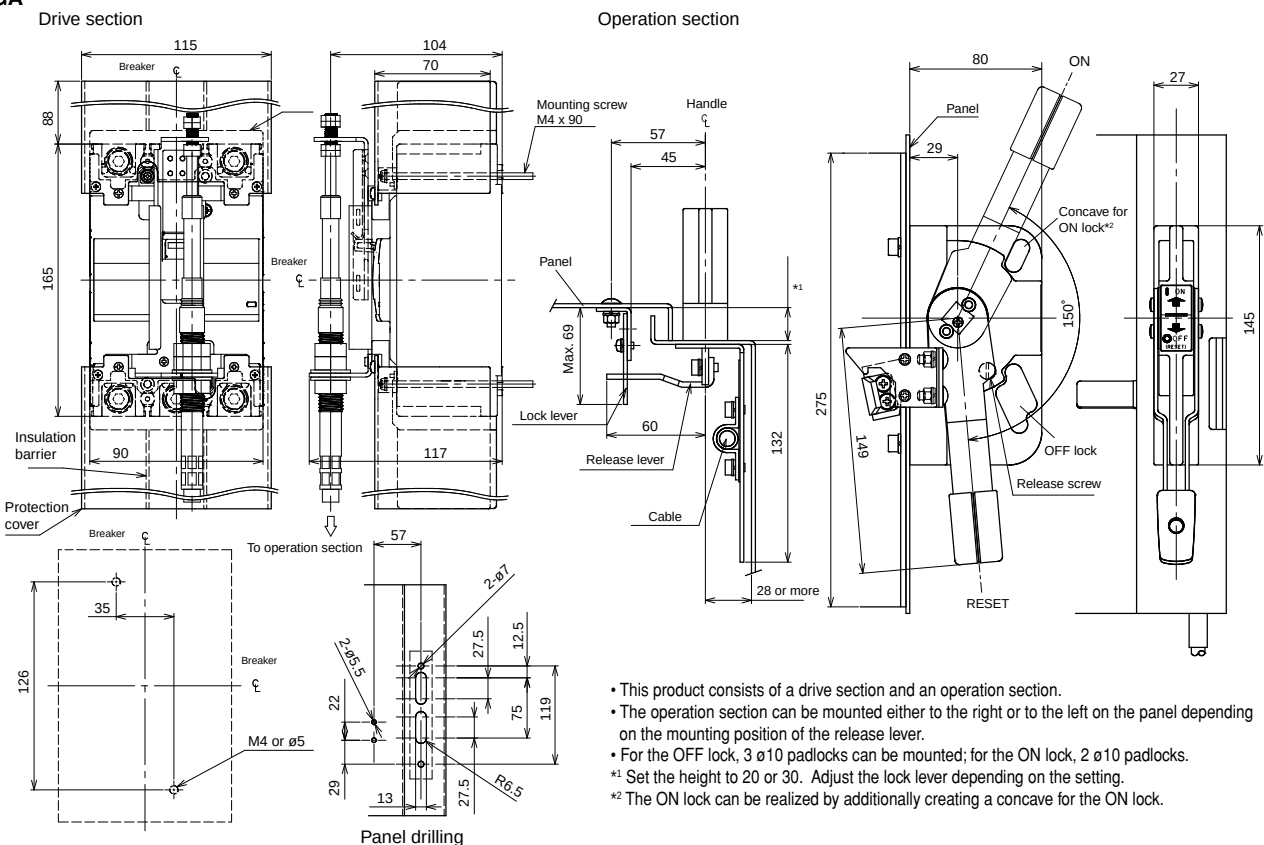
■ Dimensions, mm

F type handle

• BW9F0CA



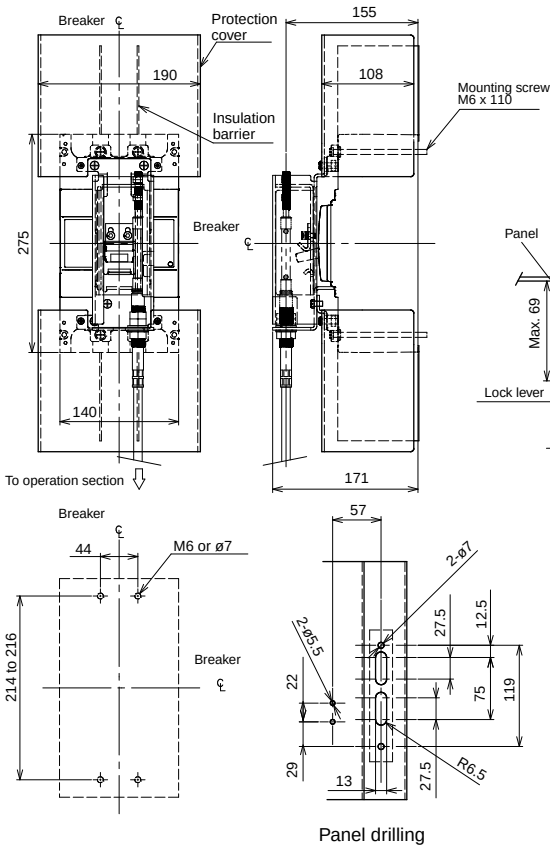
• BW9F0GA



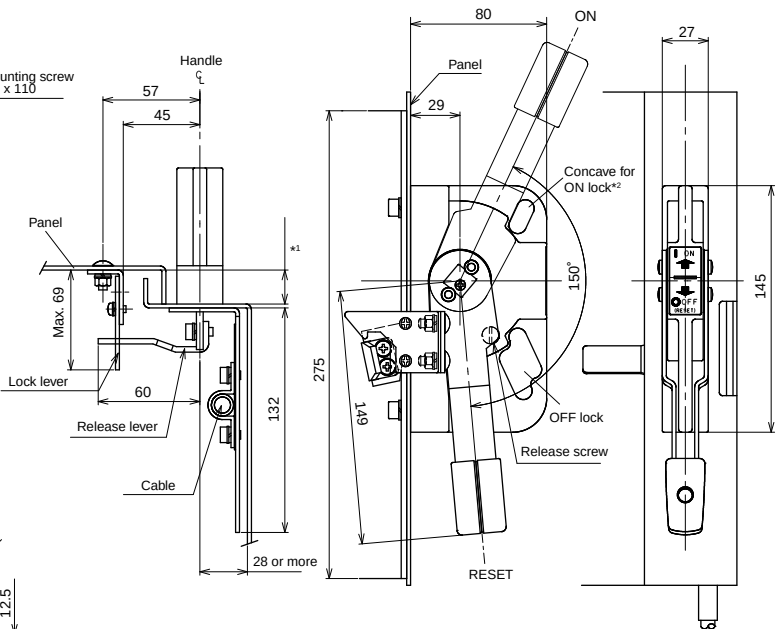
Earth leakage Circuit Breakers
G-TWIN series
External accessories

• BW9F0HA

Drive section



Operation section



- 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 Ø10 padlocks can be mounted; for the ON lock, 2 Ø10 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.

ELCB *	Handle type	Cable		Terminal cover
		Type	Length (m)	
EW125JAGU-3P EW125RAGU-3P	BW9F0CA	BW9FWCA-15A BW9FWCA-20A BW9FWCA-30A	1.5 2.0 3.0	BW9FBTCA-L3
EW250JAGU-3P EW250RAGU-3P	BW9F0GA	BW9FWGA-15A BW9FWGA-20A BW9FWGA-30A	1.5 2.0 3.0	BW9FBTGA-L3
EW400SAGU-3P EW400RAGU-3P EW400HAGU-3P	BW9F0HA	BW9FWHA-15A BW9FWHA-20A BW9FWHA-30A	1.5 2.0 3.0	BW9FBTHA-L3

Note: * Not available for BW125JAGU-2P

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

ELCB	Enclosure		
	Standard * ¹	With V-type handle Dust-proof * ¹ * ²	Rain-proof * ¹ * ²
EW32 EW50 EW63	BZ6C10C2 * ³ BZ6C10C3	BW9UVBA-3A * ³	BW9UWBA-3A * ³
EW100	BZ6C25C2 * ³ BZ6C25C3 * ³	BW9UVBA-3B * ³	BW9UWBA-3B * ³
EW125	BW9UCCA-2 BW9UCCA-3	BW9UVCA-3	BW9UWCA-3
EW250	BW9UCGA-3	BW9UVGA-3	BW9UWGA-3
EW400	BZ-C60B	BW9UVHA-3	BW9UWHA-3
EW630 EW800	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

Earth leakage Circuit Breakers

G-TWIN series

External accessories

■ Dimensions, mm

Fig.1 Standard

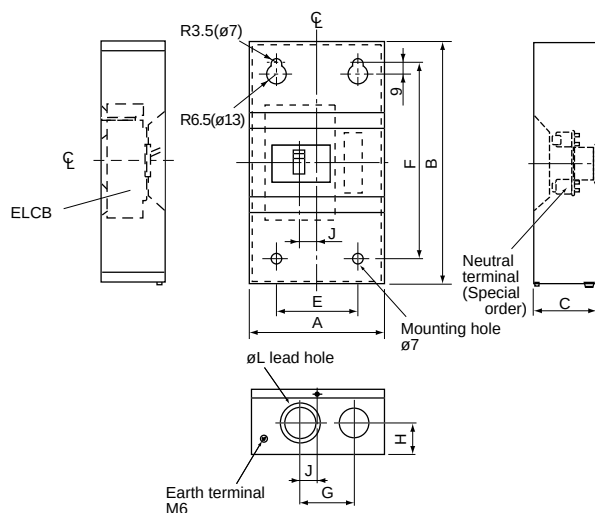


Fig.2 With V type handle

BW9UVBA-3A, BW9UVBA-3B
BW9UVCA-3, BW9UVGA-3

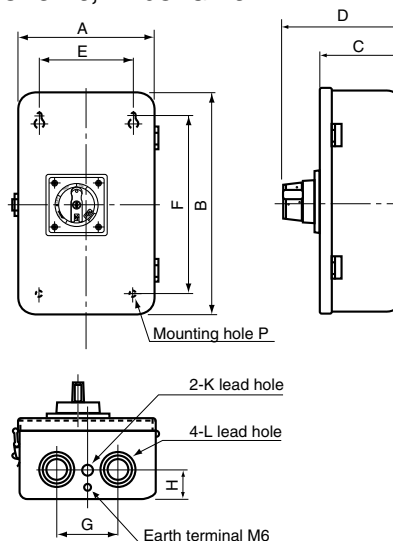
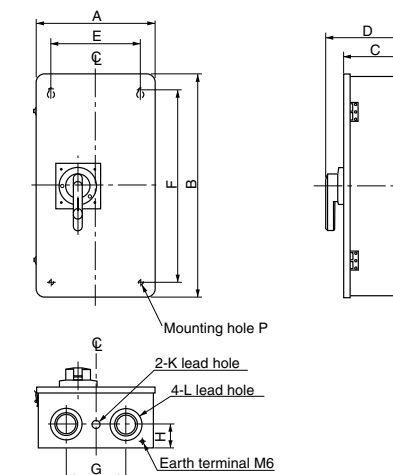
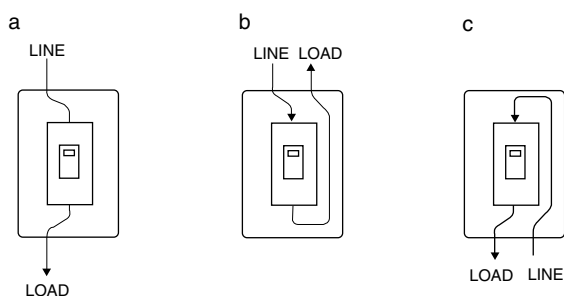


Fig.3. With V type handle

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			200	320	95	—	120	240	80	40	25	—	ø45, ø30	—
BZ6C25C3			200	320	103	—	120	240	80	40	25	—	ø45, ø30	—
BW9UCCA-3			200	320	360	—	120	240	80	40	25	—	ø55, ø40	—
BW9UCGA-3			400	750	175	—	300	650	200	80	100	—	ø106, ø78, ø63	—
BZ-C60B			400	750	175	—	300	650	200	80	100	—	ø106, ø78, ø63	—
BZ-C70B	2	2	180	300	114	178.5	100	220	70	40	—	—	ø28, ø35, ø43	ø7
BW9UVBA-3A			250	400	142	206.5	170	320	110	50	—	ø23	ø35, ø52, ø63	ø9
BW9UVBA-3B			250	400	142	206.5	170	320	110	50	—	ø23	ø35, ø52, ø63	ø9
BW9UVCA-3			250	400	142	207	170	320	110	50	—	ø23	ø35, ø52, ø63	ø9
BW9UVGA-3			250	400	142	207	170	320	110	50	—	ø23	ø35, ø52, ø63	ø9
BW9UVHA-3			250	400	142	207	170	320	110	50	—	ø23	ø35, ø52, ø63	ø9
BW9UVJA-3	3	3	400	750	206	269	300	650	200	80	—	ø28	ø63, ø78, ø106	ø12

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

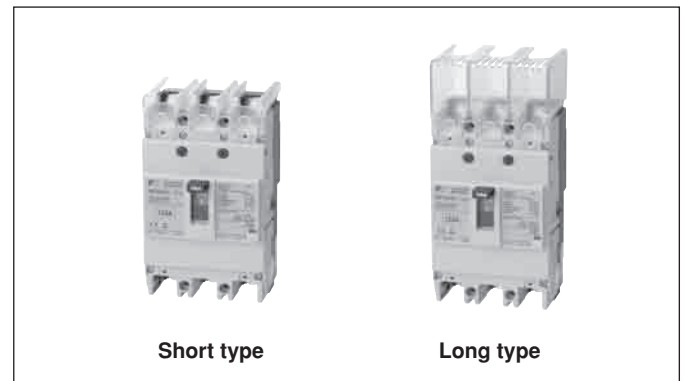
Long type: BW9BT □ A-L □

- Crimp connection use

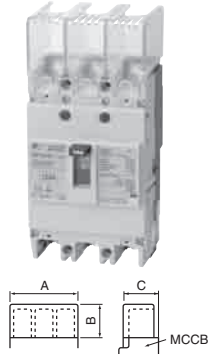
● 630, 800AF

Long type: BW9BTJA-L □

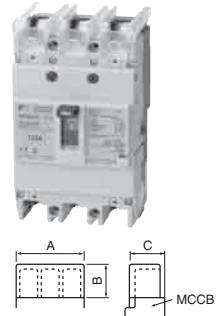
- Transparent



Long type

Type		No. of poles	ELCB	Dimensions (mm)			Packing quantity	Appearance
Transparent	Gray			A	B	C		
BW9BTAA-L2	BW9BTAA-L2W	2	EW32□-2P EW50□-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	EW32□-3P EW50□-3P EW63□-3P EW100□-2P EW100□-3P	75	40	53	2	
BW9BTCA-L3	BW9BTCA-L3W	3	EW125□-3P	90	40	66.5	2	
BW9BTCA-C3 (For Flat terminal)	—	3	EW125□-3P	90	60	66.5	2	
BW9BTCA-L4	BW9BTCA-L4W	4	EW125□-4P	120	40	66.5	2	
BW9BTGA-L3 * ¹	BW9BTGA-L3W * ¹	3	EW160□-3P EW250□-3P	105	50	66.5	2	
BW9BTGA-L4 * ¹	BW9BTGA-L4W * ¹	4	EW160□-4P EW250□-4P	140	50	66.5	2	
BW9BTGA-C3 (For Flat terminal)	—	3	BW250□-3P	105	75	66.5	2	
BW9BTHA-L3 * ²	BW9BTHA-L3W * ¹	3	EW400□-3P	172	110	98	2	
BW9BTHA-L4 * ²	—	4	EW400□-4P	220	110	98	2	
BW9BTJA-L3	BW9BTJA-L3W	3	EW630□-3P EW800□-3P	230	135	97.5	2	

Short type

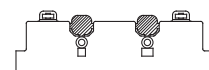
Type		No. of poles	ELCB	Dimensions (mm)			Packing quantity	Appearance
Transparent	Gray			A	B	C		
BW9BTAA-S2	BW9BTAA-S2W	2	EW32□-2P EW50□-2P	50	10	53	2	• Preventing exposure of live section when amplifier's terminals are connected • Snap-on mounting
BW9BTAA-S3	BW9BTAA-S3W	2, 3	EW32□-3P EW50□-3P EW63□-3P EW100□-2P EW100□-3P	75	10	53	2	
BW9BTCA-S3P20	BW9BTCA-S3WP20	3	EW125□-3P	90	8	66.5	2	
BW9BTCA-S4P20	BW9BTCA-S4WP20	4	EW125□-4P	120	8	66.5	2	
BW9BTGA-S3P20 * ¹	BW9BTGA-S3WP20 * ¹	3	EW160□-3P EW250□-3P	105	8	66.5	2	
BW9BTGA-S4P20 * ¹	BW9BTGA-S4WP20 * ¹	4	EW160□-4P EW250□-4P	140	8	66.5	2	
BW9BTHA-S3 * ³	BW9BTHA-S3W * ²	2, 3	EW400□-2P EW400□-3P	140	65	98	2	
BW9BTHA-S4 * ³	BW9BTHA-S4W * ²	4	EW400□-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.



Earth leakage Circuit Breakers

G-TWIN series

External accessories

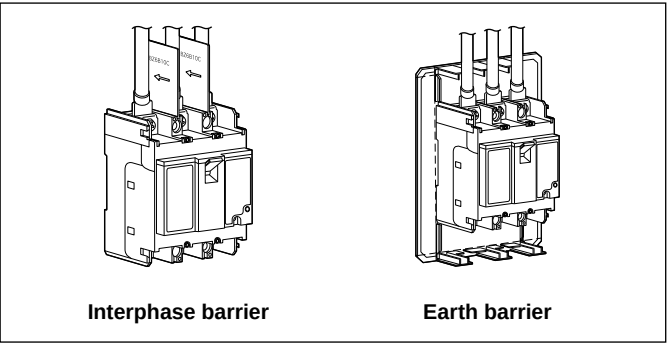
Insulation barriers

■ 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.

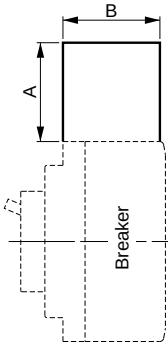
Installation of these barriers after wiring is possible even when an external accessory is installed.



Interphase barrier

ELCB	Interphase barrier				
	Type	Dimensions (mm)		Packing quantity	Mass (g)
		A	B		
EW32 EW50 EW63 EW100	BZ6B10C	50	49	4	23
EW125	BW9BPCA	50	60	2	15
EW160 EW250	BW9BPGA	80	60	2	25
EW400 EW630 EW800	B-43A	105	95	4	130

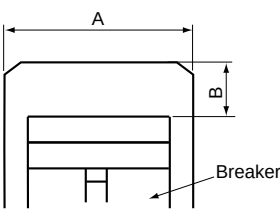
Interphase barrier



Earth barrier

ELCB	Earth barrier				
	Type	Dimensions (mm)		Packing quantity	Mass (g)
		A	B		
EW32□-2P EW50□-2P	BZ6BL10C2	100 (50, 75)*1	43 (30)*1	1	33
EW32□-3P EW50□-3P EW63□-3P EW100□-2P EW100□-3P	BZ6BL10C3	125 (75, 100)*1	43 (30)*1	1	41

Earth barrier



Note: *1 Can be cut to dimensions

Padlocking device and handle locking cover

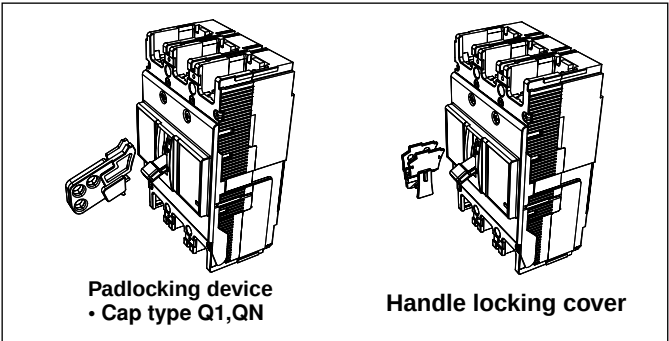
■ Description

• 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.



ELCB	Padlocking device			Handle locking cover
	Q1: Cap type	QN: Scissors type	Q2: Plate type	
EW32 EW50 EW63 EW100	BZ6L10CA	-	▲ *1*3	BZ6L10C
EW125 EW160 EW250	BW9Q1CA *4		BW9Q2CA BW9Q2GA	BW9L1CA
EW400 EW630 EW800	▲ *1	BW9QNHA *2	BW9Q2HA BW9Q2JA	BW9L1HA

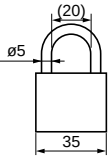
Notes:

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

*2 ON and OFF locking is possible.

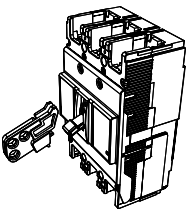
*3 If a padlock is required, use a commercially available padlock with the dimensions shown in the diagram at the right.

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

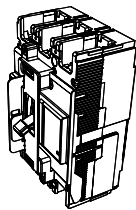


Padlocking device

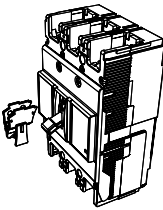
• Cap type Q1



• Plate type Q2



Handle locking cover



Q1: BZ6L10CA (OFF-locking Padlocking device)

