e-Front runners

FUJI MCCB and ELCB

G-TWIN

GLOBAL TWIN

Molded Case Circuit Breakers
Earth Leakage Circuit Breakers

Fuji Electric FA Components & Systems Co., Ltd.

EEH130

The Twin Breakers have advanced to an entirely new stage.

G-TWIN

Conforming to International Standards

Conforming to certifications and standards in major world markets

Expanded frame sizes in G-TWIN Global Series

Compact & High performance

Compact models with unified dimensions meeting UL489 480V and IEC 440V requirements

Safety & Easy maintenance

Satisfying the latest IEC 60947-2 requirements with improved maintenance

FUJI MCCB and ELCB
GLOBAL TWIN

Fuji Electric launched the Twin Breaker Series to world markets in 1990, in which molded case circuit breaker (MCCB) and earth leakage circuit breaker (ELCB) types were unified in external dimensions for the first time in the world. The Twin Breaker Series was highly evaluated and gained strong support, and the concept of Twin Breakers was established as Japan's de facto standards for MCCBs and ELCBs.
In 1992, Fuji Electric released the Super Twin Breaker Series, which enabled user installation of internal accessories for the first time in Japan.
In 1995, Fuji Electric released the Super 60 Series and advanced modularization via uniform external dimensions. In 2001, Fuji Electric launched the α-Twin Series to further advance the miniaturization and modularization of economic types with 100A frame or less as Japan's first multi-standard circuit breakers satisfying domestic and international standards. Since then, Fuji Electric has been making further product improvements by predicting market trends.
In recent years, market globalization has increasingly accelerated. At the end of 2004, the Japanese Industrial Standards (JIS) were aligned with the IEC standards, and the globalization in this field has been further accelerated.
Based on the Twin Breaker Series, Fuji Electric has expanded the range of its products conforming to and approved by international standards for global markets, always advanced the innovative development of fundamental technologies in response to the market demand, and developed the G-TWIN Series of MCCBs and ELCBs.

Ecology

Lower environmental impact

Advanced green engineering and energy-saving support

Conforming to the RoHS Directive

Usefulness

Leading the way in user-friendliness

Conforming International Standards

The 21st century is calling for the international standardization of breakers. The G-TWIN Series is approved by the world's major standards and certification bodies.

Domestic and international standards of circuit breakers

UL/CSA

North America

North America
UL489
CAN/CSA C22.2 NO.5

c UL us
LISTED

Year 1999

JIS C 8201-2

Year 2004

JIS C 8201-2-1 MCCB
JIS C 8201-2-2 ELCB

The G-TWIN series is a global breaker series that satisfies all major standards.

G-TWIN Global series

UL mark (cUL) +
CE marking (TÜV) +
CCC marking + JIS

- IEC 60947-2
- JIS C 8201-2-1, 2 (Ann. 1, 2)
- EN 60947-2 (CE marking)
- GB 14048.2 (CCC)
- UL 489
- CAN/CSA C22.2 NO.5

UL489 model

- UL 489
- CAN/CSA C22.2 NO.5
- IEC 60947-2
- JIS C 8201-2
- UL mark (cUL)
- CE marking (TÜV)

α-TWIN

TWIN

Addition of ampere frame sizes in G-TWIN Global Series

125	250	400	630	800

Compact & High performance

Compact models with unified dimensions meeting UL489 480V and IEC 440V requirements

Arc and gas flow control technology

Effect of G-TWIN technical innovation (250AF example)

Compact size meeting UL489 480V requirements

Miniaturization rate (Volume ratio) -53%

Current model

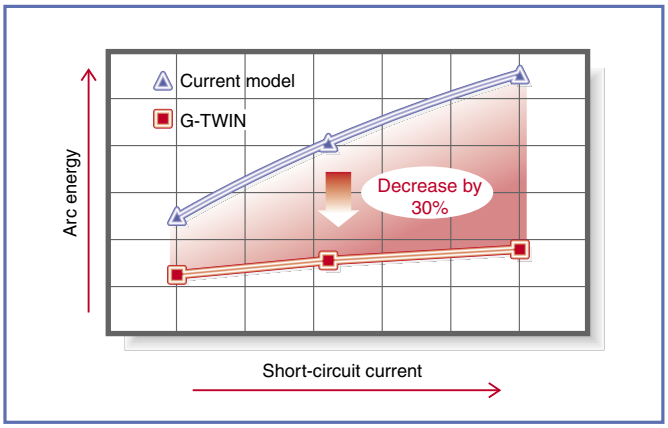
Rated voltage 240V
SG203CUL
(W105 x H165 x D60 mm)

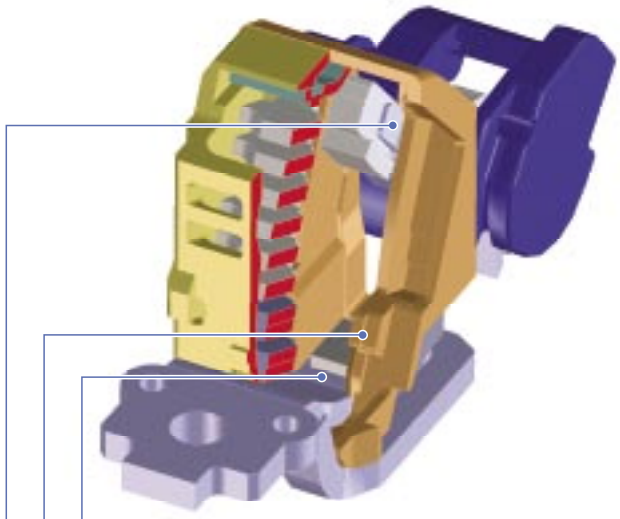
Rated voltage 480V
BW250RAGU
(W105 x H181 x D68 mm)

Current model

Rated voltage 480V
BU3JLC
(W105 x H256 x D103 mm)

Effect of ablation breaking technology





Magnetic yoke arrangement
- An increase in the repulsion force of the moving contact at initiation of contact opening

Narrow slit resin
- Increased arc voltage due to narrow slit effect
- Increased arc voltage and high-speed moving contact opening by ablation effect
- Suppression of internal pressure rise by adjusting the narrow slit width

Moving contact cover
- Arcing prevention at the bottom of moving contact

Safety & Easy maintenance

Satisfying the latest IEC 60947-2 requirements with improved maintenance

Newly developed earth leakage detection circuit

New three-phase power supply circuit functions in phase-loss state

The revised IEC stipulates that the ELCB should trip when earth-leakage occurs even in phase loss state in three-phase system. The G-TWIN Series meets this requirement.

Adoption of changeover switch for dielectric test

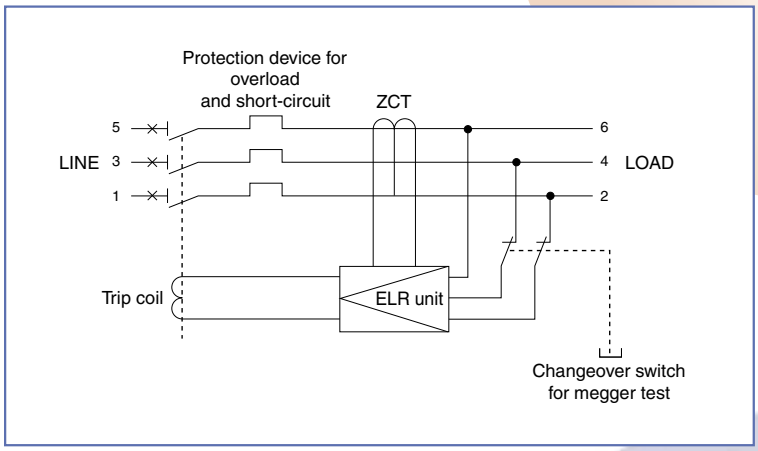
High workability can be obtained since the removal of ELCB wiring is not required at dielectric test during inspection (Adopted for 125AF or more).

World first

α-TWIN (Current model)

G-TWIN

ELCB internal wiring diagram



Usefulness

Leading the way in user-friendliness

Unifying and reducing the types of internal accessories

- Sharing internal accessories of 125/250AF breakers.
- The shunt trip (F) and undervoltage trip (R) devices can be installed inside the G-TWIN Series ELCB.
- The number of types of internal accessories of 400/630/800AF has been significantly reduced.

ELCB with shunt trip device

MCCB with ELR unit

G-TWIN 125/250 AF

Streamlined appearance and internal accessories incorporated G-TWIN

Number of types of internal accessories [No. of types]

AF	α-TWIN		G-TWIN
100/125	8	16	8
225/250	8		
400	26		6
600/630			
800			

Ecology

Advanced environmental technology Conforming to the RoHS Directive

The G-TWIN Series is designed to lower environmental impact.

Recycling

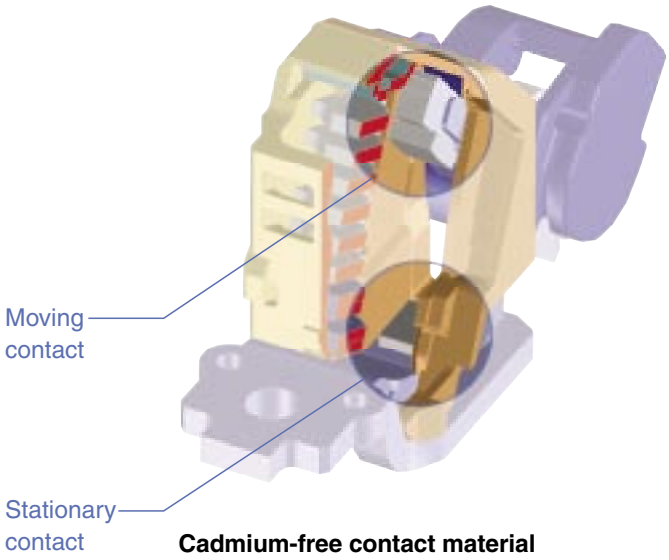
- For easier recycling, all major parts are marked with the names of the materials used.

Conforming to the RoHS Directive

- Lead-free (Pb-free) solder is used.
- Free of hexavalent chromium (Cr^{6+}-free)

Cadmium-free (Cd-free)

- Cd-free contacts are used.



Cadmium-free contact material

List of product

G-TWIN			125AF	160AF	250AF	400AF	630AF	800AF
Standard series	MCCB	E	–	**BW160EAG**	**BW250EAG**	**BW400EAG**	**BW630EAG**	**BW630EAG**
	 **BW250RAG**	J	**BW125JAG**	**BW160JAG**	**BW250JAG**	–	–	–
		S	**BW125SAG**	**BW160SAG**	**BW250SAG**	**BW400SAG**	–	–
		R	**BW125RAG**	**BW160RAG**	**BW250RAG**	**BW400RAG**	**BW630RAG**	**BW800RAG**
		H	–	–	–	**BW400HAG**	**BW630HAG**	**BW800HAG**
	ELCB	E	–	**EW160EAG**	**EW250EAG**	**EW400EAG**	**EW630EAG**	**EW630EAG**
	 **EW250RAG**	J	**EW125JAG**	**EW160JAG**	**EW250JAG**	–	–	–
		S	**EW125SAG**	**EW160SAG**	**EW250SAG**	**EW400SAG**	–	–
		R	**EW125RAG**	**EW160RAG**	**EW250RAG**	**EW400RAG**	**EW630RAG**	**EW800RAG**
		H	–	–	–	**EW400HAG**	**EW630HAG**	**EW800HAG**
Global series	MCCB	E	–	–	**BW250EAGU**	**BW400EAGU**	–	–
	 **BW250RAGU**	J	**BW125JAGU**	–	**BW250JAGU**	–	–	–
		S	–	–	–	**BW400SAGU**	–	–
		R	**BW125RAGU**	–	**BW250RAGU**	**BW400RAGU**	**BW630RAGU** Available soon	**BW800RAGU** Available soon
		H	–	–	–	**BW400HAGU**	**BW630HAGU** Available soon	**BW800HAGU** Available soon
	ELCB	J	**EW125JAGU**	–	**EW250JAGU**	–	–	–
	 **EW250RAGU**	S	–	–	–	**EW400SAGU**	–	–
		R	**EW125RAGU**	–	**EW250RAGU**	**EW400RAGU**	–	–
		H	–	–	–	**EW400HAGU**	–	–

Mold Case Circuit Breakers, G-TWIN sereies

G-TWIN series
Breaking capacities

G-TWIN Standard Series

Breaker ampere frame	Basic type	Pole	Rated current (A)	Insulation voltage (Ui)	Interrupting capacity (kA)												
					IEC60947-2 [Icu/Ics]					GB14048.2 [Icu/Ics]		UL489, CAN/CSA C22.2 N0.5					
					AC 230V 240V	AC 380V 400V 415V 440V	AC 500V	AC 690V	DC 250V	AC 230V	AC 400V	AC 240V	AC 480V / ⅄	AC 480V / △	AC 600V / ⅄	AC 600V / △	DC 125/ 250V
125	BW125JAG	–2P	15,20,30,40,50,60,75,100,125	690	50/25	30/15	5/3	–	15/8	50/25	30/15	–	–	–	–	–	–
125	BW125JAG	–3P	15,20,30,40,50,60,75,100,125	690	50/25	30/15	8/4	–	15/8	50/25	30/15	–	–	–	–	–	–
125	BW125JAG	–4P	15,20,30,40,50,60,75,100,125	690	50/25	30/15	8/4	–	15/8	50/25	30/15	–	–	–	–	–	–
125	BW125SAG	–2P	15,20,30,40,50,60,75,100,125	690	85/43	36/18	10/5	–	30/15	85/43	36/18	–	–	–	–	–	–
125	BW125SAG	–3P	15,20,30,40,50,60,75,100,125	690	85/43	36/18	10/5	–	30/15	85/43	36/18	–	–	–	–	–	–
125	BW125SAG	–4P	15,20,30,40,50,60,75,100,125	690	85/43	36/18	10/5	–	30/15	85/43	36/18	–	–	–	–	–	–
125	BW125RAG	–2P	15,20,30,40,50,60,75,100,125	690	100/50	50/25	10/5	–	40/20	100/50	50/25	–	–	–	–	–	–
125	BW125RAG	–3P	15,20,30,40,50,60,75,100,125	690	100/50	50/25	10/5	–	40/20	100/50	50/25	–	–	–	–	–	–
125	BW125RAG	–4P	15,20,30,40,50,60,75,100,125	690	100/50	50/25	10/5	–	40/20	100/50	50/25	–	–	–	–	–	–
160	BW160EAG	–2P	125,150,160	690	36/18	18/9	5/3	–	10/5	36/18	18/9	–	–	–	–	–	–
160	BW160EAG	–3P	125,150,160	690	36/18	18/9	5/3	–	10/5	36/18	18/9	–	–	–	–	–	–
160	BW160JAG	–2P	125,150,160	690	50/25	30/15	8/4	–	20/10	50/25	30/15	–	–	–	–	–	–
160	BW160JAG	–3P	125,150,160	690	50/25	30/15	8/4	–	20/10	50/25	30/15	–	–	–	–	–	–
160	BW160JAG	–4P	125,150,160	690	50/25	30/15	8/4	–	20/10	50/25	30/15	–	–	–	–	–	–
160	BW160SAG	–2P	125,150,160	690	85/43	36/18	10/5	–	30/15	85/43	36/18	–	–	–	–	–	–
160	BW160SAG	–3P	125,150,160	690	85/43	36/18	10/5	–	30/15	85/43	36/18	–	–	–	–	–	–
160	BW160SAG	–4P	125,150,160	690	85/43	36/18	10/5	–	30/15	85/43	36/18	–	–	–	–	–	–
160	BW160RAG	–2P	125,150,160	690	100/50	50/25	10/5	–	30/15	100/50	50/25	–	–	–	–	–	–
160	BW160RAG	–3P	125,150,160	690	100/50	50/25	10/5	–	30/15	100/50	50/25	–	–	–	–	–	–
160	BW160RAG	–4P	125,150,160	690	100/50	50/25	10/5	–	30/15	100/50	50/25	–	–	–	–	–	–
250	BW250EAG	–2P	175,200,225,250	690	36/18	18/9	5/3	–	10/5	36/18	18/9	–	–	–	–	–	–
250	BW250EAG	–3P	175,200,225,250	690	36/18	18/9	5/3	–	10/5	36/18	18/9	–	–	–	–	–	–
250	BW250JAG	–2P	175,200,225,250	690	50/25	30/15	8/4	–	20/10	50/25	30/15	–	–	–	–	–	–
250	BW250JAG	–3P	175,200,225,250	690	50/25	30/15	8/4	–	20/10	50/25	30/15	–	–	–	–	–	–
250	BW250JAG	–4P	175,200,225,250	690	50/25	30/15	8/4	–	20/10	50/25	30/15	–	–	–	–	–	–
250	BW250SAG	–2P	175,200,225,250	690	85/43	36/18	10/5	–	30/15	85/43	36/18	–	–	–	–	–	–
250	BW250SAG	–3P	175,200,225,250	690	85/43	36/18	10/5	–	30/15	85/43	36/18	–	–	–	–	–	–
250	BW250SAG	–4P	175,200,225,250	690	85/43	36/18	10/5	–	30/15	85/43	36/18	–	–	–	–	–	–
250	BW250RAG	–2P	175,200,225,250	690	100/50	50/25	10/5	–	30/15	100/50	50/25	–	–	–	–	–	–
250	BW250RAG	–3P	175,200,225,250	690	100/50	50/25	10/5	–	30/15	100/50	50/25	–	–	–	–	–	–
250	BW250RAG	–4P	175,200,225,250	690	100/50	50/25	10/5	–	30/15	100/50	50/25	–	–	–	–	–	–
400	BW400EAG	–2P	250,300,350,400	690	50/25	30/15	18/9	–	20/10	50/25	30/15	–	–	–	–	–	–
400	BW400EAG	–3P	250,300,350,400	690	50/25	30/15	18/9	–	20/10	50/25	30/15	–	–	–	–	–	–
400	BW400SAG	–2P	250,300,350,400	690	85/43	36/18	20/10	10/5	20/10	85/43	36/18	–	–	–	–	–	–
400	BW400SAG	–3P	250,300,350,400	690	85/43	36/18	20/10	10/5	20/10	85/43	36/18	–	–	–	–	–	–
400	BW400RAG	–2P	250,300,350,400	690	100/50	50/25	36/18	15/8	40/20	100/50	50/25	–	–	–	–	–	–
400	BW400RAG	–3P	250,300,350,400	690	100/50	50/25	36/18	15/8	40/20	100/50	50/25	–	–	–	–	–	–
400	BW400RAG	–4P	250,300,350,400	690	100/50	50/25	36/18	15/8	40/20	100/50	50/25	–	–	–	–	–	–
400	BW400HAG	–2P	250,300,350,400	690	125/63	70/35	42/21	15/8	40/20	125/63	70/35	–	–	–	–	–	–
400	BW400HAG	–3P	250,300,350,400	690	125/63	70/35	42/21	15/8	40/20	125/63	70/35	–	–	–	–	–	–
400	BW400HAG	–4P	250,300,350,400	690	125/63	70/35	42/21	15/8	40/20	125/63	70/35	–	–	–	–	–	–
630	BW630EAG	–3P	500,600,630	690	50/25	36/18	18/9	–	20/10	50/25	30/15	–	–	–	–	–	–
630	BW630RAG	–3P	500,600,630	690	100/50	50/25	36/18	15/8	40/20	100/50	50/25	–	–	–	–	–	–
630	BW630HAG	–3P	500,600,630	690	125/63	70/35	42/21	15/8	40/20	125/63	70/35	–	–	–	–	–	–
800	BW800EAG	–3P	700,800	690	50/25	36/18	18/9	–	20/10	50/25	30/15	–	–	–	–	–	–
800	BW800RAG	–3P	700,800	690	100/50	50/25	36/18	15/8	40/20	100/50	50/25	–	–	–	–	–	–
800	BW800HAG	–3P	700,800	690	125/63	70/35	42/21	15/8	40/20	125/63	70/35	–	–	–	–	–	–

G-TWIN Global Series

Breaker ampere frame	Basic type	Pole	Rated current (A)	Insulation voltage (Ui)	Interrupting capacity (kA)												
					IEC60947-2 [Icu/Ics]					GB14048.2 [Icu/Ics]		UL489, CAN/CSA C22.2 N0.5					
					AC 230V 240V	AC 380V 400V 415V 440V	AC 500V	AC 690V	DC 250V	AC 230V	AC 400V	AC 240V	AC 480V / ⅄	AC 480V / △	AC 600V / ⅄	AC 600V / △	DC 125/ 250V
125	BW125JAGU	–2P	15,20,30,40,50,60,70,75,80,90,100,125	690	50/25	30/15	15/8	–	15/8	50/25	30/15	50	30	–	10	–	10
125	BW125JAGU	–3P	15,20,30,40,50,60,70,75,80,90,100,125	690	50/25	30/15	15/8	–	15/8	50/25	30/15	50	30	30	10	–	10
125	BW125RAGU	–2P	15,20,30,40,50,60,70,75,80,90,100,125	690	100/50	50/25	36/18	5/3	40/20	100/50	50/25	100	50	50	18	–	10
125	BW125RAGU	–3P	15,20,30,40,50,60,70,75,80,90,100,125	690	100/50	50/25	36/18	5/3	40/20	100/50	50/25	100	50	50	18	–	10
250	BW250EAGU	–2P	125,150,160,175,200,225,250	690	36/18	18/9	10/5	–	10/5	36/18	18/9	22	–	–	–	–	10
250	BW250EAGU	–3P	125,150,160,175,200,225,250	690	36/18	18/9	10/5	–	10/5	36/18	18/9	22	–	–	–	–	10
250	BW250JAGU	–2P	125,150,160,175,200,225,250	690	50/25	30/15	18/9	–	20/10	50/25	30/15	50	30	30	10	–	10
250	BW250JAGU	–3P	125,150,160,175,200,225,250	690	50/25	30/15	18/9	–	20/10	50/25	30/15	50	30	30	10	–	10
250	BW250RAGU	–2P	125,150,160,175,200,225,250	690	100/50	50/25	36/18	5/3	40/20	100/50	50/25	100	50	50	25	–	10
250	BW250RAGU	–3P	125,150,160,175,200,225,250	690	100/50	50/25	36/18	5/3	40/20	100/50	50/25	100	50	50	25	–	10
400	BW400EAGU	–2P	250,300,350,400	690	50/25	30/15	18/9	–	20/10	50/25	30/15	22	–	–	–	–	10
400	BW400EAGU	–3P	250,300,350,400	690	50/25	30/15	18/9	–	20/10	50/25	30/15	22	–	–	–	–	10
400	BW400SAGU	–2P	250,300,350,400	690	85/43	36/18	20/10	10/5	20/10	85/43	36/18	50	35	35	–	–	10
400	BW400SAGU	–3P	250,300,350,400	690	85/43	36/18	20/10	10/5	20/10	85/43	36/18	50	35	35	–	–	10
400	BW400RAGU	–2P	250,300,350,400	690	100/50	50/25	36/18	15/8	40/20	100/50	50/25	100	50	50	–	–	10
400	BW400RAGU	–3P	250,300,350,400	690	100/50	50/25	36/18	15/8	40/20	100/50	50/25	100	50	50	–	–	10
400	BW400HAGU	–2P	250,300,350,400	690	125/63	70/35	42/21	15/8	40/20	125/63	70/35	125	65	65	25	25	10
400	BW400HAGU	–3P	250,300,350,400	690	125/63	70/35	42/21	15/8	40/20	125/63	70/35	125	65	65	25	25	10

Type number nomenclature

BW 250 EA G □ - 3P 225 X W K FK RK A

Series
BW: G-TWIN series

Frame size
125: 125AF
160: 160AF
250: 250AF
400: 400AF
630: 630AF
800: 800AF

Breaking capacity

	Rated breaking capacity Icu (440V AC)					
	125AF	160AF	250AF	400AF	630AF	800AF
EA	–	18kA	18kA	30kA	36kA	36kA
JA	30kA	30kA	30kA	–	–	–
SA	36kA	36kA	36kA	36kA	–	–
RA	50kA	50kA	50kA	50kA	50kA	50kA
HA	–	–	–	70kA	70kA	70kA

Model
G: Line protection

G-TWIN series
Blank: Standard
U: Global

No. of poles
2P: 2-pole
3P: 3-pole
4P: 4-pole

Rated current

	125AF	160AF	250AF	400AF	630AF	800AF
015	15A	–	–	–	–	–
020	20A	–	–	–	–	–
030	30A	–	–	–	–	–
040	40A	–	–	–	–	–
050	50A	–	–	–	–	–
060	60A	–	–	–	–	–
075	75A	–	–	–	–	–
100	100A	–	–	–	–	–
125	125A	125A	–	–	–	–
150	–	150A	–	–	–	–
160	–	160A	–	–	–	–
175	–	–	175A	–	–	–
200	–	–	200A	–	–	–
225	–	–	225A	–	–	–
250	–	–	250A	250A	–	–
300	–	–	–	300A	–	–
350	–	–	–	350A	–	–
400	–	–	–	400A	–	–
500	–	–	–	–	500A	–
600	–	–	–	–	600A	–
630	–	–	–	–	630A	–
700	–	–	–	–	–	700A
800	–	–	–	–	–	800A

* For the available configuration of accessory, see page 49.

Connection method (internal accessories)
Blank: Lead-wire system
A: Terminal block system

Undervoltage trip device*

	• 125/160/250AF	• 400/630/800AF
RR:	24V DC	24V AC/DC
RS:	48V DC	48V AC/DC
RL:	100-110V DC	–
R5:	125V DC	–
RA:	100-110V AC	100-110V AC/DC
RT:	110-130V AC	–
R1:	–	120-130V AC/200V-220V DC
RK:	200-240V AC	200-240V AC/200-220V DC
RB:	277V AC	277V AC
RP:	380-415V AC	380-480V AC
RH:	440-480V AC	–

Shunt trip device*

	• 125/160/250AF	• 400/630/800AF
FR:	24V AC/DC	24-48V AC/DC
FS:	48V AC/DC	–
FA:	100-120V AC/100-110V DC	100-240V AC/100-220V DC
F1:	120-130V AC	–
FK:	200-240V AC/200-220V DC	–
FB:	277V AC	277V AC
FP:	380-440V AC	380-550V AC
FH:	440-480V AC	–
FJ:	500-550V AC	–

Alarm switch*
K: Standard SPDT
J: Standard 2PDT
8: For low level circuit SPDT
9: For low level circuit 2PDT

Auxiliary switch*
W: Standard SPDT
V: Standard 2PDT
1: For low level circuit SPDT
2: For low level circuit 2PDT

Mounting and connection
• Standard type
Blank: Front mounting front connection
X: Front mounting rear connection
E: Flush mounting rear connection
P: Plug-in mounting

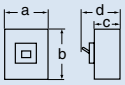
• Global type
See table below.

Terminal combination (Global type)

Code	Terminal position		Applicable breaker type	
	Line	Load	BW125, 160, 250	BW400
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	●	●

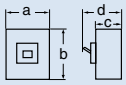
G-TWIN series
Quick reference guide

G-TWIN Standard Series

Ampere frame				125A								
Type				**BW125JAG**			**BW125SAG**			**BW125RAG**		
Pole				2	3	4	2	3	4	2	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 insulation voltage Ui (V)		AC		690			690			690		
		DC		250			250			250		
Rated breaking capacity Icu/Ics (kA)	IEC 60947-2 JIS C 8201-2-1 Ann. 1,2	AC	690V	–	–		–			–		
			500V	5/3	8/4		10/5			10/5		
			440V	30/15	30/15		36/18			50/25		
			415V	30/15	30/15		36/18			50/25		
			400V	30/15	30/15		36/18			50/25		
			380V	30/15	30/15		36/18			50/25		
			240V	50/25	50/25		85/43			100/50		
			230V	50/25	50/25		85/43			100/50		
		DC	250V	15/8	15/8		30/15			40/20		
	GB14048.2	AC	400V	30/15	30/15		36/18			50/25		
			230V	50/25	50/25		85/43			100/50		
Standard certified	CE Marking certified (TÜV)			○			○			○		
	CCC approved			○			○			○		
	Electrical Appliance and Material Safety Law <PS>E*			○ (except for 125A)			○ (except for 125A)			○ (except for 125A)		
Dimensions (mm) 			a	60	90	120	90	90	120	90	90	120
			b	155			155			155		
			c	68			68			68		
			d	95			95			95		
Mass (kg)				0.8	1.2	1.6	1.0	1.2	1.6	1.0	1.2	1.6
Tripping device				Thermal-magnetic								
Front mounting, front connection			No-mark	○	○	○	○	○	○	○	○	○
Front mounting, rear connection			X	○	○	○	○	○	○	○	○	○
Flush mounting, front connection			E	○	○	○	○	○	○	○	○	○
Plug-in mounting			P	○	○	–	○	○	–	○	○	–
Internal accessories			Page 45									
Alarm switch			K	○	○	○	○	○	○	○	○	○
Auxiliary switch			W	○	○	○	○	○	○	○	○	○
Undervoltage trip			R	–	○	○	○	○	○	○	○	○
Shunt trip			F	○	○	○	○	○	○	○	○	○
External accessories			Page 47									
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 –: Not approved
Note: * Electrical Appliance and Material Safety Law of Japan

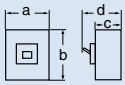
G-TWIN Standard Series

Ampere frame				160A										
Type				**BW160EAG**		**BW160JAG**			**BW160SAG**			**BW160RAG**		
Pole				2	3	2	3	4	2	3	4	2	3	4
Rated current Reference amb. temp. (40°C)		In(A)		125, 150, 160										
Rated impulse withstand voltage		Uimp(kV)		6		6			6			6		
Isolation compliant				○		○			○			○		
Rated insulation voltage Ui (V)		AC		690		690			690			690		
		DC		250		250			250			250		
Rated breaking capacity Icu/Ics (kA)	IEC 60947-2 JIS C 8201-2-1 Ann. 1,2	AC	690V	–		–			–			–		
			500V	5/3		8/4			10/5			10/5		
			440V	18/9		30/15			36/18			50/25		
			415V	18/9		30/15			36/18			50/25		
			400V	18/9		30/15			36/18			50/25		
			380V	18/9		30/15			36/18			50/25		
			240V	36/18		50/25			85/43			100/50		
			230V	36/18		50/25			85/43			100/50		
		DC	250V	10/5		20/10			30/15			30/15		
	GB14048.2	AC	400V	18/9		30/15			36/18			50/25		
			230V	36/18		50/25			85/43			100/50		
Standard certified	CE Marking certified (TÜV)			○		○			○			○		
	CCC approved			○		○			○			○		
	Electrical Appliance and Material Safety Law <PS>E*			–		–			–			–		
Dimensions (mm) 			a	105	105	105	105	140	105	105	140	105	105	140
			b	165		165			165			165		
			c	68		68			68			68		
			d	95		95			95			95		
Mass (kg)				1.4	1.6	1.4	1.6	2.2	1.4	1.6	2.2	1.4	1.6	2.2
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 45											
Alarm switch			K	○	○	○	○	○	○	○	○	○	○	○
Auxiliary switch			W	○	○	○	○	○	○	○	○	○	○	○
Undervoltage trip			R	○	○	○	○	○	○	○	○	○	○	○
Shunt trip			F	○	○	○	○	○	○	○	○	○	○	○
External accessories			Page 47											
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 –: Not approved
Note: * Electrical Appliance and Material Safety Law of Japan

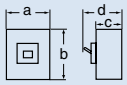
G-TWIN series
Quick reference guide

G-TWIN Standard Series

Ampere frame				250A										
Type				**BW250EAG**		**BW250JAG**			**BW250SAG**			**BW250RAG**		
Pole				2	3	2	3	4	2	3	4	2	3	4
Rated current Reference amb. temp. (40°C)		In(A)		175, 200, 225, 250										
Rated impulse withstand voltage		Uimp(kV)		6		6			6			6		
Isolation compliant				○		○			○			○		
Rated insulation voltage Ui (V)		AC		690		690			690			690		
		DC		250		250			250			250		
Rated breaking capacity Icu/Ics (kA)	IEC 60947-2 JIS C 8201-1 Ann. 1,2	AC	690V	–		–			–			–		
			500V	5/3		8/4			10/5			10/5		
			440V	18/9		30/15			36/18			50/25		
			415V	18/9		30/15			36/18			50/25		
			400V	18/9		30/15			36/18			50/25		
			380V	18/9		30/15			36/18			50/25		
			240V	36/18		50/25			85/43			100/50		
			230V	36/18		50/25			85/43			100/50		
		DC	250V	10/5		20/10			30/15			30/15		
	GB14048.2	AC	400V	18/9		30/15			36/18			50/25		
			230V	36/18		50/25			85/43			100/50		
Standard certified	CE Marking certified (TÜV)			○		○			○			○		
	CCC approved			○		○			○			○		
	Electrical Appliance and Material Safety Law <PS>E*			–		–			–			–		
Dimensions (mm) 			a	105	105	105	105	140	105	105	140	105	105	140
			b	165		165			165			165		
			c	68		68			68			68		
			d	95		95			95			95		
Mass (kg)				1.4	1.6	1.4	1.6	2.2	1.4	1.6	2.2	1.4	1.6	2.2
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 45											
Alarm switch			K	○	○	○	○	○	○	○	○	○	○	○
Auxiliary switch			W	○	○	○	○	○	○	○	○	○	○	○
Undervoltage trip			R	○	○	○	○	○	○	○	○	○	○	○
Shunt trip			F	○	○	○	○	○	○	○	○	○	○	○
External accessories			Page 47											
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 –: Not approved
Note: * Electrical Appliance and Material Safety Law of Japan

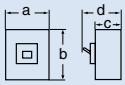
G-TWIN Standard Series

Ampere frame				400A									
Type				**BW400EAG**		**BW400SAG**		**BW400RAG**			**BW400HAG**		
Pole				2	3	2	3	2	3	4	2	3	4
Rated current Reference amb. temp. (40°C)		In(A)		250, 300, 350, 400									
Rated impulse withstand voltage		Uimp(kV)		8		8		8			8		
Isolation compliant				○		○		○			○		
Rated insulation voltage Ui (V)		AC		690		690		690			690		
		DC		250		250		250			250		
Rated breaking capacity Icu/Ics (kA)	IEC 60947-2 JIS C 8201-2-1 Ann. 1,2	AC	690V	–		10/5		15/8			15/8		
			500V	18/9		20/10		36/18			42/21		
			440V	30/15		36/18		50/25			70/35		
			415V	30/15		36/18		50/25			70/35		
			400V	30/15		36/18		50/25			70/35		
			380V	30/15		36/18		50/25			70/35		
			240V	50/25		85/43		100/50			125/63		
			230V	50/25		85/43		100/50			125/63		
		DC	250V	20/10		20/10		40/20			40/20		
	GB14048.2	AC	400V	30/15		36/18		50/25			70/35		
			230V	50/25		85/43		100/50			125/63		
Standard certified	CE Marking certified (TÜV)			○		○		○			○		
	CCC approved			○		○		○			○		
	Electrical Appliance and Material Safety Law <PS>E*1			–		–		–			–		
Dimensions (mm) 			a	140	140	140	140	140	140	185	140	140	185
			b	257		257		257			257		
			c	103		103		103			103		
			d	146		146		146			146		
Mass (kg)				4.6	5.6	4.6	5.6	4.6	5.6	7.4	4.6	5.6	7.4
Tripping device				Thermal-magnetic									
Front mounting, front connection			No-mark	○	○	○	○	○	○	○	○	○	○
Front mounting, rear connection			X	○	○	○	○	○	○	○	○	○	○
Flush mounting, front connection			E	○	○	○	○	○	○	○	○	○	○
Plug-in mounting			P	○	○	○	○	○	○	–	○	○	–
Internal accessories			Page 45										
Alarm switch			K	○	○	○	○	○	○	○	○	○	○
Auxiliary switch			W	○	○	○	○	○	○	○	○	○	○
Undervoltage trip			R	○	○	○	○	○	○	○	○	○	○
Shunt trip			F	○	○	○	○	○	○	○	○	○	○
External accessories			Page 47										
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	○*2	○*2	○*2	○*2	○*2	○*2	○*2	○*2	○*2	○*2
Block terminal			SL	○	○	○	○	○	○	○	○	○	○

○: Approved –: Not approved
Note: *1 Electrical Appliance and Material Safety Law of Japan
*2 Standard provided

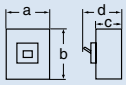
G-TWIN series
Quick reference guide

G-TWIN Standard Series

Ampere frame				630A			800A		
Type				**BW630EAG**	**BW630RAG**	**BW630HAG**	**BW800EAG**	**BW800RAG**	**BW800HAG**
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)		8	8	8	8	8	8
Isolation compliant				○	○	○	○	○	○
Rated insulation voltage Ui (V)		AC		690	690	690	690	690	690
		DC		250	250	250	250	250	250
Rated breaking capacity Icu/Ics (kA)	IEC 60947-2 JIS C 8201-2-1 Ann. 1,2	AC	690V	–	15/8	15/8	–	15/8	15/8
			600V	–	–	–	–	–	–
			500V	18/9	36/18	42/21	18/9	36/18	42/21
			440V	36/18	50/25	70/35	36/18	50/25	70/35
			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
			240V	50/25	100/50	125/63	50/25	100/50	125/63
			230V	50/25	100/50	125/63	50/25	100/50	125/63
		DC	250V	20/10	40/20	40/20	20/10	40/20	40/20
	GB14048.2	AC	400V	30/15	50/25	70/35	30/15	50/25	70/35
			230V	50/25	100/50	125/63	50/25	100/50	125/63
Standard certified	CE Marking certified (TÜV)			○	○	○	○	○	○
	CCC approved			○	○	○	○	○	○
	Electrical Appliance and Material Safety Law <PS>E*1			–	–	–	–	–	–
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)				7.8	7.8	7.8	9.1	9.1	9.1
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 45						
Alarm switch			K	○	○	○	○	○	○
Auxiliary switch			W	○	○	○	○	○	○
Undervoltage trip			R	○	○	○	○	○	○
Shunt trip			F	○	○	○	○	○	○
External accessories			Page 47						
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	○*2	○*2	○*2	○*2	○*2	○*2
Block terminal			SL	○	○	○	○	○	○

○: Approved –: Not approved
Note: *1 Electrical Appliance and Material Safety Law of Japan
*2 Standard provided

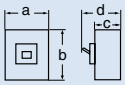
G-TWIN Global Series

Ampere frame				125A			
Type				**BW125JAGU**		**BW125RAGU**	
Pole				2	3	2	3
Rated current Reference amb. temp. (40°C)		In(A)		15, 20, 30, 40, 50, 60, 70, 75, 80, 90, 100, 125			
Rated impulse withstand voltage		Uimp(kV)		6		6	
Isolation compliant				○		○	
Rated insulation voltage Ui (V)		AC		690		690	
		DC		250		250	
Rated breaking capacity	IEC 60947-2 JIS C 8201-2-1 Ann. 1,2 Icu/Ics (kA)	AC	690V	–		5/3	
			500V	15/8		36/18	
			440V	30/15		50/25	
			415V	30/15		50/25	
			400V	30/15		50/25	
			380V	30/15		50/25	
			240V	50/25		100/50	
			230V	50/25		100/50	
		DC	250V	15/8		40/20	
	GB14048.2 Icu/Ics(kA)	AC	400V	30/15		50/25	
			230V	50/25		100/50	
	UL489 CAN/CSA C22.2 NO.5 (kA)	AC	600V/Y	10	10	18	
			480V/Δ	–	30	50	
			480V/Y	30	30	50	
			240V	50	50	100	
		DC	125/250V	10	10	10	
Standard certified	CE Marking certified (TÜV)			○		○	
	CCC approved			○		○	
	UL Listed			○		○	
	Electrical Appliance and Material Safety Law <PS>E*			○ (except for 125A)		○ (except for 125A)	
Dimensions (inch(mm)) 			a	2.362 (60)	3.543 (90)	3.543 (90)	
			b	6.732 (171)		6.732 (171)	
			c	2.677 (68)		2.677 (68)	
			d	3.740 (95)		3.740 (95)	
Mass (kg)				0.8	1.2	1.0	1.2
Tripping device				Thermal-magnetic			
Connecting terminal							
Screw				○	○	○	○
Flat				○	○	○	○
Block				○	○	○	○
Internal accessories			Page 45				
Alarm switch			K	○	○	○	○
Auxiliary switch			W	○	○	○	○
Undervoltage trip			R	–	○	○	○
Shunt trip			F	○	○	○	○
External accessories			Page 47				
Handle padlocking device Cap type			Q1	○	○	○	○
Handle padlocking device Plate type			Q2	○	○	○	○
Operating handle N-type			N	–	○	○	○
Operating handle V-type			V	–	○	○	○
Operating handle F-type			F	–	○	○	○
Terminal cover Short			BT□S	○	○	○	○
Terminal cover Long			BT□L	○	○	○	○
Insulation barrier Interphase			BP	○	○	○	○
Handle locking cover			L1	○	○	○	○

○: Approved –: Not approved
Note: * Electrical Appliance and Material Safety Law of Japan

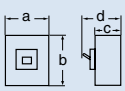
G-TWIN series
Quick reference guide

G-TWIN Global Series

Ampere frame				250A					
Type				**BW250EAGU**		**BW250JAGU**		**BW250RAGU**	
Pole				2	3	2	3	2	3
Rated current Reference amb. temp. (40°C)		In(A)		125, 150, 160, 175, 200, 225, 250					
Rated impulse withstand voltage		Uimp(kV)		6		6		6	
Isolation compliant				○		○		○	
Rated insulation voltage Ui (V)		AC		690		690		690	
		DC		250		250		250	
Rated breaking capacity	IEC 60947-2 JIS C 8201-2-1 Ann. 1,2 Icu/Ics (kA)	AC	690V	–		–		5/3	
			500V	10/5		18/9		36/18	
			440V	18/9		30/15		50/25	
			415V	18/9		30/15		50/25	
			400V	18/9		30/15		50/25	
			380V	18/9		30/15		50/25	
			240V	36/18		50/25		100/50	
			230V	36/18		50/25		100/50	
		DC	250V	10/5		20/10		40/20	
	GB14048.2 Icu/Ics(kA)	AC	400V	18/9		30/15		50/25	
			230V	36/18		50/25		100/50	
	UL489 CAN/CSA C22.2 NO.5 (kA)	AC	600V/Y	–		10		25	
			480V/Δ	–		30		50	
			480V/Y	–		30		50	
			240V	22		50		100	
		DC	125/250V	10		10		10	
Standard certified	CE Marking certified (TÜV)			○		○		○	
	CCC approved			○		○		○	
	UL Listed			○		○		○	
	Electrical Appliance and Material Safety Law <PS>E*			–		–		–	
Dimensions (inch(mm)) 			a	4.134 (105)		4.134 (105)		4.134 (105)	
			b	7.126 (181)		7.126 (181)		7.126 (181)	
			c	2.677 (68)		2.677 (68)		2.677 (68)	
			d	3.740 (95)		3.740 (95)		3.740 (95)	
Mass (kg)				1.4	1.6	1.4	1.6	1.4	1.6
Tripping device				Thermal-magnetic					
Connecting terminal									
Screw				○	○	○	○	○	○
Flat				○	○	○	○	○	○
Block				○	○	○	○	○	○
Internal accessories			Page 45						
Alarm switch			K	○	○	○	○	○	○
Auxiliary switch			W	○	○	○	○	○	○
Undervoltage trip			R	○	○	○	○	○	○
Shunt trip			F	○	○	○	○	○	○
External accessories			Page 47						
Handle padlocking device Cap type			Q1	○	○	○	○	○	○
Handle padlocking device Plate type			Q2	○	○	○	○	○	○
Operating handle N-type			N	○	○	○	○	○	○
Operating handle V-type			V	○	○	○	○	○	○
Operating handle F-type			F	○	○	○	○	○	○
Terminal cover Short			BT□S	○	○	○	○	○	○
Terminal cover Long			BT□L	○	○	○	○	○	○
Insulation barrier Interphase			BP	○	○	○	○	○	○
Handle locking cover			L1	○	○	○	○	○	○

○: Approved –: Not approved
Note: * Electrical Appliance and Material Safety Law of Japan

G-TWIN Global Series

Ampere frame				400A							
Type				BW400EAGU		BW400SAGU		BW400RAGU		BW400HAGU	
Pole				2	3	2	3	2	3	2	3
Rated current Reference amb. temp. (40°C)		In(A)		250, 300, 350, 400							
Rated impulse withstand voltage		Uimp(kV)		8		8		8		8	
Isolation compliant				○		○		○		○	
Rated insulation voltage Ui (V)		AC		690		690		690		690	
		DC		250		250		250		250	
Rated breaking capacity	IEC 60947-2 JIS C 8201-2-1 Ann. 1,2 Icu/Ics (kA)	AC	690V	–		10/5		15/8		15/8	
			500V	18/9		20/10		36/18		42/21	
			440V	30/15		36/18		50/25		70/35	
			415V	30/15		36/18		50/25		70/35	
			400V	30/15		36/18		50/25		70/35	
			380V	30/15		36/18		50/25		70/35	
			240V	50/25		85/43		100/50		125/63	
			230V	50/25		85/43		100/50		125/63	
		DC	250V	20/10		20/10		40/20		40/20	
	GB14048.2 Icu/Ics(kA)	AC	400V	30/15		36/18		50/25		70/35	
			230V	50/25		85/43		100/50		125/63	
	UL489 CAN/CSA C22.2 NO.5 (kA)	AC	600V/Δ	–		–		–		25	
			600V/Y	–		–		–		25	
			480V/Δ	–		35		50		65 (With block terminal:50)	
			480V/Y	–		35		50		65 (With block terminal:50)	
			240V	22		50		100		125	
		DC	125/250V	10		10		10		10	
Standard certified	CE Marking certified (TÜV)			○		○		○		○	
	CCC approved			○		○		○		○	
	UL Listed			○		○		○		○	
	Electrical Appliance and Material Safety Law <PS>E*			–		–		–		–	
Dimensions (inch(mm)) 		a		5.512 (140)		5.512 (140)		5.512 (140)		5.512 (140)	
		b		10.12 (257)		10.12 (257)		10.12 (257)		10.12 (257)	
		c		4.055 (103)		4.055 (103)		4.055 (103)		4.055 (103)	
		d		5.748 (146)		5.748 (146)		5.748 (146)		5.748 (146)	
Mass (kg)				4.6	5.6	4.6	5.6	4.6	5.6	4.6	5.6
Tripping device				Thermal-magnetic							
Connecting terminal											
Screw				○	○	○	○	○	○	○	○
Flat				○	○	○	○	○	○	○	○
Block				○	○	○	○	○	○	○	○
Internal accessories			Page 45								
Alarm switch			K	○	○	○	○	○	○	○	○
Auxiliary switch			W	○	○	○	○	○	○	○	○
Undervoltage trip			R	○	○	○	○	○	○	○	○
Shunt trip			F	○	○	○	○	○	○	○	○
External accessories			Page 47								
Handle padlocking device	Cap type		Q1	–	–	–	–	–	–	–	–
Handle padlocking device	Plate type		Q2	○	○	○	○	○	○	○	○
Operating handle	N-type		N	○	○	○	○	○	○	○	○
Operating handle	V-type		V	○	○	○	○	○	○	○	○
Operating handle	F-type		F	○	○	○	○	○	○	○	○
Terminal cover	Short		BT□S	○	○	○	○	○	○	○	○
Terminal cover	Long		BT□L	○	○	○	○	○	○	○	○
Insulation barrier	Interphase		BP	○	○	○	○	○	○	○	○
Handle locking cover			L1	○	○	○	○	○	○	○	○

○: Approved –: Not approved
Note: * Electrical Appliance and Material Safety Law of Japan

Mounting modifications

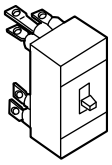
■ Mounting modifications

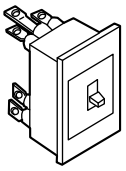
• Standard

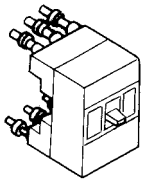
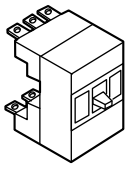
Standard type FUJI breakers are front mounting with front connections. The standard breaker can easily be modified to become front mounting rear connection type, flush mounting type and plug-in type. The additional parts such as insulation bases, barriers, covers and similar parts are added as required.

Front mounting
Front connection

BASIC DESIGN

Additional main parts	Front mounting Rear connection (X type)
Bar stud terminal 	BW125 BW160 BW250 BW400 BW630 BW800 Each stud can be turned by 90˚

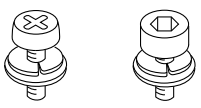
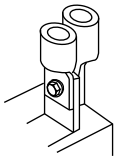
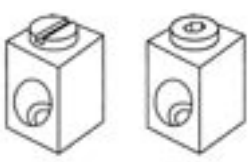
Additional main parts	Flush mounting Rear connection (E type)
Bar stud terminal 	BW125 BW160 BW250 BW400 BW630 BW800 Each stud can be turned by 90˚

Additional main parts	Plug-in mounting (P type)
Round stud terminal 	BW125
Bar stud terminal 	BW160 BW250 BW400 BW630 BW800 Each stud can be turned by 90˚

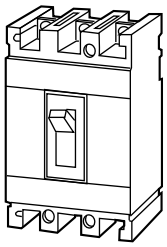
• Global

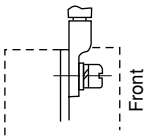
Front mounting
Front connection

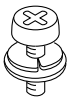
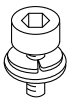
BASIC DESIGN

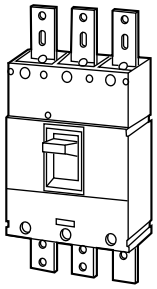
Screw	Flat terminal	Block terminal
		

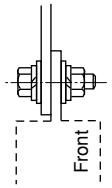
Terminal connection/Front mounting, front connection





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



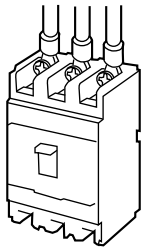


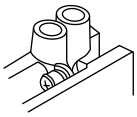
Flat terminal

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

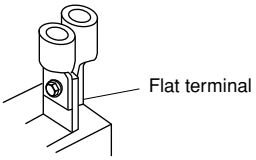
Type of connection/up to 250AF
Front mounting front connection

Direct connection





Flat terminal connection
Flat terminals are required.



Flat bar studs/1-hole type

Breaker type	Pole	Type of flat terminal
BW125	2 3 4	**BZ-S35B-1002** **BZ-S35B-1003** **BW9SS0CA-4**
BW160 BW250	2 3 4	**BZ-S50B-2252** **BZ-S50B-2253** **BW9SS0GA-4**

G-TWIN series
Wire size and terminal

■ Wire size and crimp terminal

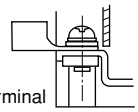
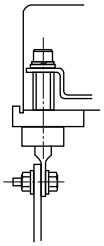
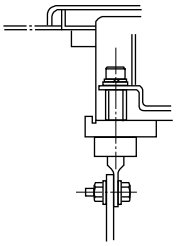
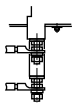
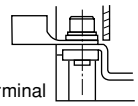
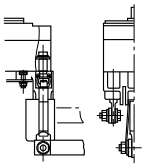
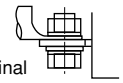
The following is the size recommendations for crimp terminals.

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

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
125	BW125	R2-8	R5.5-8	R8-8	R14-8	R22-8	JST38-S8	CD60-8				
160 250	BW160 BW250				R14-8	R22-8	R38-8	R60-8	CB100-8	CB150-8		
400	BW400						R38-12	R60-12	R100-12	R150-12	R200-12	JST325-12
630	BW630								R100-12	R150-12	R200-12	JST325-12
800	BW800								R100-12	R150-12	R200-12	JST325-12

■ Breaker termination

• Standard

MCCB type	Front connection	Rear connection **X**	Flush mounting **E**	Plug-in mounting **P**
BW125	 Flat terminal			
BW160 BW250	 Flat terminal			 90˚ rotational stud
BW400 BW630 BW800	 Flat 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.

Code	Terminal position		Applicable breaker type	
	Line	Load	BW125, 160, 250	BW400
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	●	●

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 mm^2.

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

Precautions

- Two wires, regardless of whether they are of the same size or different sizes, cannot be connected to block terminals.
- 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

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

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

G-TWIN series
Wire size and terminal

• Flat terminal connection

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

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

• Block terminal connection

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

Type number, Standard series

● E series, 2-pole IEC and CE marking conformed

Breaker ampere frame	Rated current (A)	Type	□: Available mounting and connection
160	125	BW160EAG-2P125□	Blank, X, E
	150	BW160EAG-2P150□	
	160	BW160EAG-2P160□	
250	175	BW250EAG-2P175□	Blank, X, E
	200	BW250EAG-2P200□	
	225	BW250EAG-2P225□	
	250	BW250EAG-2P250□	
400	250	BW400EAG-2P250□	Blank, X, E
	300	BW400EAG-2P300□	
	350	BW400EAG-2P350□	
	400	BW400EAG-2P400□	

● H series, 2-pole IEC and CE marking conformed

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

Mounting	Connection	□
Front	Front	Blank
Front	Rear	X
Flush	Rear	E
Plug-in		P

● J, S, R series, 2-pole IEC and CE marking conformed

Breaker ampere frame	Rated current (A)	Type	□: Available mounting and connection
125	15	BW125JAG-2P15□	Blank, X, E
	20	BW125JAG-2P20□	
	30	BW125JAG-2P30□	
	40	BW125JAG-2P40□	
	50	BW125JAG-2P50□	
	60	BW125JAG-2P60□	
	75	BW125JAG-2P75□	
	100	BW125JAG-2P100□	
	125	BW125JAG-2P125□	
	15	BW125SAG-2P15□	
	20	BW125SAG-2P20□	
	30	BW125SAG-2P30□	
	40	BW125SAG-2P40□	
	50	BW125SAG-2P50□	
	60	BW125SAG-2P60□	
	75	BW125SAG-2P75□	
	100	BW125SAG-2P100□	
	125	BW125SAG-2P125□	
	15	BW125RAG-2P15□	
	20	BW125RAG-2P20□	
	30	BW125RAG-2P30□	
	40	BW125RAG-2P40□	
	50	BW125RAG-2P50□	
	60	BW125RAG-2P60□	
	75	BW125RAG-2P75□	
	100	BW125RAG-2P100□	
	125	BW125RAG-2P125□	
160	125	BW160JAG-2P125□	Blank, X, E
	150	BW160JAG-2P150□	
	160	BW160JAG-2P160□	
	125	BW160SAG-2P125□	
	150	BW160SAG-2P150□	
	160	BW160SAG-2P160□	
	125	BW160RAG-2P125□	
	150	BW160RAG-2P150□	
	160	BW160RAG-2P160□	
250	175	BW250JAG-2P175□	Blank, X, E
	200	BW250JAG-2P200□	
	225	BW250JAG-2P225□	
	250	BW250JAG-2P250□	
	175	BW250SAG-2P175□	
	200	BW250SAG-2P200□	
	225	BW250SAG-2P225□	
	250	BW250SAG-2P250□	
	175	BW250RAG-2P175□	
	200	BW250RAG-2P200□	
	225	BW250RAG-2P225□	
	250	BW250RAG-2P250□	
400	250	BW400SAG-2P250□	Blank, X, E
	300	BW400SAG-2P300□	
	350	BW400SAG-2P350□	
	400	BW400SAG-2P400□	
	250	BW400RAG-2P250□	
	300	BW400RAG-2P300□	
	350	BW400RAG-2P350□	
	400	BW400RAG-2P400□	

G-TWIN series
Type number/Line protection

● E series, 3-pole IEC and CE marking conformed

Breaker ampere frame	Rated current (A)	Type	□: Available mounting and connection
160	125	BW160EAG-3P125□	Blank, X, E, P
	150	BW160EAG-3P150□	
	160	BW160EAG-3P160□	
250	175	BW250EAG-3P175□	Blank, X, E, P
	200	BW250EAG-3P200□	
	225	BW250EAG-3P225□	
	250	BW250EAG-3P250□	
400	250	BW400EAG-3P250□	Blank, X, E, P
	300	BW400EAG-3P300□	
	350	BW400EAG-3P350□	
	400	BW400EAG-3P400□	
630	500	BW630EAG-3P500□	Blank, X, E, P
	600	BW630EAG-3P600□	
	630	BW630EAG-3P630□	
800	700	BW800EAG-3P700□	Blank, X, E, P
	800	BW800EAG-3P800□	

● H series, 3-pole IEC and CE marking conformed

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

● J, S, R series, 3-pole IEC and CE marking conformed

Breaker ampere frame	Rated current (A)	Type	□: Available mounting and connection
125	15	BW125JAG-3P15□	Blank, X, E, P
	20	BW125JAG-3P20□	
	30	BW125JAG-3P30□	
	40	BW125JAG-3P40□	
	50	BW125JAG-3P50□	
	60	BW125JAG-3P60□	
	75	BW125JAG-3P75□	
	100	BW125JAG-3P100□	
	125	BW125JAG-3P125□	
	15	BW125SAG-3P15□	
	20	BW125SAG-3P20□	
	30	BW125SAG-3P30□	
	40	BW125SAG-3P40□	
	50	BW125SAG-3P50□	
	60	BW125SAG-3P60□	
	75	BW125SAG-3P75□	
	100	BW125SAG-3P100□	
	125	BW125SAG-3P125□	
	15	BW125RAG-3P15□	
	20	BW125RAG-3P20□	
	30	BW125RAG-3P30□	
	40	BW125RAG-3P40□	
	50	BW125RAG-3P50□	
	60	BW125RAG-3P60□	
	75	BW125RAG-3P75□	
	100	BW125RAG-3P100□	
	125	BW125RAG-3P125□	
160	125	BW160JAG-3P125□	Blank, X, E, P
	150	BW160JAG-3P150□	
	160	BW160JAG-3P160□	
	125	BW160SAG-3P125□	
	150	BW160SAG-3P150□	
	160	BW160SAG-3P160□	
	125	BW160RAG-3P125□	
	150	BW160RAG-3P150□	
	160	BW160RAG-3P160□	
250	175	BW250JAG-3P175□	Blank, X, E, P
	200	BW250JAG-3P200□	
	225	BW250JAG-3P225□	
	250	BW250JAG-3P250□	
	175	BW250SAG-3P175□	
	200	BW250SAG-3P200□	
	225	BW250SAG-3P225□	
	250	BW250SAG-3P250□	
	175	BW250RAG-3P175□	
	200	BW250RAG-3P200□	
	225	BW250RAG-3P225□	
	250	BW250RAG-3P250□	
400	250	BW400SAG-3P250□	Blank, X, E, P
	300	BW400SAG-3P300□	
	350	BW400SAG-3P350□	
	400	BW400SAG-3P400□	
	250	BW400RAG-3P250□	
	300	BW400RAG-3P300□	
	350	BW400RAG-3P350□	
	400	BW400RAG-3P400□	
630	500	BW630RAG-3P500□	Blank, X, E, P
	600	BW630RAG-3P600□	
	630	BW630RAG-3P630□	
800	700	BW800RAG-3P700□	Blank, X, E, P
	800	BW800RAG-3P800□	

● **J, S, R series, 4-pole IEC and CE marking conformed**

Breaker ampere frame	Rated current (A)	Type	□: Available mounting and connection
125	15	BW125JAG-4P15□	Blank, X, E
	20	BW125JAG-4P20□	
	30	BW125JAG-4P30□	
	40	BW125JAG-4P40□	
	50	BW125JAG-4P50□	
	60	BW125JAG-4P60□	
	75	BW125JAG-4P75□	
	100	BW125JAG-4P100□	
	125	BW125JAG-4P125□	
	15	BW125SAG-4P15□	
	20	BW125SAG-4P20□	
	30	BW125SAG-4P30□	
	40	BW125SAG-4P40□	
	50	BW125SAG-4P50□	
	60	BW125SAG-4P60□	
	75	BW125SAG-4P75□	
	100	BW125SAG-4P100□	
	125	BW125SAG-4P125□	
	15	BW125RAG-4P15□	
	20	BW125RAG-4P20□	
	30	BW125RAG-4P30□	
	40	BW125RAG-4P40□	
	50	BW125RAG-4P50□	
	60	BW125RAG-4P60□	
	75	BW125RAG-4P75□	
	100	BW125RAG-4P100□	
	125	BW125RAG-4P125□	
160	125	BW160JAG-4P125□	Blank, X, E
	150	BW160JAG-4P150□	
	160	BW160JAG-4P160□	
	125	BW160SAG-4P125□	
	150	BW160SAG-4P150□	
	160	BW160SAG-4P160□	
	125	BW160RAG-4P125□	
	150	BW160RAG-4P150□	
	160	BW160RAG-4P160□	
250	175	BW250JAG-4P175□	Blank, X, E
	200	BW250JAG-4P200□	
	225	BW250JAG-4P225□	
	250	BW250JAG-4P250□	
	175	BW250SAG-4P175□	
	200	BW250SAG-4P200□	
	225	BW250SAG-4P225□	
	250	BW250SAG-4P250□	
	175	BW250RAG-4P175□	
	200	BW250RAG-4P200□	
	225	BW250RAG-4P225□	
	250	BW250RAG-4P250□	
400	250	BW400RAG-4P250□	Blank, X, E
	300	BW400RAG-4P300□	
	350	BW400RAG-4P350□	
	400	BW400RAG-4P400□	

● **H series, 4-pole IEC and CE marking conformed**

Breaker ampere frame	Rated current (A)	Type	□: Available mounting and connection
400	250	BW400HAG-4P250□	Blank, X, E
	300	BW400HAG-4P300□	
	350	BW400HAG-4P350□	
	400	BW400HAG-4P400□	

G-TWIN series
Type number/Line protection

Type number, Global series

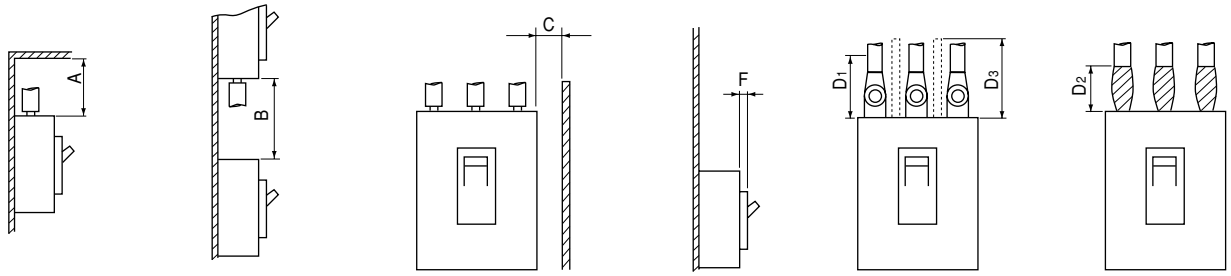
● 2-pole UL489 Listed

Breaker ampere frame	Rated current (A)	Type	□: Available mounting and connection
125	15	BW125JAGU-2P15□	Blank, SB, SF, S3
	20	BW125JAGU-2P20□	S4, S5, S6, S7, S8
	30	BW125JAGU-2P30□	
	40	BW125JAGU-2P40□	
	50	BW125JAGU-2P50□	
	60	BW125JAGU-2P60□	
	70	BW125JAGU-2P70□	
	75	BW125JAGU-2P75□	
	80	BW125JAGU-2P80□	
	90	BW125JAGU-2P90□	
	100	BW125JAGU-2P100□	
	125	BW125JAGU-2P125□	
	15	BW125RAGU-2P15□	
	20	BW125RAGU-2P20□	
	30	BW125RAGU-2P30□	
	40	BW125RAGU-2P40□	
	50	BW125RAGU-2P50□	
	60	BW125RAGU-2P60□	
	70	BW125RAGU-2P70□	
	75	BW125RAGU-2P75□	
	80	BW125RAGU-2P80□	
	90	BW125RAGU-2P90□	
	100	BW125RAGU-2P100□	
	125	BW125RAGU-2P125□	
250	125	BW250EAGU-2P125□	Blank, SB, SF, S3
	150	BW250EAGU-2P150□	S4, S5, S6, S7, S8
	160	BW250EAGU-2P160□	
	175	BW250EAGU-2P175□	
	200	BW250EAGU-2P200□	
	225	BW250EAGU-2P225□	
	250	BW250EAGU-2P250□	
	125	BW250JAGU-2P125□	
	150	BW250JAGU-2P150□	
	160	BW250JAGU-2P160□	
	175	BW250JAGU-2P175□	
	200	BW250JAGU-2P200□	
	225	BW250JAGU-2P225□	
	250	BW250JAGU-2P250□	
	125	BW250RAGU-2P125□	
	150	BW250RAGU-2P150□	
	160	BW250RAGU-2P160□	
	175	BW250RAGU-2P175□	
	200	BW250RAGU-2P200□	
	225	BW250RAGU-2P225□	
	250	BW250RAGU-2P250□	
400	250	BW400EAGU-2P250□	Blank, SB, S7, S8
	300	BW400EAGU-2P300□	
	350	BW400EAGU-2P350□	
	400	BW400EAGU-2P400□	
	250	BW400SAGU-2P250□	
	300	BW400SAGU-2P300□	
	350	BW400SAGU-2P350□	
	400	BW400SAGU-2P400□	
	250	BW400RAGU-2P250□	
	300	BW400RAGU-2P300□	
	350	BW400RAGU-2P350□	
	400	BW400RAGU-2P400□	
	250	BW400HAGU-2P250□	
	300	BW400HAGU-2P300□	
	350	BW400HAGU-2P350□	
	400	BW400HAGU-2P400□	

● 3-pole UL489 Listed

Breaker ampere frame	Rated current (A)	Type	□: Available mounting and connection
125	15	BW125JAGU-3P15□	Blank, SB, SF, S3
	20	BW125JAGU-3P20□	S4, S5, S6, S7, S8
	30	BW125JAGU-3P30□	
	40	BW125JAGU-3P40□	
	50	BW125JAGU-3P50□	
	60	BW125JAGU-3P60□	
	70	BW125JAGU-3P70□	
	75	BW125JAGU-3P75□	
	80	BW125JAGU-3P80□	
	90	BW125JAGU-3P90□	
	100	BW125JAGU-3P100□	
	125	BW125JAGU-3P125□	
	15	BW125RAGU-3P15□	
	20	BW125RAGU-3P20□	
	30	BW125RAGU-3P30□	
	40	BW125RAGU-3P40□	
	50	BW125RAGU-3P50□	
	60	BW125RAGU-3P60□	
	70	BW125RAGU-3P70□	
	75	BW125RAGU-3P75□	
	80	BW125RAGU-3P80□	
	90	BW125RAGU-3P90□	
	100	BW125RAGU-3P100□	
	125	BW125RAGU-3P125□	
250	125	BW250EAGU-3P125□	Blank, SB, SF, S3
	150	BW250EAGU-3P150□	S4, S5, S6, S7, S8
	160	BW250EAGU-3P160□	
	175	BW250EAGU-3P175□	
	200	BW250EAGU-3P200□	
	225	BW250EAGU-3P225□	
	250	BW250EAGU-3P250□	
	125	BW250JAGU-3P125□	
	150	BW250JAGU-3P150□	
	160	BW250JAGU-3P160□	
	175	BW250JAGU-3P175□	
	200	BW250JAGU-3P200□	
	225	BW250JAGU-3P225□	
	250	BW250JAGU-3P250□	
	125	BW250RAGU-3P125□	
	150	BW250RAGU-3P150□	
	160	BW250RAGU-3P160□	
	175	BW250RAGU-3P175□	
	200	BW250RAGU-3P200□	
	225	BW250RAGU-3P225□	
	250	BW250RAGU-3P250□	
400	250	BW400EAGU-3P250□	Blank, SB, S7, S8
	300	BW400EAGU-3P300□	
	350	BW400EAGU-3P350□	
	400	BW400EAGU-3P400□	
	250	BW400SAGU-3P250□	
	300	BW400SAGU-3P300□	
	350	BW400SAGU-3P350□	
	400	BW400SAGU-3P400□	
	250	BW400RAGU-3P250□	
	300	BW400RAGU-3P300□	
	350	BW400RAGU-3P350□	
	400	BW400RAGU-3P400□	
	250	BW400HAGU-3P250□	
	300	BW400HAGU-3P300□	
	350	BW400HAGU-3P350□	
	400	BW400HAGU-3P400□	

Arc space, mm



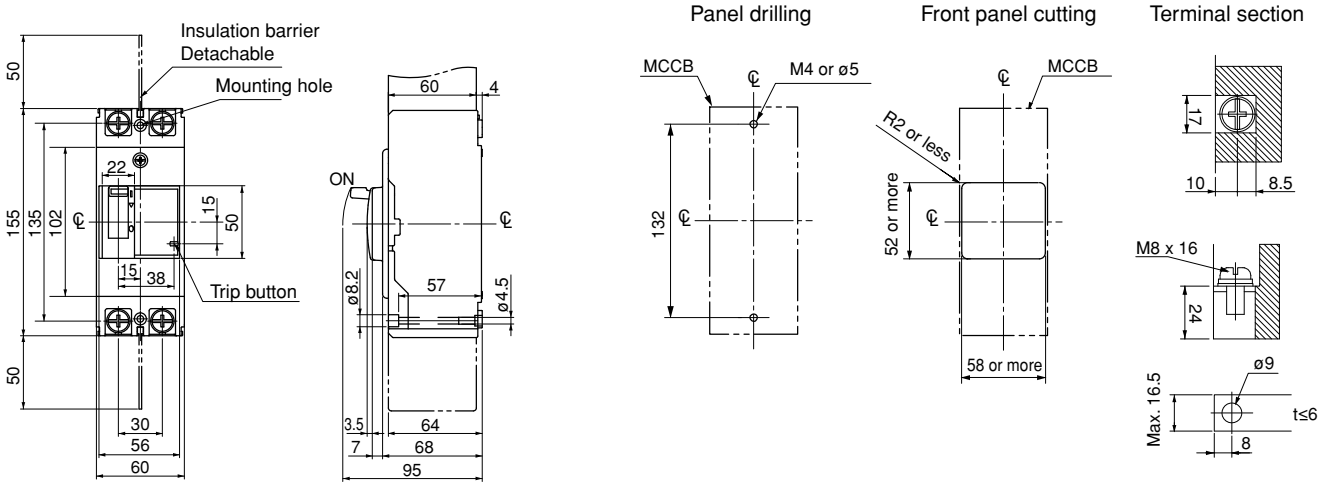
Frame size	MCCB basic type	Ceiling distance A		Vertical distance B		Side plate distance C		Front plate distance Painted F		Front plate distance No painted F		Taping Crimp type terminal lug D1	Taping Bus-bar D2	Barrier D3
		440V	230V	440V	230V	440V	230V	440V	230V	440V	230V			
125A	BW125J	40	40	50	50	25	20	0	0	10	5	Exposed live part dimension +20	50	50
	BW125S	40	40	60	60	25	20	5	0	10	5		50	50
	BW125R	40	40	60	60	25	20	5	0	10	5		50	50
160A	BW160E	40	40	50	50	50	15	0	0	10	5		80	80
	BW160J	40	40	60	60	50	20	0	0	10	5		80	80
	BW160S	40	40	80	80	50	20	5	0	10	10		80	80
	BW160R	40	40	80	80	50	20	5	0	10	10		80	80
250A	BW250E	40	40	50	50	50	15	0	0	10	5		80	80
	BW250J	40	40	60	60	50	20	0	0	10	5		80	80
	BW250S	40	40	80	80	50	20	5	0	10	10		80	80
	BW250R	40	40	80	80	50	20	5	0	10	10		80	80
400A	BW400E	100	80	100	80	50	20	0	0	10	5		100	100
	BW400S	100	80	100	80	50	20	0	0	10	5		100	100
	BW400R	100	80	100	80	80	40	5	0	20	10		100	100
	BW400H	100	80	100	80	80	40	5	0	20	10		100	100
630A	BW630E	100	80	100	80	80	40	5	0	20	10		100	100
	BW630R	100	80	100	80	80	40	5	0	20	10		100	100
	BW630H	120	100	120	100	80	40	5	0	20	10		120	120
800A	BW800E	100	80	100	80	80	40	5	0	20	10		100	100
	BW800R	100	80	100	80	80	40	5	0	20	10		100	100
	BW800H	120	100	120	100	80	40	5	0	20	20		120	120

G-TWIN series
Dimensions

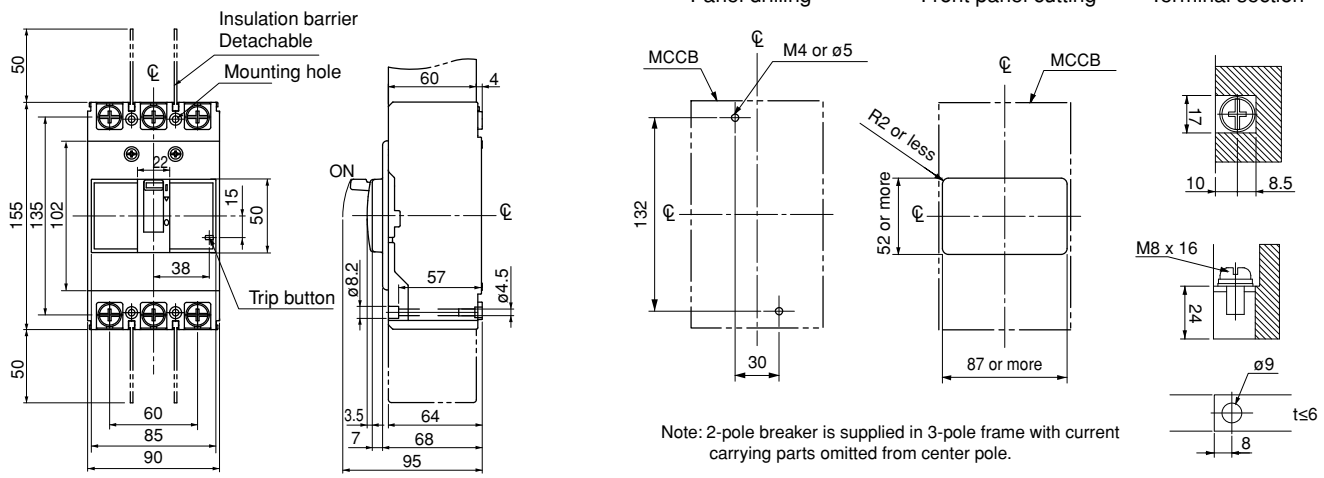
Dimensions, mm

● Front mounting, front connection

BW125JAG-2P

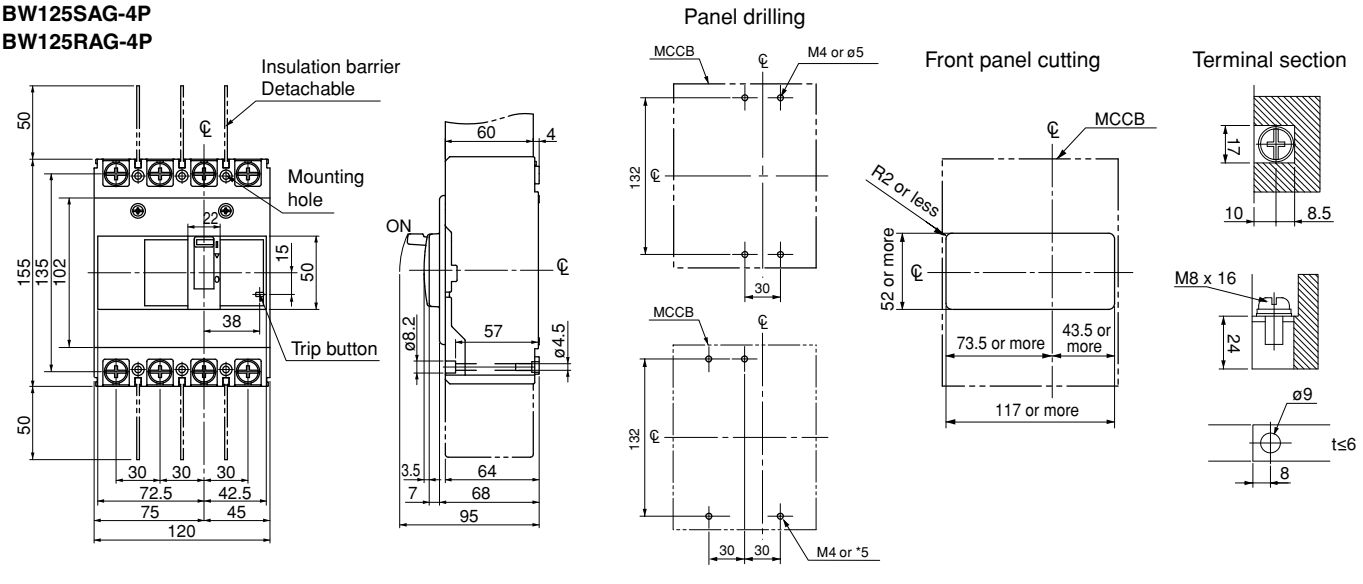


BW125JAG-3P
BW125SAG-2P, 3P
BW125RAG-2P, 3P



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

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

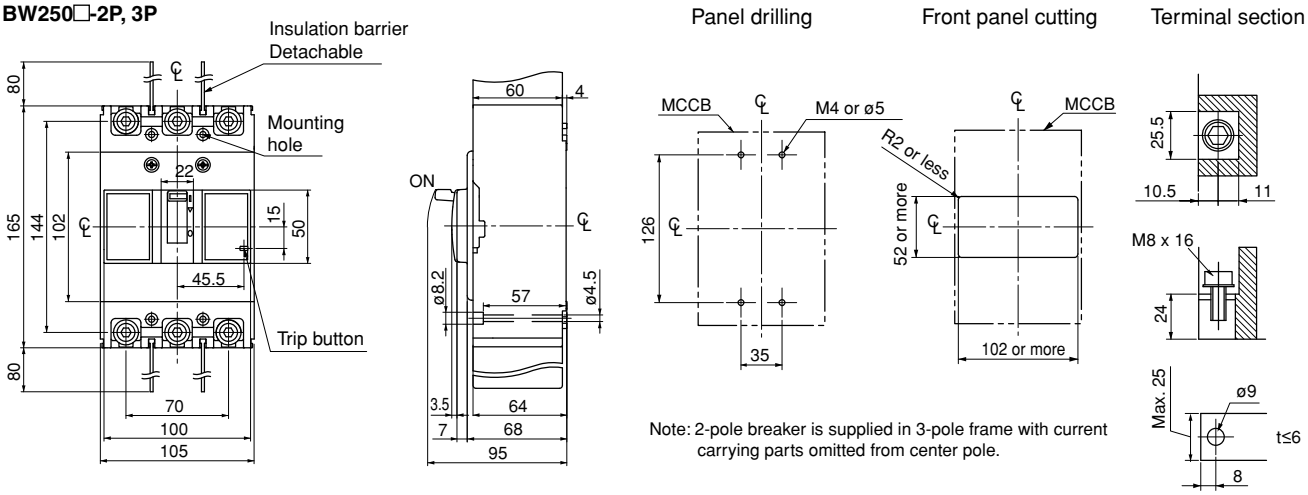


For V, N-type hadle

Dimensions, mm

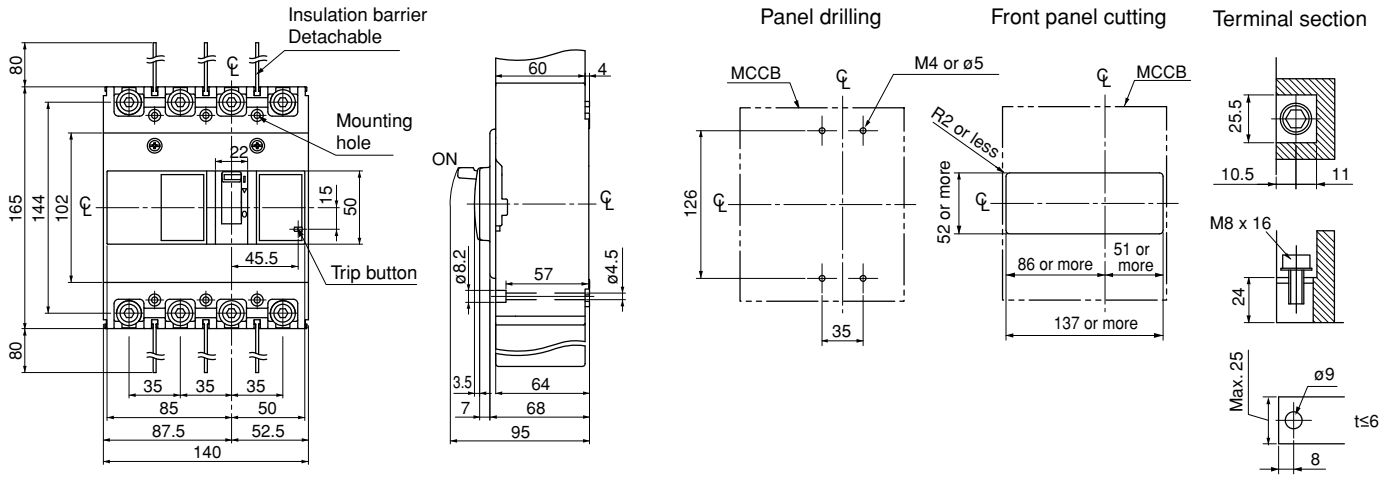
● Front mounting, front connection

BW160□-2P, 3P
BW250□-2P, 3P



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

BW160□-4P
BW250□-4P

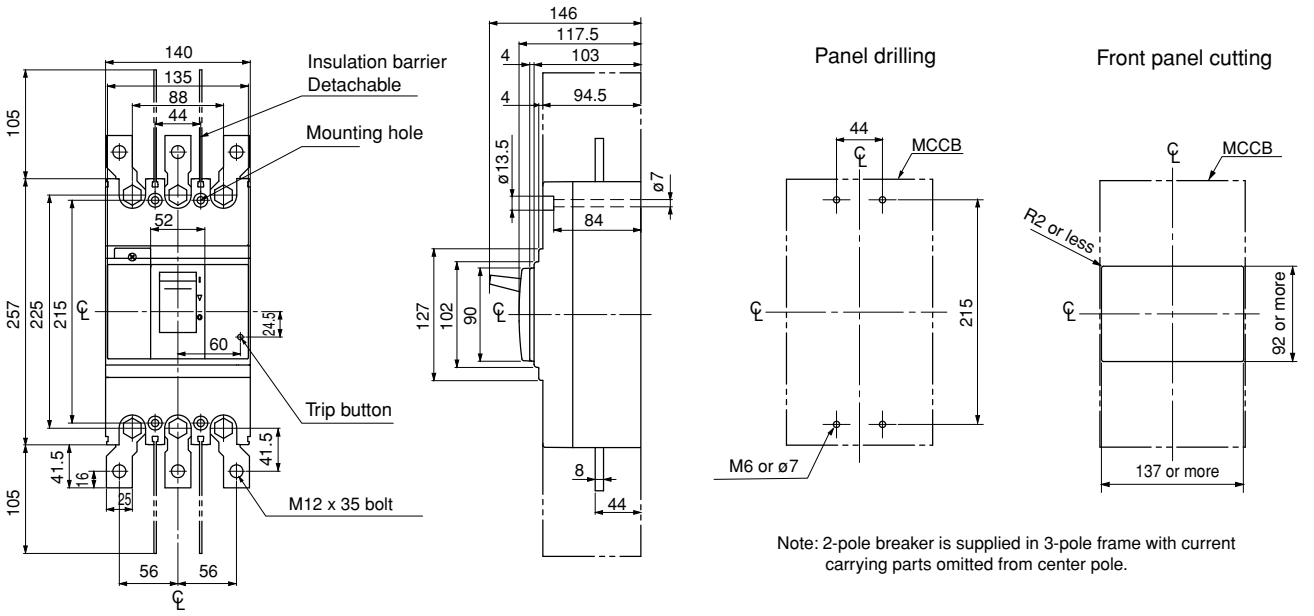


G-TWIN series
Dimensions

■ Dimensions, mm

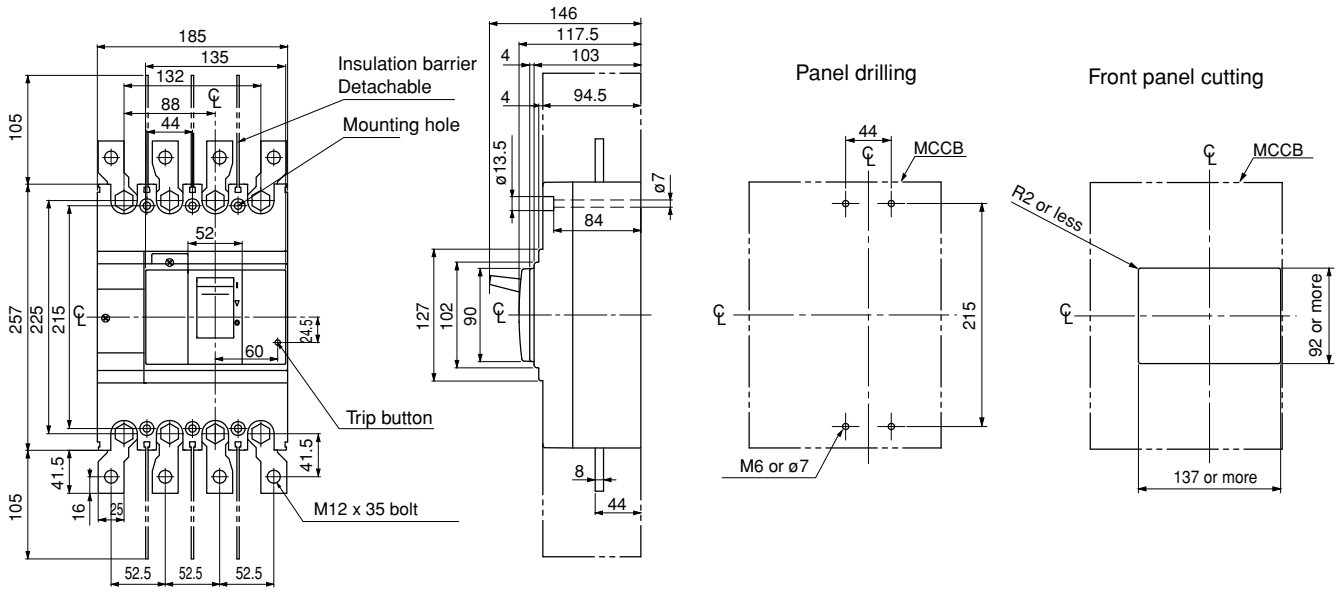
● Front mounting, front connection

BW400□-2P, 3P



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

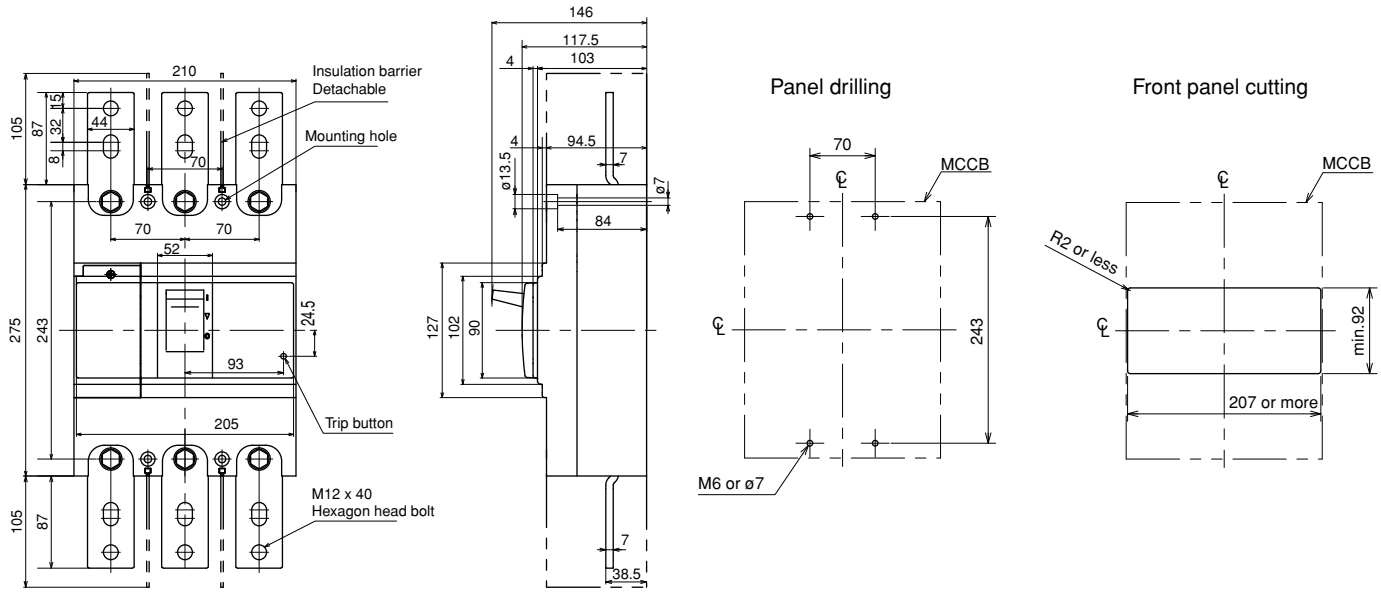
BW400□-4P



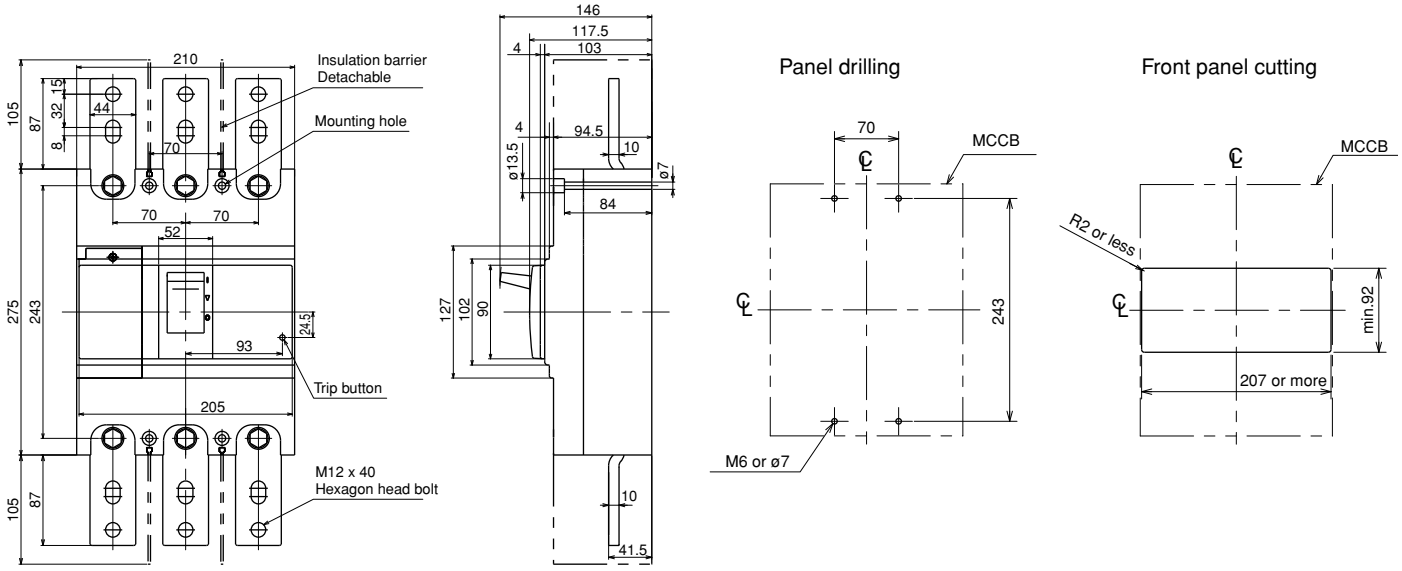
Dimensions, mm

● Front mounting, front connection

BW630□-3P



BW800□-3P

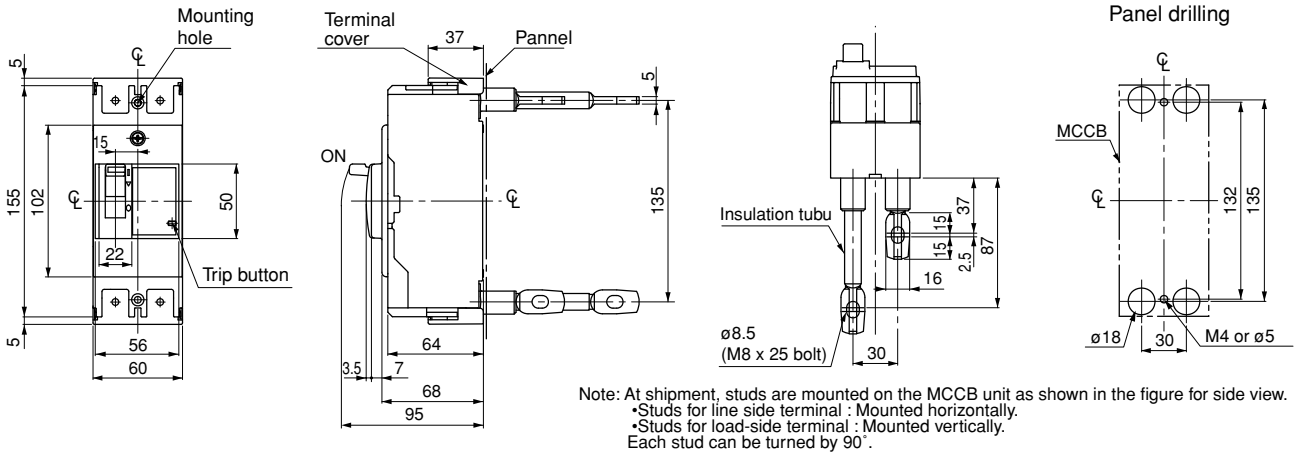


Dimensions

Dimensions, mm

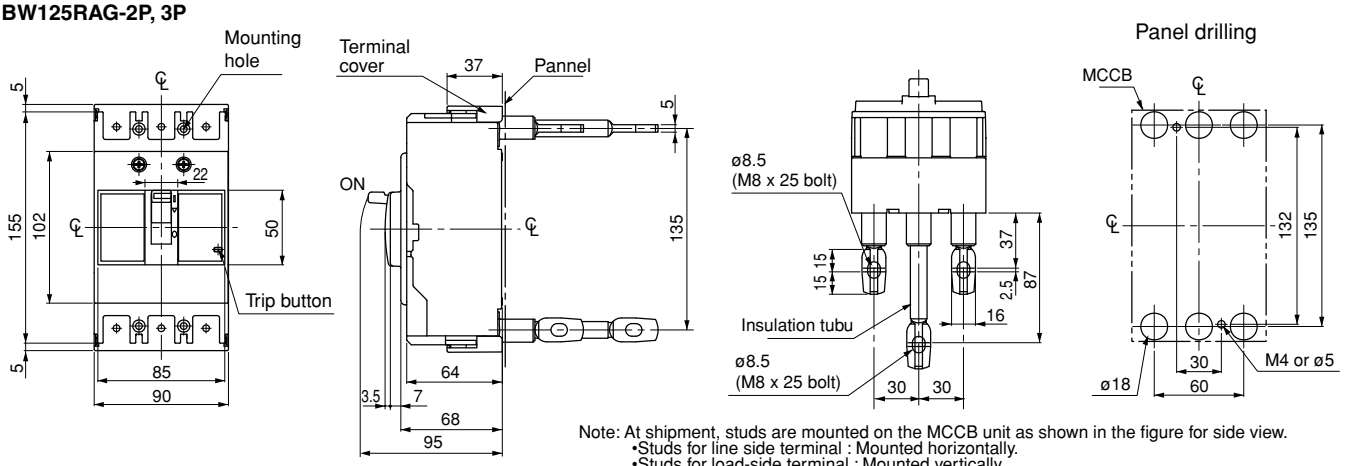
● Front mounting, rear connection (X)

BW125JAG-2P



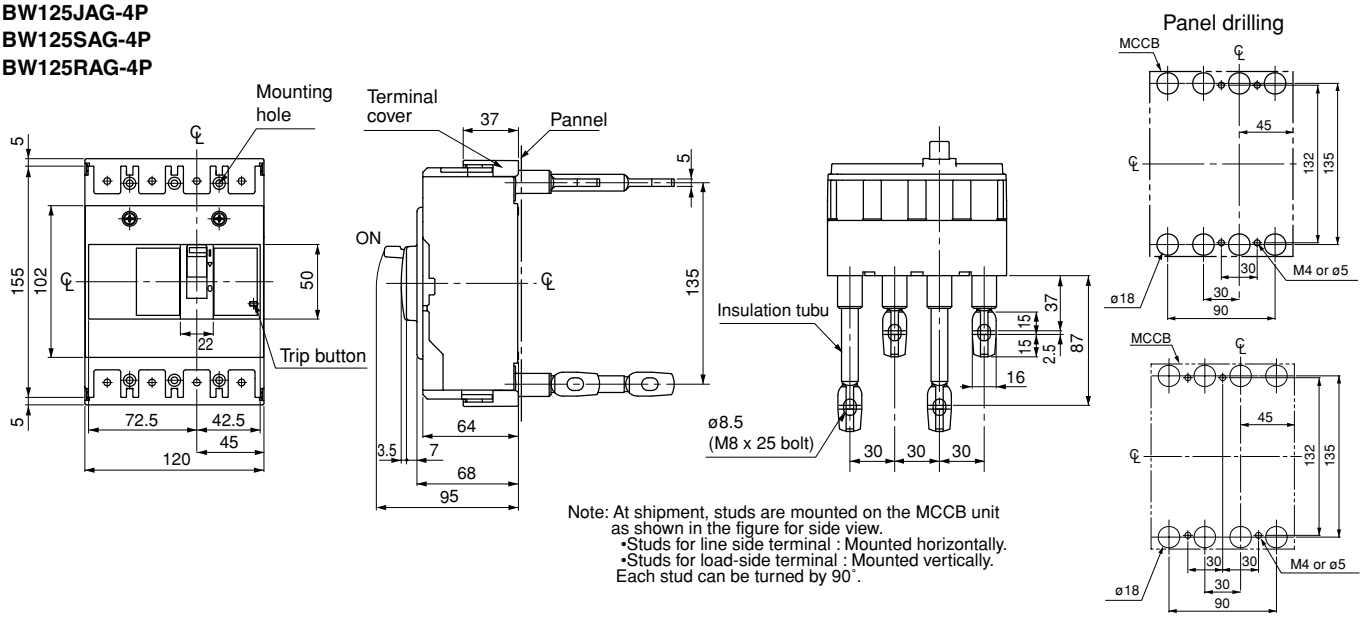
Note: At shipment, studs are mounted on the MCCB unit as shown in the figure for side view.
•Studs for line side terminal : Mounted horizontally.
•Studs for load-side terminal : Mounted vertically.
Each stud can be turned by 90˚.

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



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

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



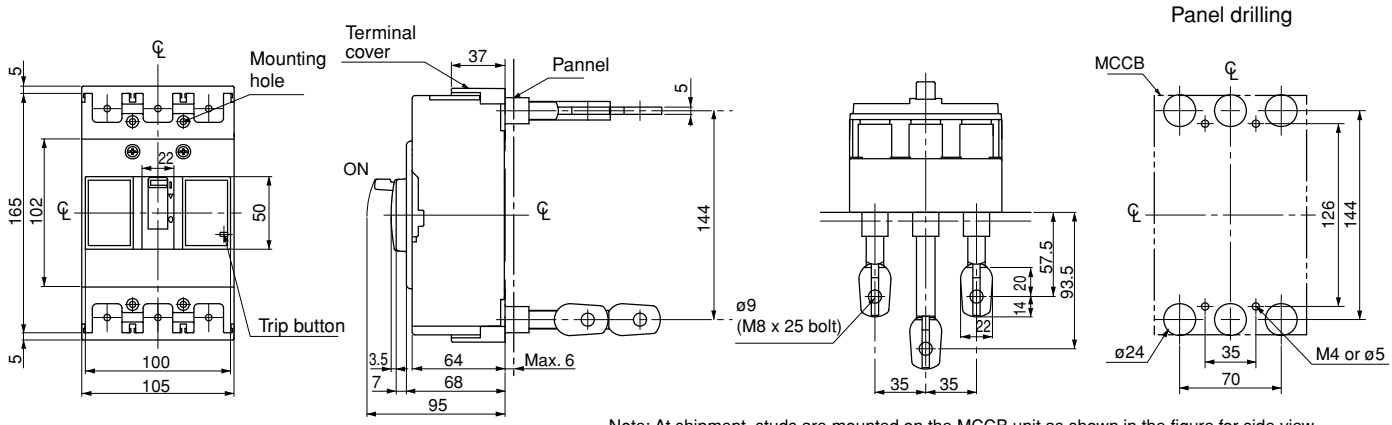
Note: At shipment, studs are mounted on the MCCB unit as shown in the figure for side view.
•Studs for line side terminal : Mounted horizontally.
•Studs for load-side terminal : Mounted vertically.
Each stud can be turned by 90˚.

For V, N-type handle

Dimensions, mm

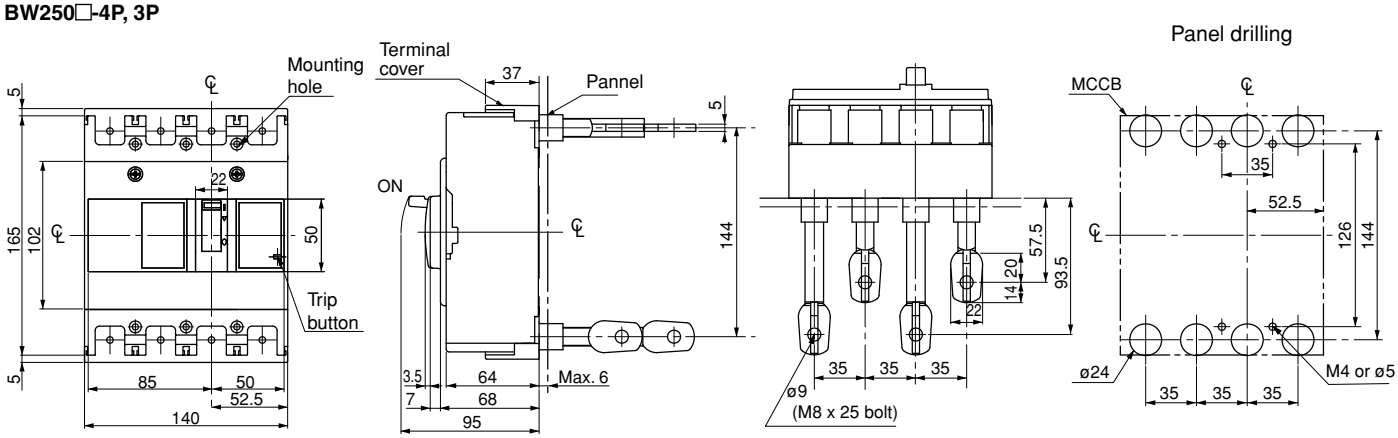
● Front mounting, rear connection (X)

BW160□-2P, 3P
BW250□-2P, 3P



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

BW160□-4P
BW250□-4P, 3P



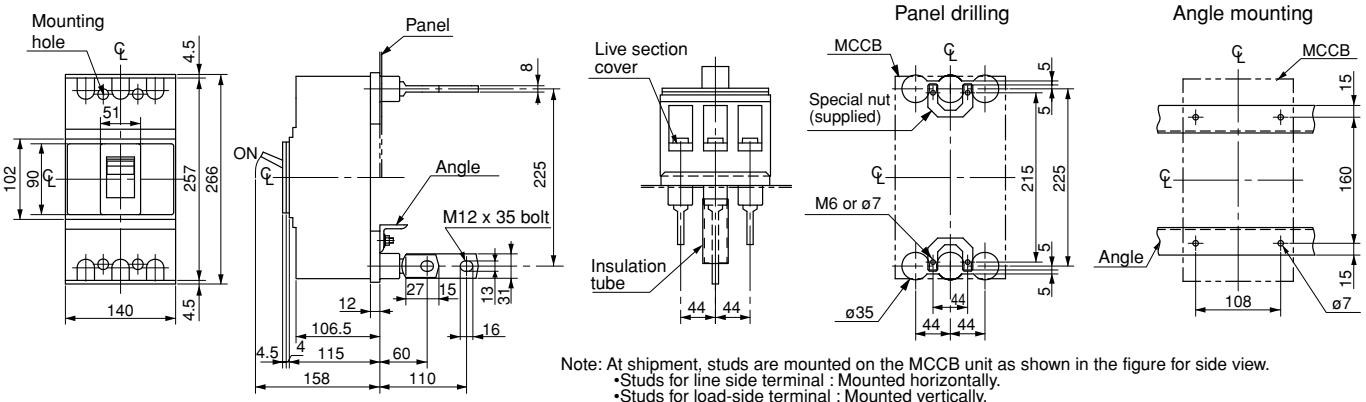
Note: At shipment, studs are mounted on the MCCB unit as shown in the figure for side view.
•Studs for line side terminal : Mounted horizontally.
•Studs for load-side terminal : Mounted vertically.
Each stud can be turned by 90˚.

Dimensions

■ Dimensions, mm

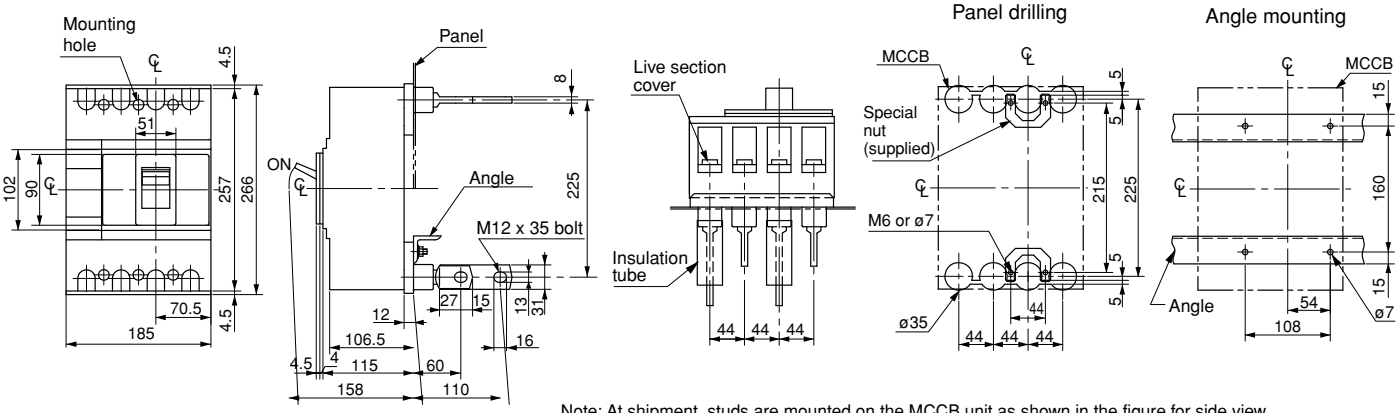
● Front mounting, rear connection (X)

BW400□-2P, 3P



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

BW400□-4P

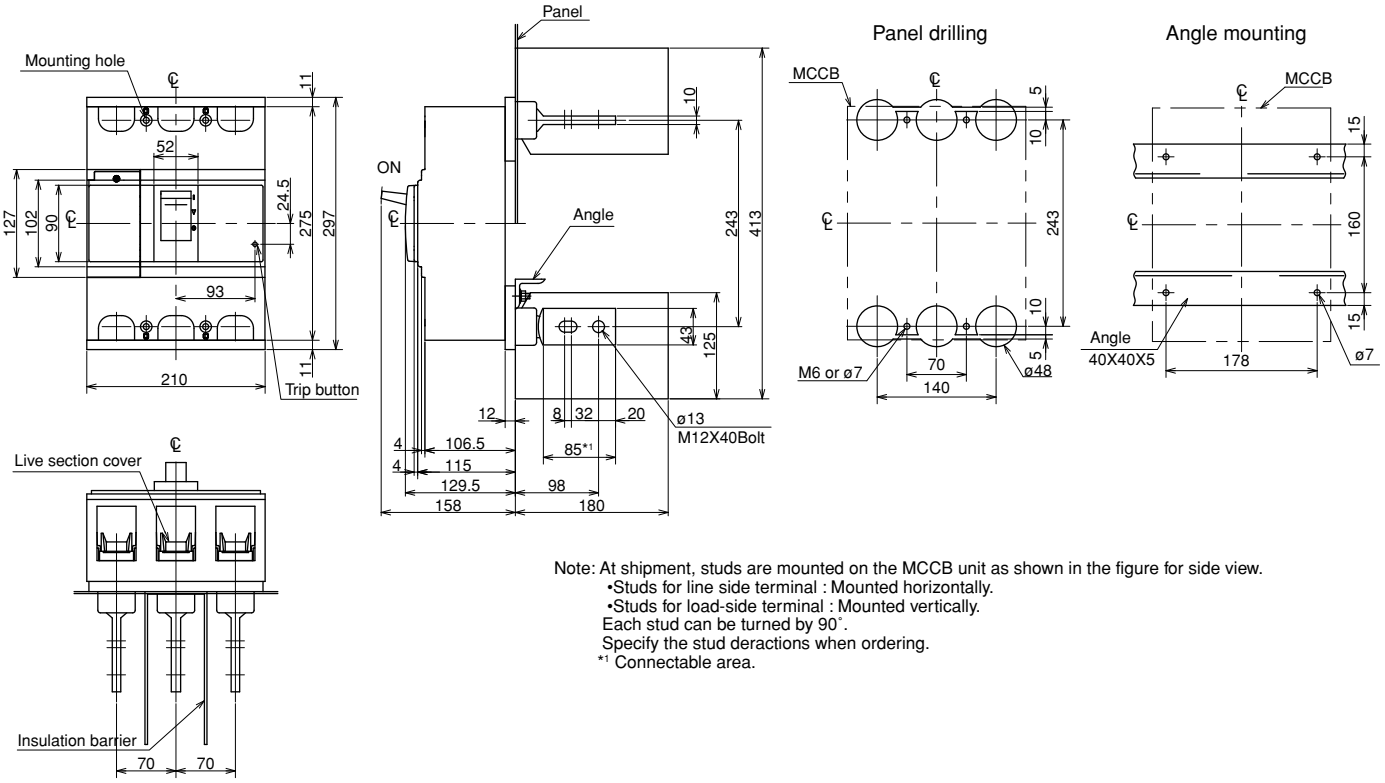


Note: At shipment, studs are mounted on the MCCB unit as shown in the figure for side view.
•Studs for line side terminal : Mounted horizontally.
•Studs for load-side terminal : Mounted vertically.
Each stud can be turned by 90˚.

Dimensions, mm

● Front mounting, rear connection (X)

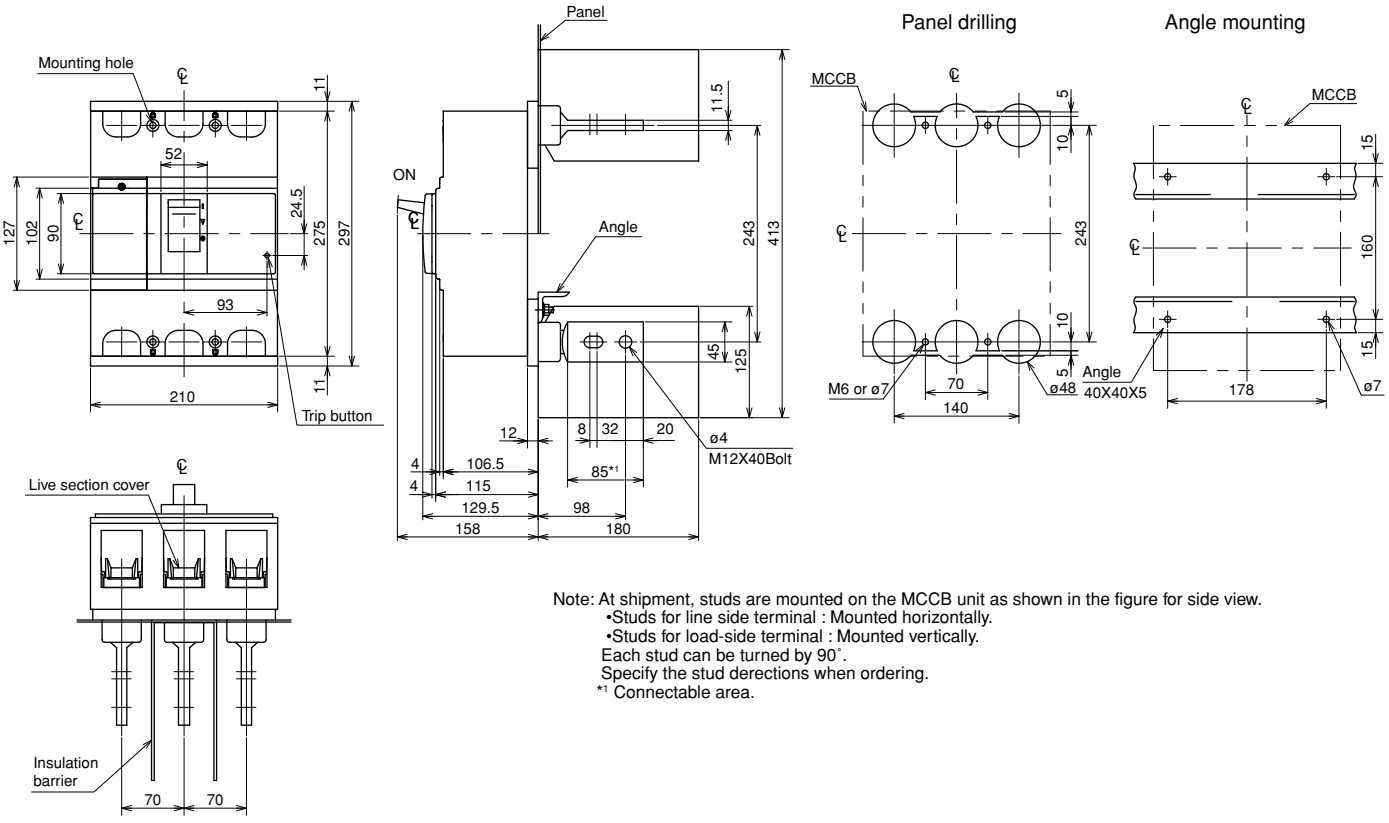
BW630□-3P



Note: At shipment, studs are mounted on the MCCB unit as shown in the figure for side view.
- •Studs for line side terminal : Mounted horizontally.
- •Studs for load-side terminal : Mounted vertically.

Each stud can be turned by 90˚.
Specify the stud deractions when ordering.
*1 Connectable area.

BW800□-3P



Note: At shipment, studs are mounted on the MCCB unit as shown in the figure for side view.
- •Studs for line side terminal : Mounted horizontally.
- •Studs for load-side terminal : Mounted vertically.

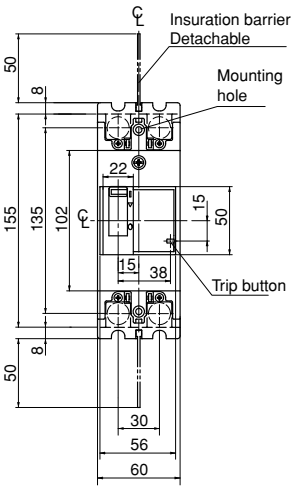
Each stud can be turned by 90˚.
Specify the stud derections when ordering.
*1 Connectable area.

Dimensions, mm

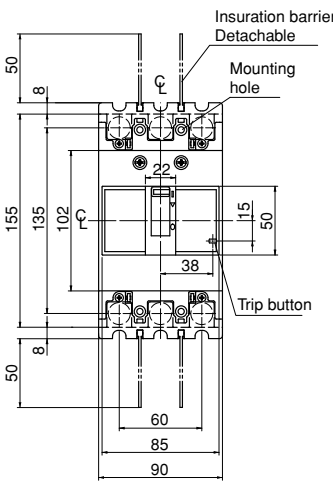
● Front mounting, front connection

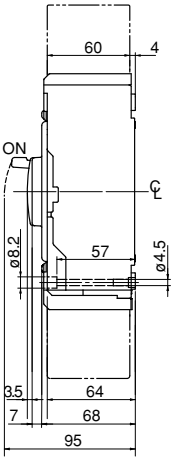
BW125□U-2P, 3P

2-pole



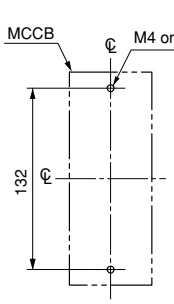
3-pole (2-pole)



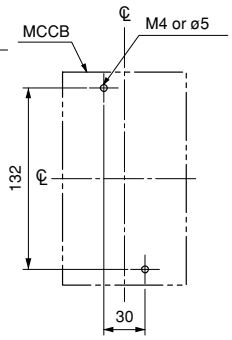


Panel drilling

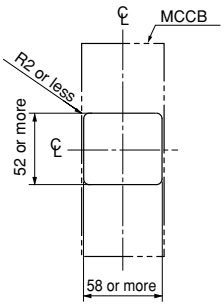
2-pole

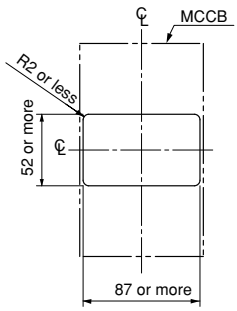


3-pole (2-pole)

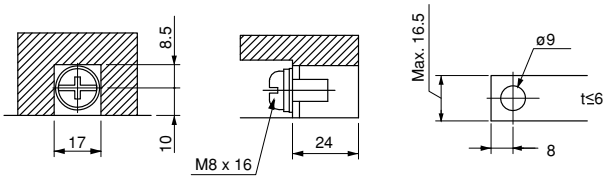


Front panel cutting





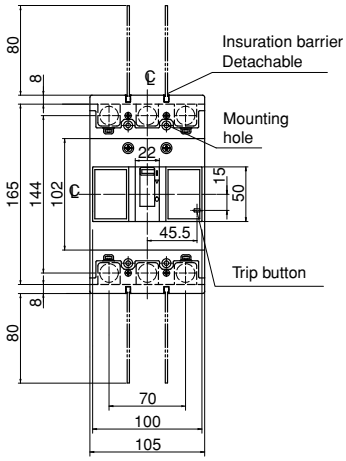
Terminal section

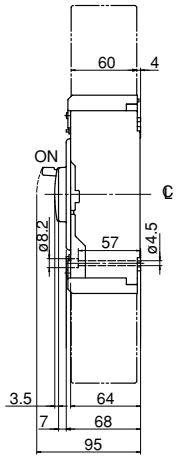


Note: 2-pole breaker is supplied in 3-pole frame with current carrying parts omitted from center pole.

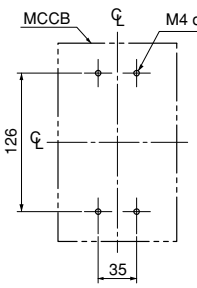
BW250□U-2P, 3P

3-pole (2-pole)

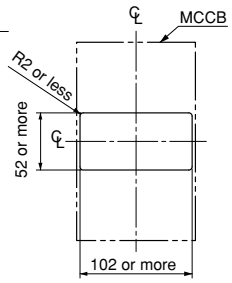




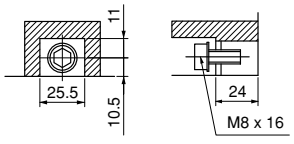
Panel drilling



Front panel cutting



Terminal section

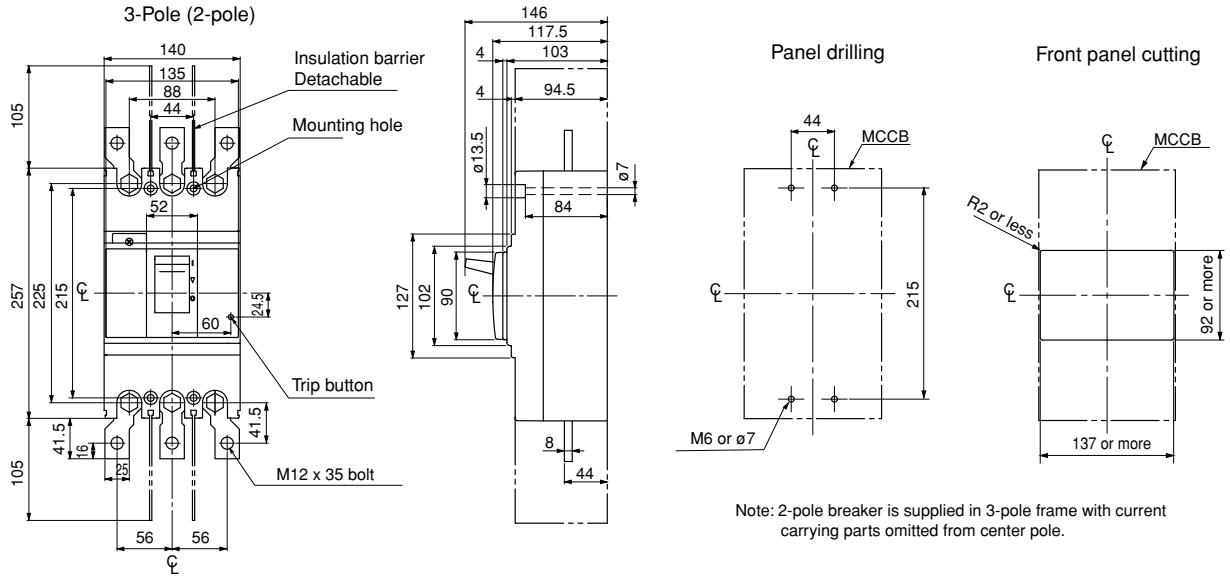


Note: 2-pole breaker is supplied in 3-pole frame with current carrying parts omitted from center pole.

Dimensions, mm

● Front mounting, front connection

BW400□U-2P, 3P



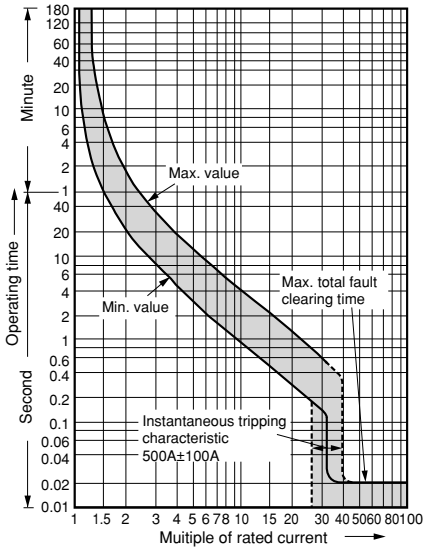
Note: 2-pole breaker is supplied in 3-pole frame with current carrying parts omitted from center pole.

G-TWIN series
Characteristic curves

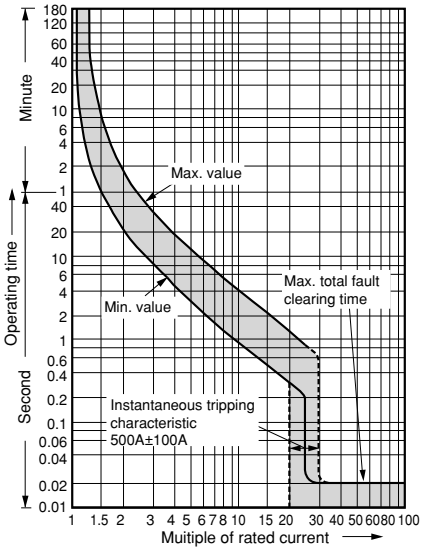
Characteristic curves

BW125

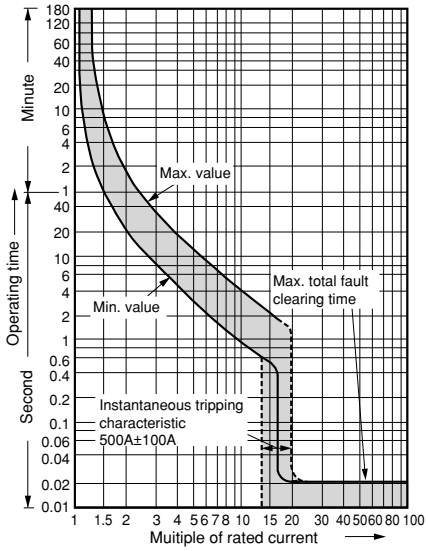
• 15A



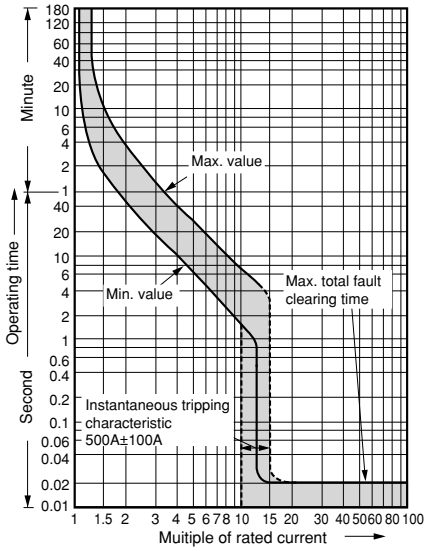
• 20A



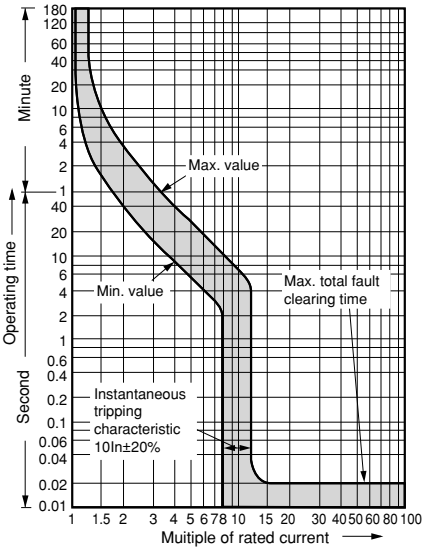
• 30A



• 40A

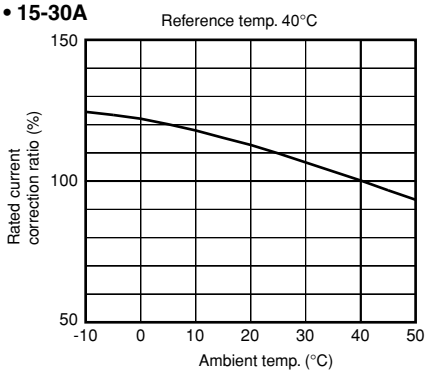


• 50-125A

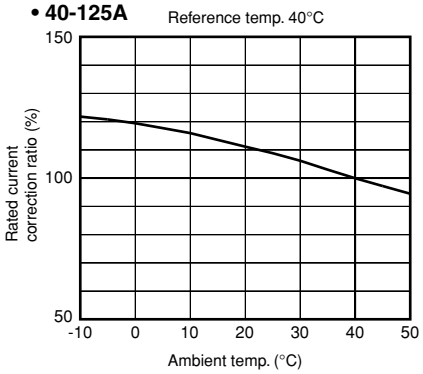


Temperature correction curve

• 15-30A

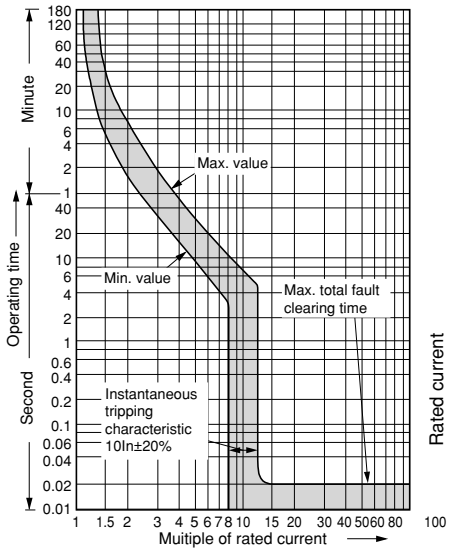


• 40-125A

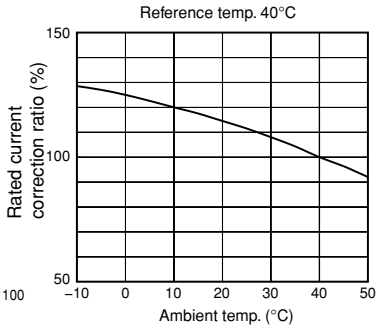


Characteristic curves

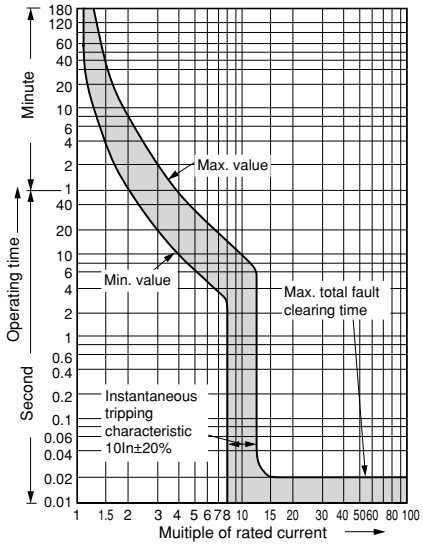
BW160, 250



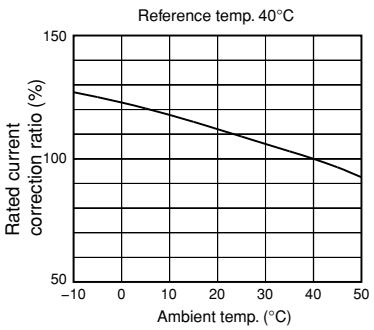
Temperature correction curve



BW400



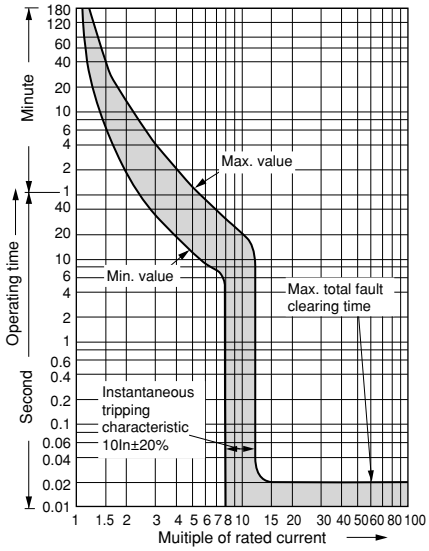
Temperature correction curve



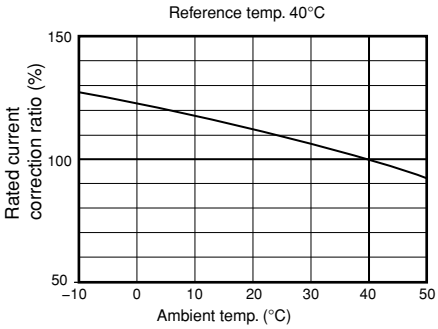
G-TWIN series
Characteristic curves

Characteristic curves

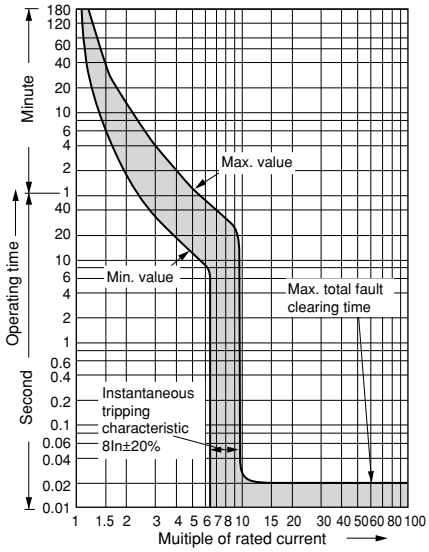
BW630



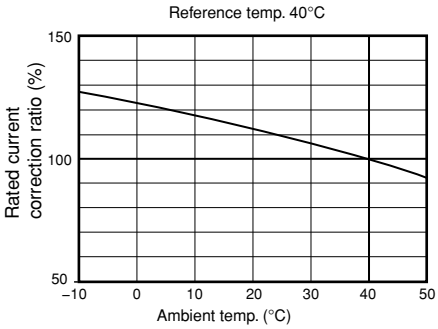
Temperature correction curve



BW800



Temperature correction curve



Variation of internal accessory

• 125 to 250AF

Auxiliary switch (Type W)

This switch is used for indicator lamp or control circuit.
See page 50.

Alarm switch (Type K)

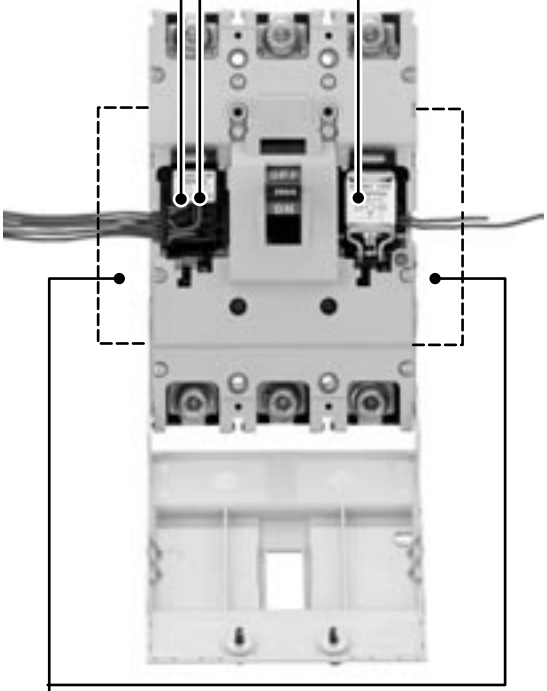
This switch can be connected to a warning lamp or buzzer to indicate when the breaker has been tripped.
See page 50.

Shunt trip device (Type F)

The purpose of this accessory is to trip the breaker from a distance.
See page 51.

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 51.



Terminal block (Type A)

A wiring terminal for internal accessories (Factory-mounted)
See page 48.

Variation of internal accessory

• 400AF

Alarm switch (Type K)

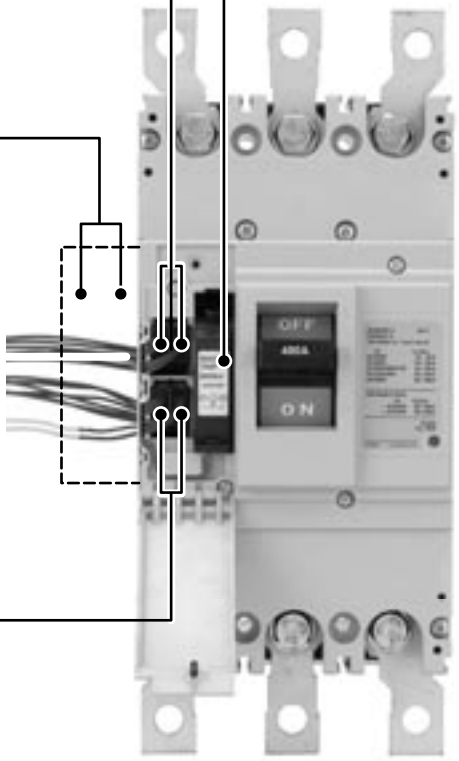
This switch can be connected to a warning lamp or buzzer to indicate when the breaker has been tripped.
See page 50.

Shunt trip device (Type F)

The purpose of this accessory is to trip the breaker from a distance.
See page 51.

Terminal block (Type A)

A wiring terminal for internal accessories (Factory-mounted)
See page 48.



Undervoltage trip device (Type R)

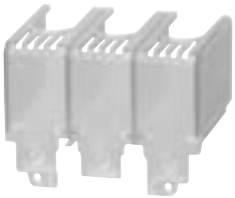
The device is designed to protect circuits from harmful voltage drops.
It can also be used for remote control purposes. The trip operates when the voltage drops to less than 70% of nominal coil rating, and the breaker cannot be reset until the voltage recovers 85% of its normal rating.
See page 51.

Auxiliary switch (Type W)

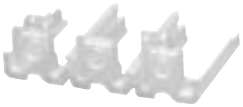
This switch is used for indicator lamp or control circuit.
See page 50.

Variation of external accessory

Terminal cover
Long type
See page 61.



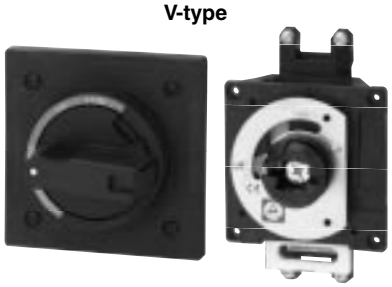
Interphase barrier
See page 62.



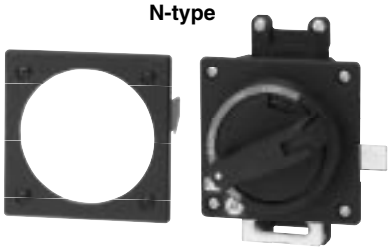
Terminal cover
Short type
See page 61.

External operating handles
See page 54.

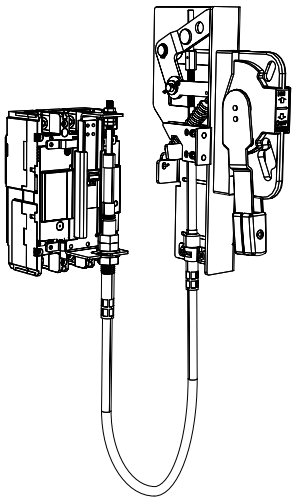
V-type



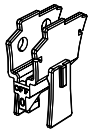
N-type



F-type



Handle locking cover
See page 62.



Padlocking device
See page 62.

Cap type (Q1)

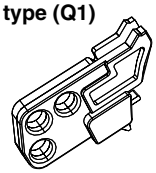
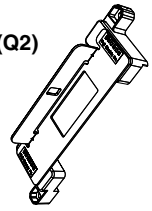


Plate type (Q2)



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 49.*

With terminal block

• Terminal number of internal accessory

Accessory		125 – 250AF		400 – 800AF
		Left side mounting	Right side mounting	Left side mounting
Auxiliary switch Accessory	SPDT: W (1)*	11 12 14 AXcL AXbL AXaL	21 22 24 AXcR AXbR AXaR	11 12 14 AXc AXb AXa
Auxiliary switch	2PDT: V (2)*	11 12 14 AXcL AXbL AXaL	21 22 24 AXcR AXbR AXaR	11 12 14 AXc AXb AXa 21 22 24 AXc AXb AXa
Alarm switch	SPDT: K (8)*	91 92 94 ALcL ALbL ALaL	01 02 04 ALcR ALbR ALaR	91 92 94 ALc ALb ALa
Alarm switch	2PDT: J (9)*	91 92 94 ALcL ALbL ALaL	01 02 04 ALcR ALbR ALaR	91 92 94 ALc ALb ALa 01 02 04 ALc ALb ALa
Shunt trip device : F	With 1NO contact to prevent coil burn-out	C2 C1 S2 S1		
Shunt trip device : F	Continuous rating			C2 C1 S2 S1
Undervoltage trip device : R		U< D2 D1 P2 P1		

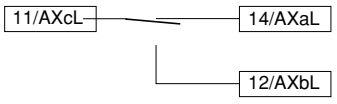
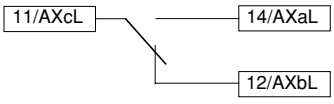
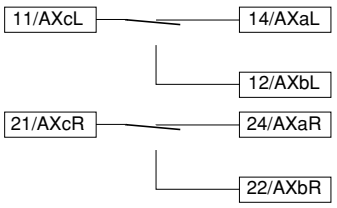
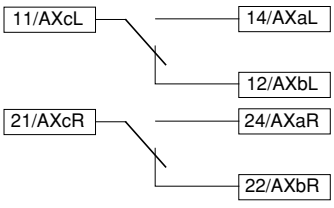
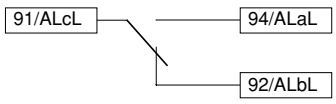
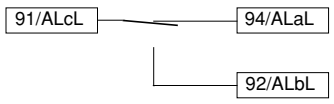
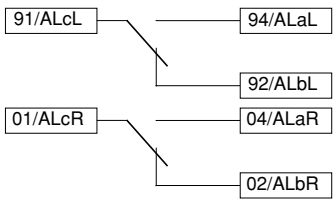
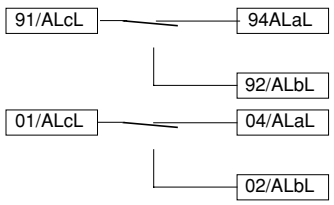
Note: * ( ) Code of Low level circuit

Available configurations

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

Notes: •The above table is applied to front mounting type, rear mounting type, flush mounting type, and plug-in mounting type.
• Terminal block is attached on the same side of the accessory.
• ( ) Code of low level circuit
*1 Configurations with terminal block are not available.

■ 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

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

• Standard type

Applicable breaker type **MCCB**	Rated thermal current (A)	Make/break current (A)						Minimum load current
		AC			DC			
		Voltage (V)	Res. load	Ind. load	Voltage (V)	Res. load	Ind. load	
BW125 **BW160** **BW250** **BW400** **BW630** **BW800**	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

Applicable breaker type **MCCB**	Rated thermal current (A)	Make/break current (A)				Minimum load current
		AC		DC		
		Voltage (V)	Res. load	Voltage (V)	Res. load	
BW125 **BW160** **BW250** **BW400** **BW630** **BW800**	0.1	30	0.1	30	0.1	5V DC 1mA

Rating of shunt trip (F)

MCCB type	AC		DC		Time rating of coil	Opearting time (ms)
	V	VA	V	W		
BW125	24	50	24	50	Continuous (With 1NO contact to prevent coil burn-out)	13-21
BW160	48	50	48	50		
BW250	100-120	50	100-110	50		
	120-130	50	–	–		
	200-240	50	200-220	50		
	277	50	–	–		
	380-440	50	–	–		
	440-480	50	–	–		
	500-550	50	–	–		
BW400	24-48	2	24-48	2	Continuous	8-20
BW630	100-240	3	100-220	3		
BW800	277	3		–		
	380-550	4		–		

Note: Allowable voltage function AC voltage: 85% to 110% of coil rated voltage
DC voltage: 75% to 125% of coil rated voltage

Rating of undervoltage trip (R)

MCCB type	AC		DC		Code
	V	VA	V	W	
BW125 *1	–	–	24	5	RR
BW160 *1	–	–	48	5	RS
BW250 *1	–	–	100-110	5	RL
	–	–	125	5	R5
	100-110	5	–	–	RA
	110-130	5	–	–	RT
	200-240	5	–	–	RK
	277	5	–	–	RB
	380-415	5	–	–	RP
	440-480	5	–	–	RH
BW400 *2	24	2	24	2	RR
BW630 *2	48	2	48	2	RS
BW800 *2	100-110	3	100-110	3	RA
	120-130	3	125	3	R1
	200-240	3	200-220	3	RK
	277	3	–	–	RB
	380-480	4	–	–	RP

Note: Allowable voltage function AC voltage: 85% to 110% of coil rated voltage
DC voltage: 75% to 125% of coil 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.

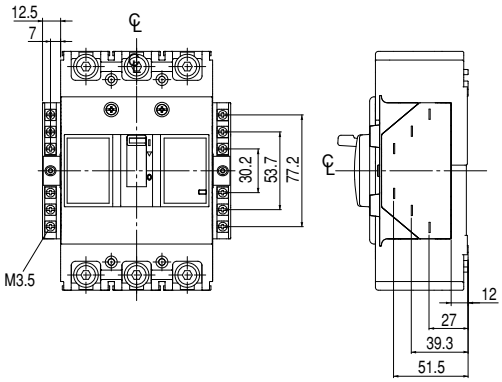
*2 Reset-prohibited type: When the R coil is not energized, reset operation cannot reset the tripped breaker to the OFF state.

■ Lead wire specification

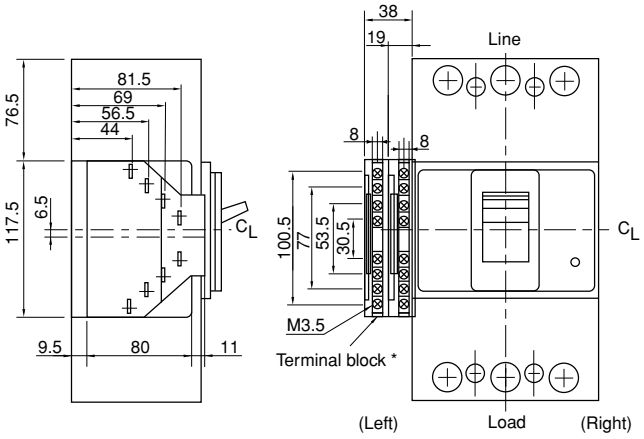
Wire size: 0.5mm^2 (AWG20)
Wire length: 500mm

■ Terminal blocks

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 49 for information on the accessory mounting position.
• Available wire: Solid wire: 1.6ø Stranded wire: 2mm^2
• Terminal blocks are available as factory mounted only.

Type number

Internal accessories (Sold separately)

• 125, 160, 250AF

Accessory	Type			Operating voltge
	Lead wire system		Terminal block system *	
	Left side	Right side		
Auxiliary switch	BW9W1SG0	BW9W1SG0-R	–	–
Auxiliary switch (low level circuit)	BW9W1DG0	BW9W1DG0-R		
Alarm switch	BW9K1SG0	BW9K1SG0-R		
Alarm switch (low level circuit)	BW9K1DG0	BW9K1DG0-R		
Auxiliary switch + Alarm switch	BW9WKSG0	BW9WK1SG0-R		
Auxiliary switch + Alarm switch (low level circuit)	BW9WKDG0	BW9WK1DG0-R		
Shunt trip device	BW9FRG0	BW9FRG0		24V AC/DC
	BW9FSG0	BW9FSG0		48V AC/DC
	BW9FAG0	BW9FAG0		100-120V AC/100-110V DC
	BW9F1G0	BW9F1G0		120-130V AC
	BW9FKG0	BW9FKG0		200-240V AC/200-220V DC
	BW9FBG0	BW9FBG0		277V AC
	BW9FPG0	BW9FPG0		380-440V AC
	BW9FHG0	BW9FHG0		440-480V AC
	BW9FJG0	BW9FJG0		500-550V AC
Undervoltage trip devics	BW9RGAR	–		24V DC
	BW9RGAS			48V DC
	BW9RGAL			100-110V DC
	BW9RGA5			125V DC
	BW9RGAA			100-110V AC
	BW9RGAT			110-130V AC
	BW9RGAK			200-240V AC
	BW9RGAB			277V AC
	BW9RGAP			380-415V AC
	BW9RGAH			440-480V AC

Note: * Factory-mounted

• 400, 630, 800AF

Accessory	Type		Operating voltge
	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 devics	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

External operating handles

Description

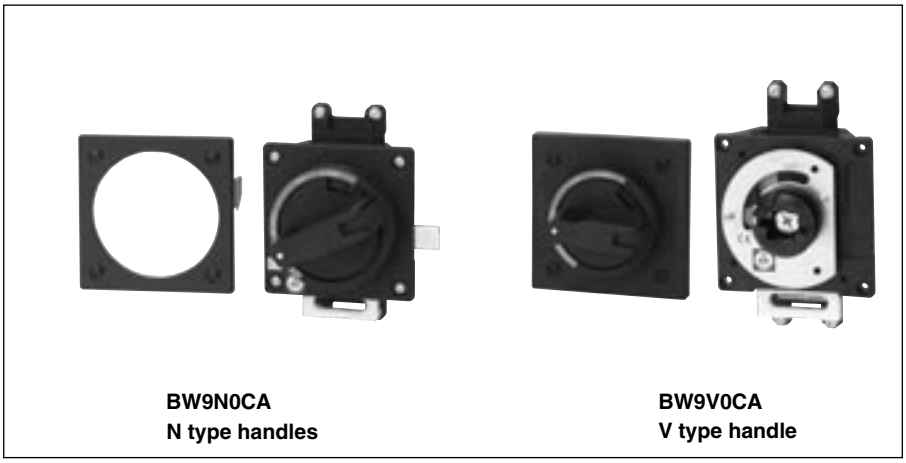
Molded case circuit breaker handles are generally directly manual-operated but when mounted in motor control centers or on control panels they are sometimes required to be operated externally. To meet such applications FUJI offers the following three types of handles.

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 up 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.

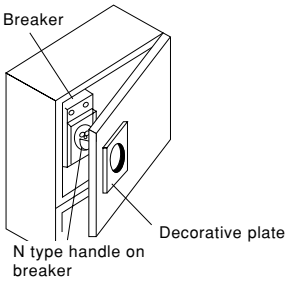
Conformed to UL489 (File No.E93289)

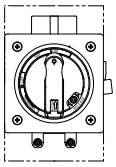


BW9N0CA
N type handles

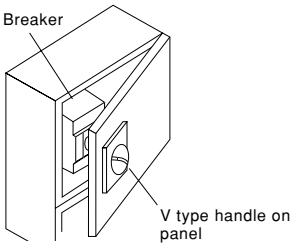
BW9V0CA
V type handle

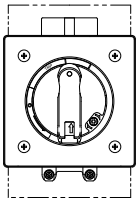
N type handles



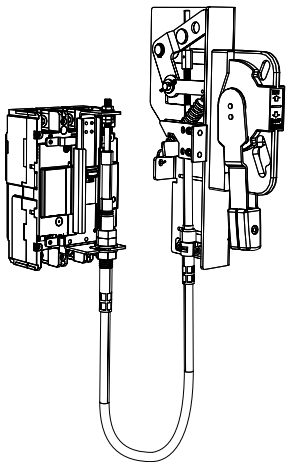


V type handles





F type handles



N type handles

MCCB	N type handle
BW125	**BW9N0CA**
BW160 BW250	**BW9N0GA**
BW400	**BW9N0HA**
BW630 BW800	**BW9N0JA**

V type handles

MCCB	V type handle
BW125	**BW9V0CA**
BW160 BW250	**BW9V0GA**
BW400	**BW9V0HA**
BW630 BW800	**BW9V0JA**

F type handles

MCCB	N type handle
BW125	**BW9F0CA**
BW250	**BW9F0GA**
BW400	**BW9F0HA**

Type number nomenclature

• N type handle

BW9N0 □ A – □

- **Mounting** (For BW9N0HA, BW9N0JA)
  - Blank: Front mounting, front connection
  - X: Front mounting, rear connection
  - P: Plug-in mounting
- **Breaker type**
  - C: BW125
  - G: BW160, BW250
  - H: BW400
  - J: BW630, BW800
- **Basic type**

• V type handle

BW9V0 □ A – □

- **Mounting** (For BW9V0HA, BW9V0JA)
  - Blank: Front mounting, front connection
  - X: Front mounting, rear connection
  - P: Plug-in mounting
- **Breaker type**
  - C: BW125
  - G: BW160, BW250
  - H: BW400
  - J: BW630, BW800
- **Basic type**

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

• F type handle

BW9F0 □ A

- **Breaker type**
  - C: BW125□U
  - G: BW250□U
  - H: BW400□U
- **Basic type**

Cable (For F type)

BW9FW □ A – □ A

- **Cable length**
  - 15: 1.5m
  - 20: 2.0m
  - 30: 3.0m
- **Breaker type**
  - C: BW125□U
  - G: BW250□U
  - H: BW400□U
- **Basic type**

Terminal cover (For F type)

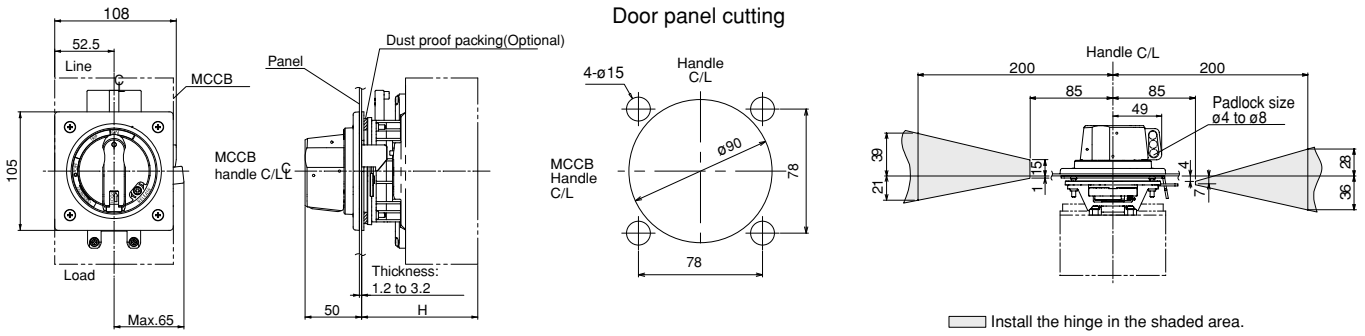
BW9FBT □ A – L3

- **Breaker type**
  - C: BW125□U
  - G: BW250□U
  - H: BW400□U
- **Basic type**

■ Dimensions, mm

N type handle

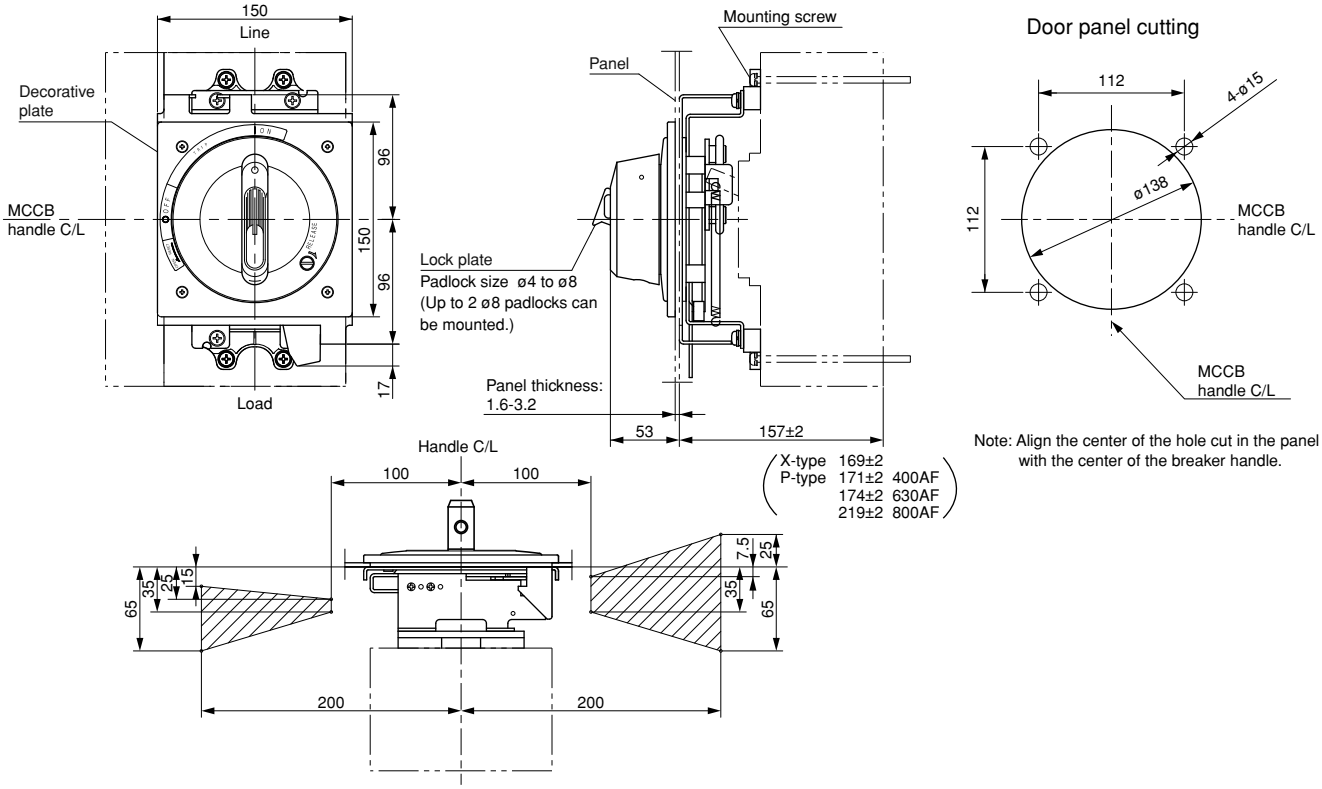
• BW9N0CA, BW9N0GA (BZ-NP-1C: dust proof packing, optional)



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

MCCB	Handle type	Mounting screw	H (mm)	Mass (kg)
BW125	**BW9N0CA**	M4 x 85	103±2	0.56
BW160 BW250	**BW9N0GA**	M4 x 85	103±2	0.56

• BW9N0HA, BW9N0JA (BZ-NP-2: dust proof packing, optional)



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

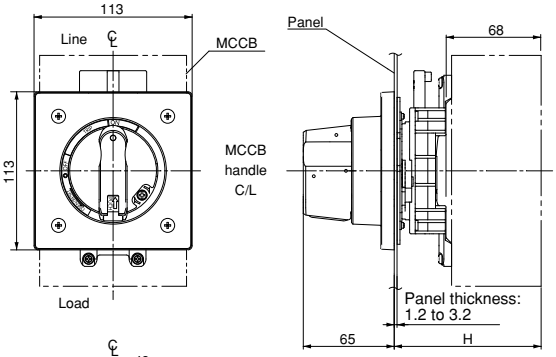
Install the door hinge in the shaded area.

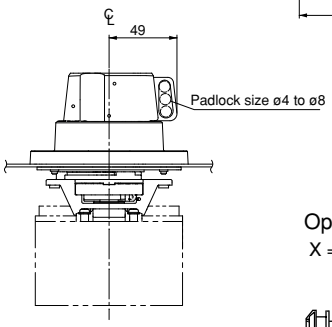
MCCB	Handle type	Mounting screw	Mass (kg)
BW400	**BW9N0HA** **BW9N0HA-X** **BW9N0HA-P**	M6 x 110 M6 x 125 Contact FUJI.	1.9
BW630 BW800	**BW9N0JA** **BW9N0JA-X** **BW9N0JA-P**	M6 x 110 M6 x 125 Contact FUJI.	1.9

Dimensions, mm

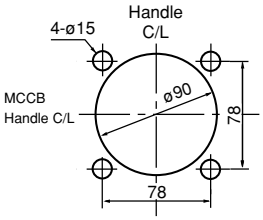
V type handle

• BW9V0CA, BW9V0GA

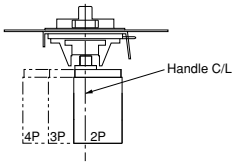




Door panel cutting

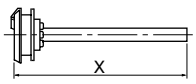


Note: Align the center of the hole cut in the panel with the center of the breaker handle.

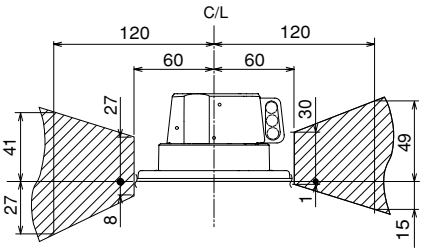


Optional shaft BW9VSG0

X = H - 95



Door hinge installation area



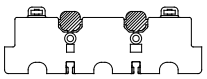
Install the door hinge in the shaded area.

MCCB	Handle type	Standard type H	With the optional shaft (X=154)		Mounting screw	Mass (kg)
			H	Area in which the hinge with H can be installed		
BW125*1	**BW9V0CA**	105±2	250±2	140 to 250	M4 x 85	0.67
BW160*2 BW250*2	**BW9V0GA**	105±2	250±2	140 to 250	M4 x 85	0.67

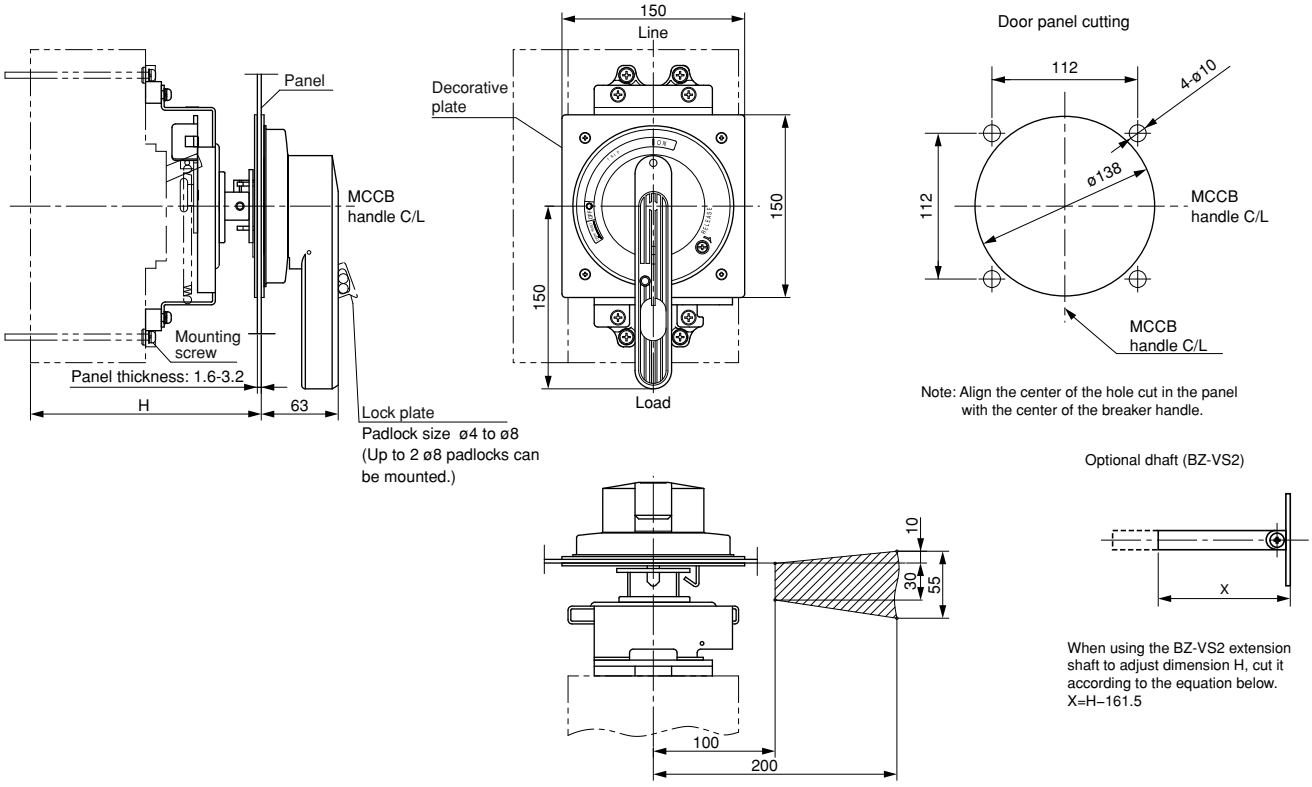
Notes:
- The handle does not have any means to hold the door. Provide it separately.
- Not available for side mounting.

*1 For the BW125JAG-2P with the external operating handle, the standard terminal cover is not available because it does not fit with the mounting base. Specify the terminal cover for the external operating handle. (Specify "-00635" at the end of the type number of the product with the standard terminal cover.) Note that the external operating handle cannot be mounted to the global version of BW125JAGU-2P. Use the BW125RAGU-2P.

*2 When mounting a terminal cover, cut away part of it because it hides the mounting screws for the breaker. Remove the shaded parts in the figure below.



• BW9V0HA, BW9V0JA



Install the door hinge in the shaded area.

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

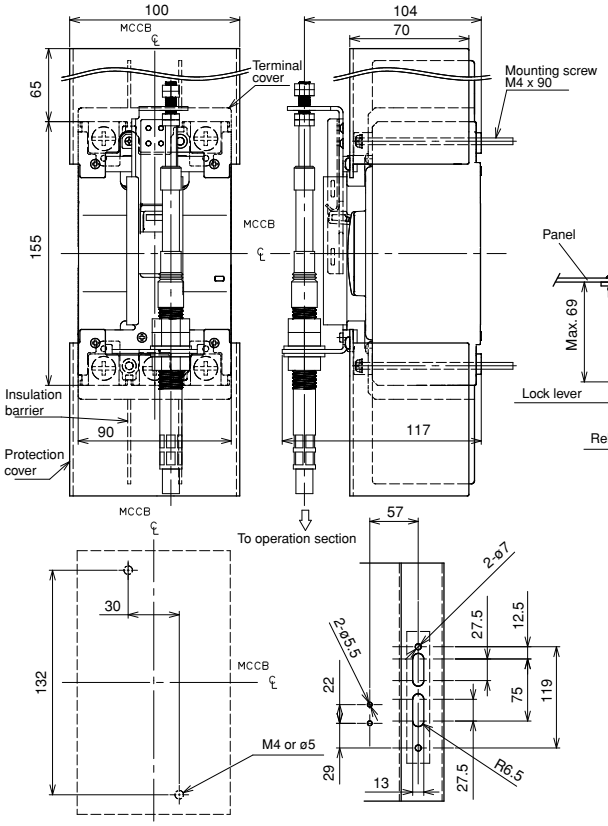
Note: • The handle cannot hold the door.
• Not available for side mountimg

■ Dimensions, mm

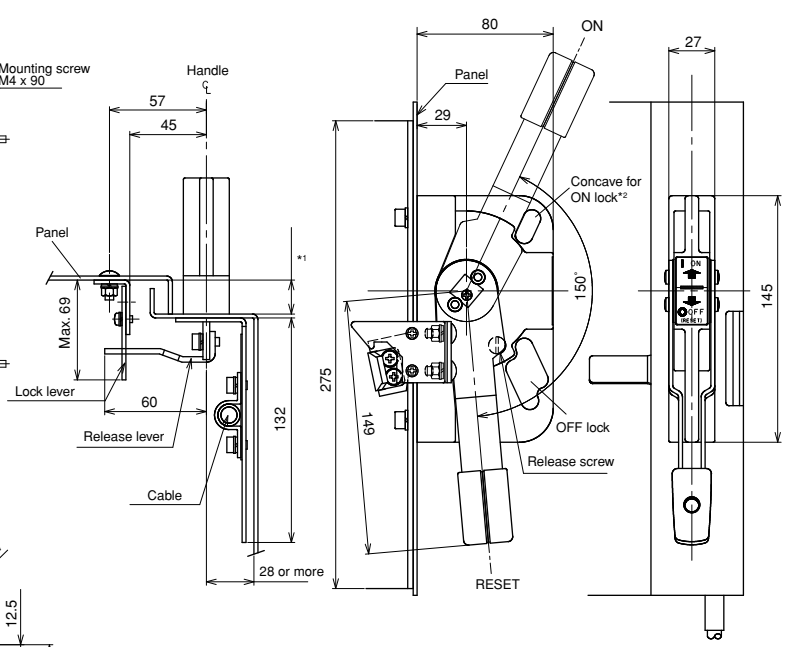
F type handle

• BW9F0CA

Drive section



Operation section



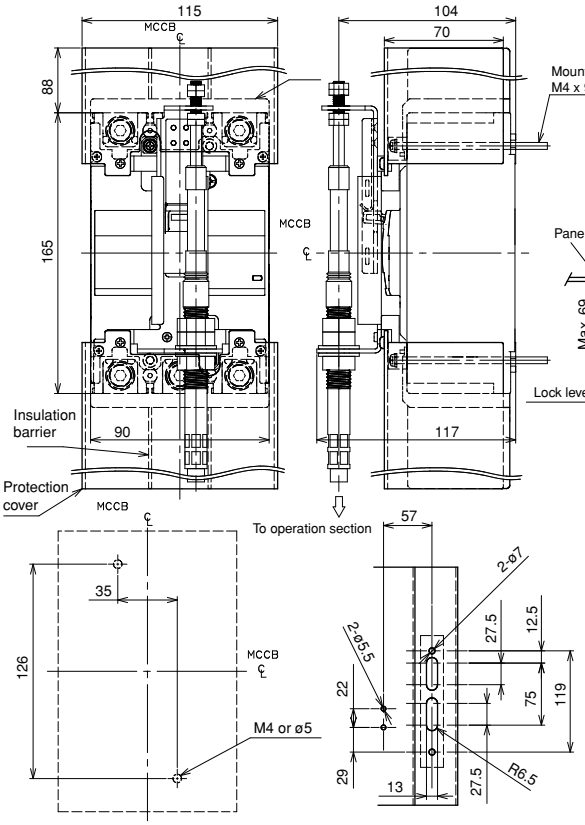
- This product consists of a drive section and an operation section.
- The operation section can be mounted either to the right or to the left on the panel depending on the mounting position of the release lever.
- For the OFF lock, 3 ϕ10 padlocks can be mounted; for the ON lock, 2 ϕ10 padlocks.

*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.

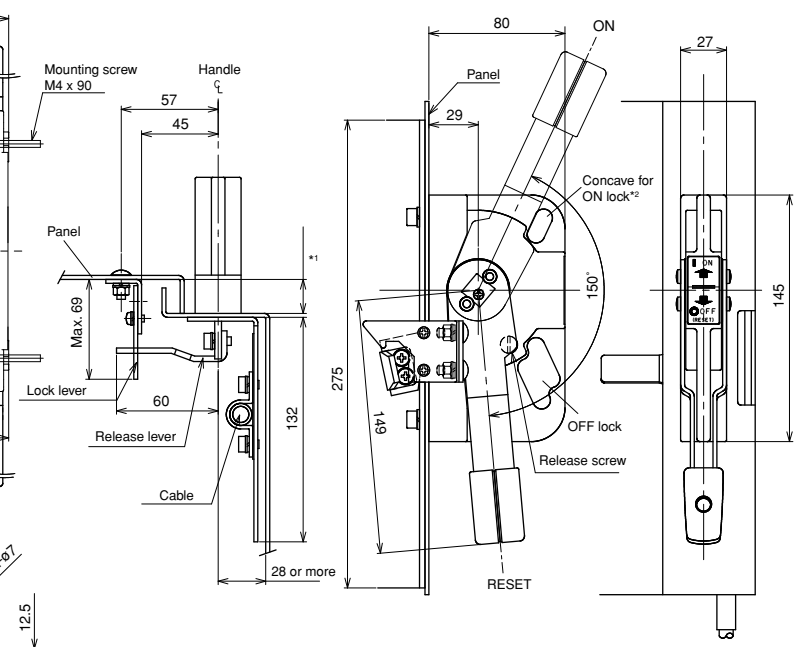
Panel drilling

• BW9F0GA

Drive section



Operation section



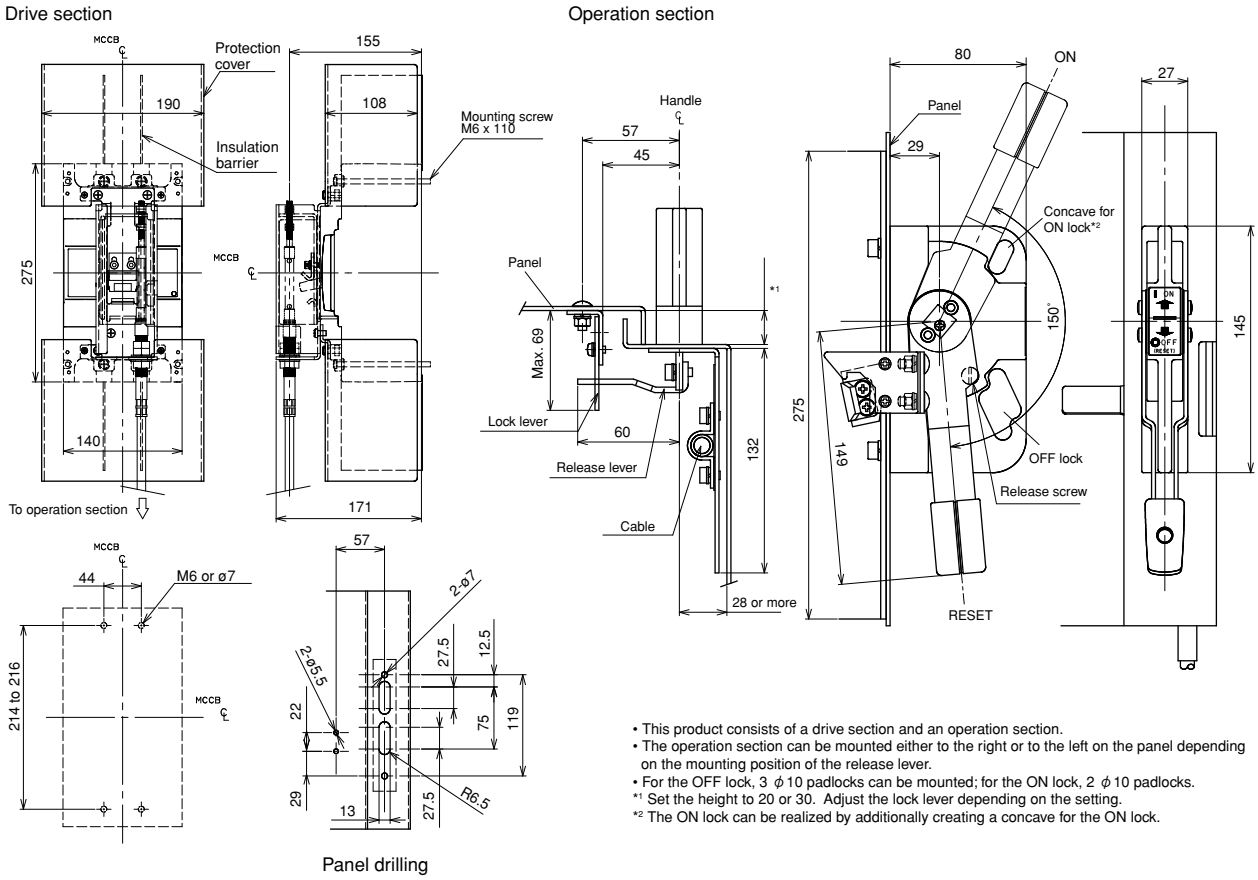
- This product consists of a drive section and an operation section.
- The operation section can be mounted either to the right or to the left on the panel depending on the mounting position of the release lever.
- For the OFF lock, 3 ϕ10 padlocks can be mounted; for the ON lock, 2 ϕ10 padlocks.

*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.

Panel drilling

G-TWIN series
External accessories

• BW9F0HA



- 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 ϕ10 padlocks can be mounted; for the ON lock, 2 ϕ10 padlocks.

*1 Set the height to 20 or 30. Adjust the lock lever depending on the setting.
*2 The ON lock can be realized by additionally creating a concave for the ON lock.

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

Note: * Not available for BW125JAG-2P

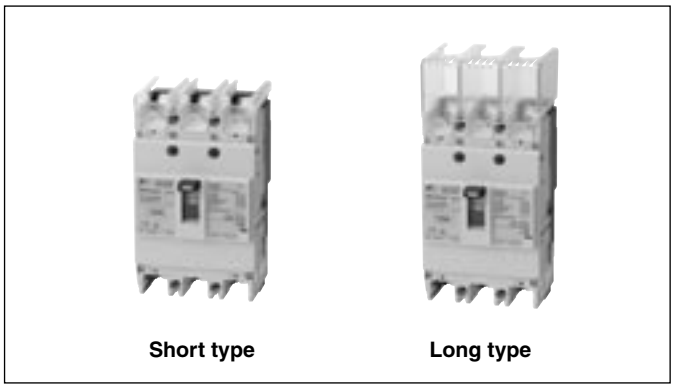
Terminal covers

■ 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



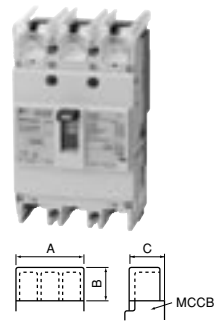
Short type **Long type**

Long type

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

Short type

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



Notes: • A gray-white terminal cover comes standard with the Global Series 125AF and 250AF.
*1 When using the external operating handle, part of the terminal cover (▨) must be cut away.
*2 Crimp terminals for 325 mm^2 are not available.
*3 This type of cover can be mounted on the 400AF when flat terminals are not used.

Insulation barriers

Description

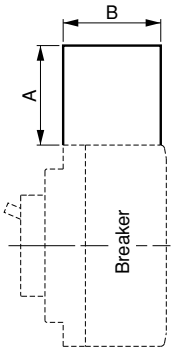
The interphase barriers are provided on frame size of 125AF to 800AF breakers for front mounting. The barriers are installed in the molded slots between terminals.
Installation of these barriers after wiring is possible even when an external accessory is installed.

Interphase barrier

Interphase barrier

MCCB	Interphase barrier				
	Type	Dimensions (mm)		Packing quantity	Mass (g)
		A	B		
BW125	**BW9BPCA**	50	60	4	30
BW160 BW250	**BW9BPGA**	80	60	4	50
BW400 BW630 BW800	**B-43A**	105	95	4	130

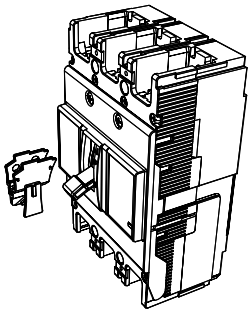
Interphase barrier



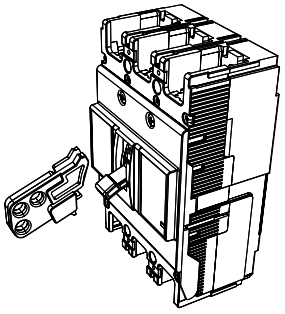
Padlocking device and handle locking cover

MCCB	Padlocking device		Handle locking cover
	Q1: Cap type	Q2: Plate type	
BW125	**BW9Q1CA**	**BW9Q2CA**	**BW9L1CA**
BW160 BW250		**BW9Q2GA**	
BW400	–	**BW9Q2HA**	**BW9L1HA**
BW630 BW800	–	**BW9Q2JA**	

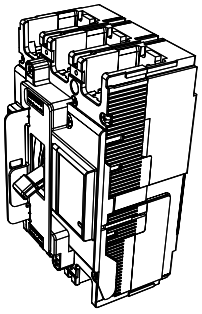
Handle locking cover



Padlocking device
• Cap type Q1



• Plate type Q2



Earth Leakage Circuit Breakers, G-TWIN sereies

G-TWIN series
Breaking capacities

G-TWIN Standard Series

Breaker ampere frame	Basic type	Pole	Rated current (A)	Sensitive current (mA)	Rated voltage (AC V)	Interrupting capacity (kA)						
						IEC60947–2 [Icu/Ics]		GB14048.2 [Icu/Ics]		UL489, CAN/CSA C22.2 N0.5		
						AC 100V 200V 230V	380V 400V 415V 440V	AC 230V	400V	AC 240V	480V / ⅄	480V / Δ
125	EW125JAG	–3P	15,20,30,40,50,60,75,100,125	30,100/300/500/1000	100–440	50/25	30/15	50/25	30/15	–	–	–
125	EW125JAG	–4P	15,20,30,40,50,60,75,100,125	30,100/300/500/1000	100–440	50/25	30/15	50/25	30/15	–	–	–
125	EW125SAG	–3P	15,20,30,40,50,60,75,100,125	30,100/300/500/1000	100–440	85/43	36/18	85/43	36/18	–	–	–
125	EW125SAG	–4P	15,20,30,40,50,60,75,100,125	30,100/300/500/1000	100–440	85/43	36/18	85/43	36/18	–	–	–
125	EW125RAG	–3P	15,20,30,40,50,60,75,100,125	30,100/300/500/1000	100–440	100/50	50/25	100/50	50/25	–	–	–
125	EW125RAG	–4P	15,20,30,40,50,60,75,100,125	30,100/300/500/1000	100–440	100/50	50/25	100/50	50/25	–	–	–
160	EW160EAG	–3P	125,150,160	30,100/300/500/1000	100–440	36/18	18/9	36/18	18/9	–	–	–
160	EW160JAG	–3P	125,150,160	30,100/300/500/1000	100–440	50/25	30/15	50/25	30/15	–	–	–
160	EW160JAG	–4P	125,150,160	30,100/300/500/1000	100–440	50/25	30/15	50/25	30/15	–	–	–
160	EW160SAG	–3P	125,150,160	30,100/300/500/1000	100–440	85/43	36/18	85/43	36/18	–	–	–
160	EW160SAG	–4P	125,150,160	30,100/300/500/1000	100–440	85/43	36/18	85/43	36/18	–	–	–
160	EW160RAG	–3P	125,150,160	30,100/300/500/1000	100–440	100/50	50/25	100/50	50/25	–	–	–
160	EW160RAG	–4P	125,150,160	30,100/300/500/1000	100–440	100/50	50/25	100/50	50/25	–	–	–
250	EW250EAG	–3P	175,200,225,250	30,100/300/500/1000	100–440	36/18	18/9	36/18	18/9	–	–	–
250	EW250JAG	–3P	175,200,225,250	30,100/300/500/1000	100–440	50/25	30/15	50/25	30/15	–	–	–
250	EW250JAG	–4P	175,200,225	30,100/300/500/1000	100–440	50/25	30/15	50/25	30/15	–	–	–
250	EW250SAG	–3P	175,200,225,250	30,100/300/500/1000	100–440	85/43	36/18	85/43	36/18	–	–	–
250	EW250SAG	–4P	175,200,225	30,100/300/500/1000	100–440	85/43	36/18	85/43	36/18	–	–	–
250	EW250RAG	–3P	175,200,225,250	30,100/300/500/1000	100–440	100/50	50/25	100/50	50/25	–	–	–
250	EW250RAG	–4P	175,200,225	30,100/300/500/1000	100–440	100/50	50/25	100/50	50/25	–	–	–
400	EW400EAG	–3P	250,300,350,400	30,100/300/500/1000	100–440	50/25	30/15	50/25	30/15	–	–	–
400	EW400SAG	–3P	250,300,350,400	30,100/300/500/1000	100–440	85/43	36/18	85/43	36/18	–	–	–
400	EW400RAG	–3P	250,300,350,400	30,100/300/500/1000	100–440	100/50	50/25	100/50	50/25	–	–	–
400	EW400RAG	–4P	250,300,350,400	30,100/300/500/1000	100–440	100/50	50/25	100/50	50/25	–	–	–
400	EW400HAG	–3P	250,300,350,400	30,100/300/500/1000	100–440	125/63	70/35	125/63	70/35	–	–	–
400	EW400HAG	–4P	250,300,350,400	30,100/300/500/1000	100–440	125/63	70/35	125/63	70/35	–	–	–
630	EW630EAG	–3P	500,600,630	100/300/500/1000	100–440	50/25	36/18	50/25	36/18	–	–	–
630	EW630RAG	–3P	500,600,630	100/300/500/1000	100–440	100/50	50/25	100/50	50/25	–	–	–
630	EW630HAG	–3P	500,600,630	100/300/500/1000	100–440	125/63	70/35	125/63	70/35	–	–	–
800	EW800EAG	–3P	700,800	100/300/500/1000	100–440	50/25	36/18	50/25	36/18	–	–	–
800	EW800RAG	–3P	700,800	100/300/500/1000	100–440	100/50	50/25	100/50	50/25	–	–	–
800	EW800HAG	–3P	700,800	100/300/500/1000	100–440	125/63	70/35	125/63	70/35	–	–	–

G-TWIN Global Series

Breaker ampere frame	Basic type	Pole	Rated current (A)	Sensitive current (mA)	Rated voltage (AC V)	Interrupting capacity (kA)						
						IEC60947-2 [Icu/Ics]		GB14048.2 [Icu/Ics]		UL489, CAN/CSA C22.2 N0.5		
						AC 100V 200V 230V	380V 400V 415V 440V	AC 230V	400V	AC 240V	480V / ⅄	480V / Δ
125	EW125JAGU	–3P	15,20,30,40,50,60,70,75,80,90,100,125	30,100/200/500/1000	100-480	50/25	30/15	50/25	30/15	50	30	30
125	EW125RAGU	–3P	15,20,30,40,50,60,70,75,80,90,100,125	30,100/200/500/1000	100-480	100/50	50/25	100/50	50/25	100	50	50
250	EW250JAGU	–3P	125,150,160,175,200,225,250	30,100/200/500/1000	100-480	50/25	30/15	50/25	30/15	50	30	30
250	EW250RAGU	–3P	125,150,160,175,200,225,250	30,100/200/500/1000	100-480	100/50	50/25	100/50	50/25	100	50	50
400	EW400SAGU	–3P	250,300,350,400	30,100/200/500/1000	100-480	85/43	36/18	85/43	36/18	50	35	35
400	EW400RAGU	–3P	250,300,350,400	30,100/200/500/1000	100-480	50/25	50/25	100/50	50/25	100	50	50
400	EW400HAGU	–3P	250,300,350,400	30,100/200/500/1000	100-480	100/50	70/35	125/63	70/35	125	65	65

Type number nomenclature

EW 250 EA G □ - 3P 225 B X W K FK RK A L

Series
EW: G-TWIN series

Frame size
125: 125AF
160: 160AF
250: 250AF
400: 400AF
630: 630AF
800: 800AF

Breaking capacity

	Rated breaking capacity Icu (440V AC)					
	125AF	160AF	250AF	400AF	630AF	800AF
EA	–	18kA	18kA	30kA	36kA	36kA
JA	30kA	30kA	30kA	–	–	–
SA	36kA	36kA	36kA	36kA	–	–
RA	50kA	50kA	50kA	50kA	50kA	50kA
HA	–	–	–	70kA	70kA	70kA

Model
G: Line protection

G-TWIN series
Blank: Standard
U: Global

No. of poles
2P: 2-pole
3P: 3-pole
4P: 4-pole

Rated current

	125AF	160AF	250AF	400AF	630AF	800AF
015	15A	–	–	–	–	–
020	20A	–	–	–	–	–
030	30A	–	–	–	–	–
040	40A	–	–	–	–	–
050	50A	–	–	–	–	–
060	60A	–	–	–	–	–
075	75A	–	–	–	–	–
100	100A	–	–	–	–	–
125	125A	125A	–	–	–	–
150	–	150A	–	–	–	–
160	–	160A	–	–	–	–
175	–	–	175A	–	–	–
200	–	–	200A	–	–	–
225	–	–	225A	–	–	–
250	–	–	250A*2	250A	–	–
300	–	–	–	300A	–	–
350	–	–	–	350A	–	–
400	–	–	–	400A	–	–
500	–	–	–	–	500A	–
600	–	–	–	–	600A	–
630	–	–	–	–	630A	–
700	–	–	–	–	–	700A
800	–	–	–	–	–	800A

Notes:
*1 For the available configuration of accessory, see page 100.
*2 Except for 4-pole

Erath alarm switch

Connection method (internal accessories)
Blank: Lead-wire system
A: Terminal block system

Undervoltage trip device*1

	• 125/160/250AF	• 400/630/800AF
RR:	24V DC	24V AC/DC
RS:	48V DC	48V AC/DC
RL:	100-110V DC	–
R5:	125V DC	–
RA:	100-110V AC	100-110V AC/DC
RT:	110-130V AC	–
R1:	–	120-130V AC/200V-220V DC
RK:	200-240V AC	200-240V AC/200-220V DC
RB:	277V AC	277V AC
RP:	380-415V AC	380-480V AC
RH:	440-480V AC	–

Shunt trip device*1

	• 125/160/250AF	• 400/630/800AF
FR:	24V AC/DC	24-48V AC/DC
FS:	48V AC/DC	–
FA:	100-120V AC/100-110V DC	100-240V AC/100-220V DC
F1:	120-130V AC	–
FK:	200-240V AC/200-220V DC	–
FB:	277V AC	277V AC
FP:	380-440V AC	380-550V AC
FH:	440-480V AC	–
FJ:	500-550V AC	–

Alarm switch*1
K: Standard SPDT
J: Standard 2PDT
8: For low level circuit SPDT
9: For low level circuit 2PDT

Auxiliary switch*1
W: Standard SPDT
V: Standard 2PDT
1: For low level circuit SPDT
2: For low level circuit 2PDT

Mounting and connection
• Standard type
Blank: Front mounting front connection
X: Front mounting rear connection
E: Flush mounting rear connection
P: Plug-in mounting

• Global type
See table below.

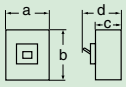
Rated sensitive current
B: 30mA
J: 100/300/500/1000mA
K: 100/200/500/1000mA

Terminal combination (Global type)

Code	Terminal position		Applicable breaker type	
	Line	Load	EW125, 160, 250	EW400
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	●	●

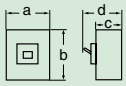
G-TWIN series
Quick reference guide

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 (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 JISC8201-2-2 Ann. 1,2	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	
Standard certified	CE Marking certified (TÜV)			○		○		○	
	CCC approved			○		○		○	
	Electrical Appliance and Material Safety Law <PS>E*			○ (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)				1.2	1.6	1.2	1.6	1.2	1.6
Tripping device				Thermal-magnetic					
Front mounting, front connection			No-mark	○	○	○	○	○	○
Front mounting, rear connection			X	○	○	○	○	○	○
Flush mounting, front connection			E	○	○	○	○	○	○
Plug-in mounting			P	○	–	○	–	○	–
Internal accessories			Page 96						
Alarm switch			K	○	○	○	○	○	○
Auxiliary switch			W	○	○	○	○	○	○
Undervoltage trip			R	○	○	○	○	○	○
Shunt trip			F	○	○	○	○	○	○
Earth alarm switch			L	○	○	○	○	○	○
External accessories			Page 98						
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 –: Not approved
Note: * Electrical Appliance and Material Safety Law of Japan

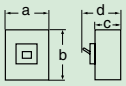
G-TWIN Standard Series

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 (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 JISC8201-2-2 Ann. 1,2	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	
Standard certified	CE Marking certified (TÜV)			○	○		○		○	
	CCC approved			○	○		○		○	
	Electrical Appliance and Material Safety Law <PS>E*			–	–		–		–	
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)				1.6	1.6	2.2	1.6	2.2	1.6	2.2
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 96							
Alarm switch			K	○	○	○	○	○	○	○
Auxiliary switch			W	○	○	○	○	○	○	○
Undervoltage trip			R	○	○	○	○	○	○	○
Shunt trip			F	○	○	○	○	○	○	○
Earth alarm switch			L	○	○	○	○	○	○	○
External accessories			Page 98							
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 –: Not approved
Note: * Electrical Appliance and Material Safety Law of Japan

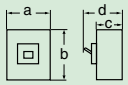
G-TWIN series
Quick reference guide

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 (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 JISC8201-2-2 Ann. 1,2	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	
Standard certified	CE Marking certified (TÜV)			○	○		○		○	
	CCC approved			○	○		○		○	
	Electrical Appliance and Material Safety Law <PS>E*			–	–		–		–	
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)				1.6	1.6	2.2	1.6	2.2	1.6	2.2
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 96							
Alarm switch			K	○	○	○	○	○	○	○
Auxiliary switch			W	○	○	○	○	○	○	○
Undervoltage trip			R	○	○	○	○	○	○	○
Shunt trip			F	○	○	○	○	○	○	○
Earth alarm switch			L	○	○	○	○	○	○	○
External accessories			Page 98							
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 –: Not approved
Note: * Electrical Appliance and Material Safety Law of Japan

G-TWIN Standard Series

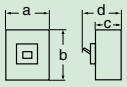
Ampere frame				400A						
Type				**EW400EAG**	**EW400SAG**		**EW400RAG**		**EW400HAG**	
Pole				3	3	4	3	4	3	4
Rated current Reference amb. temp. (40°C)			In(A)	250, 300, 350, 400						
Rated impulse withstand voltage			Uimp(kV)	6	6		6		6	
Isolation compliant				○	○		○		○	
Rated voltage (AC V)			IEC	100-230-440						
			UL	200-480						
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)			100/300/500/1000 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 JISC8201-2-2 Ann. 1,2	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	
Standard certified	CE Marking certified (TÜV)			○	○		○		○	
	CCC approved			○	○		○		○	
	Electrical Appliance and Material Safety Law <PS>E*			–	–		–		–	
Dimensions (mm) 			a	140	140	185	140	185	140	185
			b	257	257		257		257	
			c	103	103		103		103	
			d	146	146		146		146	
Mass (kg)				5.1	5.1	6.8	5.1	6.8	5.1	6.8
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 96							
Alarm switch			K	○	○	○	○	○	○	○
Auxiliary switch			W	○	○	○	○	○	○	○
Undervoltage trip			R	○	○	○	○	○	○	○
Shunt trip			F	○	○	○	○	○	○	○
Earth alarm switch			L	–	–	–	–	–	–	–
External accessories			Page 98							
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	○*2	○*2	○*2	○*2	○*2	○*2	○*2
Block terminal			SL	○	○	○	○	○	○	○

○: Approved –: Not approved

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

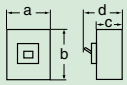
G-TWIN series
Quick reference guide

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			700, 800		
Rated impulse withstand voltage		Uimp(kV)		6	6	6	6	6	6
Isolation compliant				○	○	○	○	○	○
Rated voltage (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 JISC8201-2-2 Ann. 1,2	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	36/18	100/50	125/63
Standard certified	CE Marking certified (TÜV)			○	○	○	○	○	○
	CCC approved			○	○	○	○	○	○
	Electrical Appliance and Material Safety Law <PS>E*1			–	–	–	–	–	–
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)				8.3	8.3	8.3	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 96						
Alarm switch			K	○	○	○	○	○	○
Auxiliary switch			W	○	○	○	○	○	○
Undervoltage trip			R	○	○	○	○	○	○
Shunt trip			F	○	○	○	○	○	○
Earth alarm switch			L	–	–	–	–	–	–
External accessories			Page 98						
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	○*2	○*2	○*2	○*2	○*2	○*2
Block terminal			SL	○	○	○	○	○	○

○: Approved –: Not approved
Note: *1 Electrical Appliance and Material Safety Law of Japan
*2 Standard provided

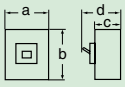
G-TWIN Global Series

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	6
Isolation compliant				○	○
Rated voltage (AC V)		IEC		100-230-440	
		UL		200-480	
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 JISC8201-2-2 Ann. 1,2 Icu/Ics (kA)	AC	440V	30/15	50/25
			415V	30/15	50/25
			400V	30/15	50/25
			380V	30/15	50/25
			230V	50/25	100/50
			200V	50/25	100/50
			100V	50/25	100/50
	GB14048.2 Icu/Ics (kA)	AC	400V	30/15	50/25
			230V	50/25	100/50
	UL489 CAN/CSA C22.2 NO.5 (kA)	AC	480V/Δ	30	50
			480V/Y	30	50
			240V	50	100
Standard certified	CE Marking certified (TÜV)			○	○
	CCC approved			○	○
	UL approved			○	○
	Electrical Appliance and Material Safety Law <PS>E*			○ (except for 125A)	○ (except for 125A)
Dimensions (inch(mm)) 			a	3.543 (90)	3.543 (90)
			b	6.732 (171)	6.732 (171)
			c	2.677 (68)	2.677 (68)
			d	3.740 (95)	3.740 (95)
Mass (kg)				1.2	1.2
Tripping device				Thermal-magnetic	
Connecting terminal					
Screw				○	○
Flat				○	○
Block				○	○
Internal accessories			Page 96		
Alarm switch			K	○	○
Auxiliary switch			W	○	○
Undervoltage trip			R	○	○
Shunt trip			F	○	○
Earth alarm switch			L	○	○
External accessories			Page 98		
Handle padlocking device	Cap type		Q1	○	○
Handle padlocking device	Plate type		Q2	○	○
Operating handle	N-type		N	○	○
Operating handle	V-type		V	○	○
Operating handle	F-type		F	○	○
Terminal cover	Short		BT□S	○	○
Terminal cover	Long		BT□L	○	○
Insulation barrier	Interphase		BP	○	○
Handle locking cover			L1	○	○

○: Approved –: Not approved
Note: * Electrical Appliance and Material Safety Law of Japan

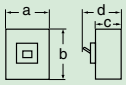
G-TWIN series
Quick reference guide

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	6
Isolation compliant				○	○
Rated voltage (AC V)		IEC		100-230-440	
		UL		200-480	
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 JISC8201-2-2 Ann. 1,2 Icu/Ics (kA)	AC	440V	30/15	50/25
			415V	30/15	50/25
			400V	30/15	50/25
			380V	30/15	50/25
			230V	50/25	100/50
			200V	50/25	100/50
			100V	50/25	100/50
	GB14048.2 Icu/Ics (kA)	AC	400V	30/15	50/25
			230V	50/25	100/50
	UL489 CAN/CSA C22.2 NO.5 (kA)	AC	480V/Δ	30	50
			480V/Y	30	50
			240V	50	100
Standard certified	CE Marking certified (TÜV)			○	○
	CCC approved			○	○
	UL approved			○	○
	Electrical Appliance and Material Safety Law <PS>E*			–	–
Dimensions (inch(mm)) 			a	4.134 (105)	4.134 (105)
			b	7.126 (181)	7.126 (181)
			c	2.677 (68)	2.677 (68)
			d	3.740 (95)	3.740 (95)
Mass (kg)				1.6	1.6
Tripping device				Thermal-magnetic	
Connecting terminal					
Screw				○	○
Flat				○	○
Block				○	○
Internal accessories			Page 96		
Alarm switch			K	○	○
Auxiliary switch			W	○	○
Undervoltage trip			R	○	○
Shunt trip			F	○	○
Earth alarm switch			L	○	○
External accessories			Page 98		
Handle padlocking device Cap type			Q1	○	○
Handle padlocking device Plate type			Q2	○	○
Operating handle N-type			N	○	○
Operating handle V-type			V	○	○
Operating handle F-type			F	○	○
Terminal cover Short			BT□S	○	○
Terminal cover Long			BT□L	○	○
Insulation barrier Interphase			BP	○	○
Handle locking cover			L1	○	○

○: Approved –: Not approved
Note: * Electrical Appliance and Material Safety Law of Japan

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 (AC V)		IEC		100-230-440		
		UL		200-480		
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 JISC8201-2-2 Ann. 1,2 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
			100V	85/43	100/50	125/63
	GB14048.2 Icu/Ics (kA)	AC	400V	36/18	50/25	70/35
			230V	85/43	100/50	125/63
	UL489 CAN/CSA C22.2 NO.5 (kA)	AC	480V/Δ	35	50	65 (with block terminal: 50)
			480V/Y	35	50	65
			240V	50	100	125
Standard certified	CE Marking certified (TÜV)			○	○	○
	CCC approved			○	○	○
	UL approved			○	○	○
	Electrical Appliance and Material Safety Law <PS>E*			–	–	–
Dimensions (inch(mm)) 			a	5.512 (140)	5.512 (140)	5.512 (140)
			b	10.12 (257)	10.12 (257)	10.12 (257)
			c	4.055 (103)	4.055 (103)	4.055 (103)
			d	5.748 (146)	5.748 (146)	5.748 (146)
Mass (kg)				5.6	5.6	5.6
Tripping device				Thermal-magnetic		
Connecting terminal						
Screw				–	–	–
Flat				○	○	○
Block				○	○	○
Internal accessories			Page 96			
Alarm switch			K	○	○	○
Auxiliary switch			W	○	○	○
Undervoltage trip			R	○	○	○
Shunt trip			F	○	○	○
Earth alarm switch			L	–	–	–
External accessories			Page 98			
Handle padlocking device	Cap type		Q1	–	–	–
Handle padlocking device	Plate type		Q2	○	○	○
Operating handle	N-type		N	○	○	○
Operating handle	V-type		V	○	○	○
Operating handle	F-type		F	○	○	○
Terminal cover	Short		BT□S	○	○	○
Terminal cover	Long		BT□L	○	○	○
Insulation barrier	Interphase		BP	○	○	○
Handle locking cover			L1	○	○	○

○: Approved –: Not approved
Note: * Electrical Appliance and Material Safety Law of Japan

G-TWIN series
Mounting modifications

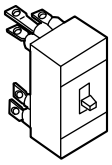
■ Mounting modifications

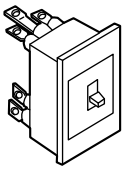
• Standard

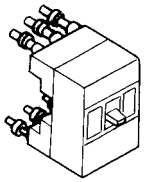
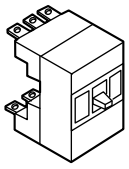
Standard type FUJI breakers are front mounting with front connections. The standard breaker can easily be modified to become front mounting rear connection type, flush mounting type and plug-in type. The additional parts such as insulation bases, barriers, covers and similar parts are added as required.

Front mounting
Front connection

BASIC DESIGN

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

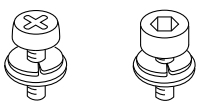
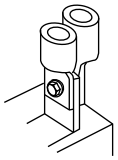
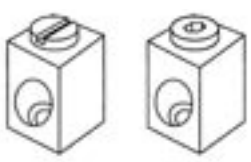
Additional main parts	Flush mounting Rear connection (E type)
Bar stud terminal 	EW125 EW160 EW250 EW400 EW630 EW800 Each stud can be turned by 90˚

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

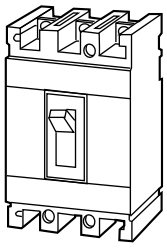
• Global

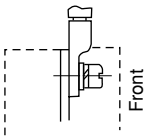
Front mounting
Front connection

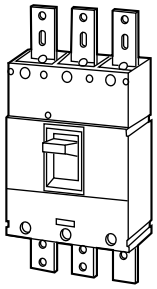
BASIC DESIGN

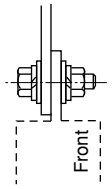
Screw	Flat terminal	Block terminal
		

Terminal connection/Front mounting, front connection

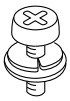
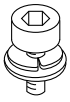


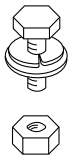






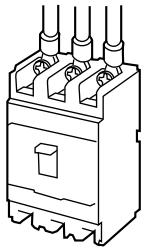
Flat terminal

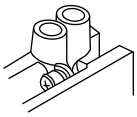
Pan-head screw	Breaker type	Tightening torque (N•m)	Size (mm)
	EW125	5.5 to 7.5	M8 × 16
Hexagonal socket head bolt 	EW160 EW250	8.0 to 13.0	M8 × 16

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

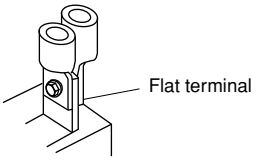
Type of connection/up to 250AF
Front mounting front connection

Direct connection





Flat terminal connection
Flat terminals are required.



Flat bar studs/1-hole type

Breaker type	Pole	Type of flat terminal
EW125	2 3 4	**BZ-S35B-1002** **BZ-S35B-1003** **EW9SS0CA-4**
EW160 EW250	2 3 4	**BZ-S50B-2252** **BZ-S50B-2253** **EW9SS0GA-4**

Wire size and terminal

Wire size and crimp terminal

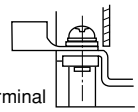
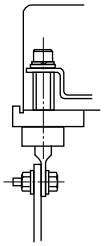
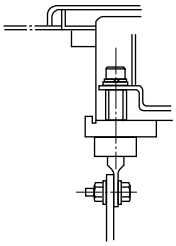
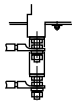
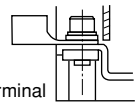
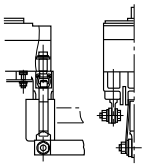
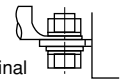
The following is the size recommendations for crimp terminals.

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

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
125	EW125	R2-8	R5.5-8	R8-8	R14-8	R22-8	JST38-S8	CD60-8				
160 250	EW160 EW250				R14-8	R22-8	R38-8	R60-8	CB100-8	CB150-8		
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

MCCB type	Front connection	Rear connection **X**	Flush mounting **E**	Plug-in mounting **P**
EW125	 Flat terminal			
EW160 EW250	 Flat terminal			 90˚ rotational stud
EW400 EW630 EW800	 Flat 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.

Code	Terminal position		Applicable breaker type	
	Line	Load	EW125, 160, 250	EW400
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	●	●

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 mm^2.

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

Precautions

- Two wires, regardless of whether they are of the same size or different sizes, cannot be connected to block terminals.
- 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 75˚C wire			Connectable wire size (AWG)	Tightening torque (N•m)	Type of screw head and size (mm)
		J.S.T Mfg. Co., Ltd.	Nichifu Co., Ltd.	Daido Solderless Terminal Mfg. Co., Ltd.	75˚C wire		
EW125JAGU EW125RAGU	15	R2-8	R2-8	2-8, 2-BB	14AWG	5.8 (5.3-6.4)	Cross/straight slotted pan-head screws M8 x 16
	20	5.5-S8, R5.5-8	R3.5-8, R5.5-8	3.5-8, 5.5-8	12AWG		
	30		R5.5-8	5.5-8	10AWG		
	40	8-8NS, R8-8	R8-8	8-8	8AWG		
	50						
	60	14-8NS, 14-S8, R14-8	R14-8S, R14-8	14-S8, 14-8	6AWG		
	70	22-S8, R22-8, CB22-S8	R22-8S, R22-8, CB22-8S	22-S8, 2-8, CB22-8	4AWG		
	75						
	80						
	90	38-S8	R38-8S	38-S8	3AWG		
	100						
	125				1AWG		
EW250JAGU EW250RAGU	125	38-S8, R38-8	R38-8S, R38-8	38-S8, 38-8	1AWG	10.5 (8-13)	Hexagon socket head bolt M8 x 16
	150	60-S8, R60-8	R60-8, CB60-8, CB60-8S	60-8, CB60-8	1/0AWG		
	175	70-8	R70-8	70-8	2/0AWG		
	200	CB80-S8		CB80-8	3/0AWG		
	225	CB100-S8		CB100-8	4/0AWG		
	250	CB150-S8	CB150-8	CB150-8	250MCM		

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

G-TWIN series
Wire size and terminal

• Flat terminal connection

ELCB	Rated current (A)	Applicable crimp terminal 75˚C wire			Connectable wire size (AWG)	Tightening torque (N•m)		Type of screw head and size (mm)
		J.S.T Mfg. Co., Ltd.	Nichifu Co., Ltd.	Daido Solderless Terminal Mfg. Co., Ltd.	75˚C wire	Wire side	MCCB side	
EW125JAGU EW125RAGU	15	R2-8	R2-8	2-8, 2-BB	14AWG	9 (8-10)	5.8 (5.3-6.4)	Cross/straight slotted pan-head screws M8 x 16
	20	5.5-S8, R5.5-8	R3.5-8, R5.5-8	3.5-8, 5.5-8	12AWG			
	30		R5.5-8	5.5-8	10AWG			
	40	8-8NS, R8-8	R8-8	8-8	8AWG			
	50							
	60	14-8NS, 14-S8, R14-8	R14-8S, R14-8	14-S8, 14-8	6AWG			
	70	22-S8, R22-8, CB22-S8	R22-8S, R22-8, CB22-8S	22-S8, 2-8, CB22-8	4AWG			
	75							
	80							
	90	38-S8	R38-8S	38-S8	3AWG			
	100							
	125				1AWG			
EW250JAGU EW250RAGU	125	38-S8, R38-8	R38-8S, R38-8	38-S8, 38-8	1AWG	9 (8-10)	10.5 (8-13)	Hexagon socket head bolt M8 x 16
	150	60-S8, R60-8	R60-8, CB60-8, CB60-8S	60-8, CB60-8	1/0AWG			
	175	70-8	R70-8	70-8	2/0AWG			
	200	CB80-S8		CB80-8	3/0AWG			
	225	CB100-S8		CB100-8	4/0AWG			
	250	CB150-S8	CB150-8	CB150-8	250MCM			
EW400SAGU EW400RAGU EW400HAGU	250	150-12	R150-12		250MCM	45 (40-50)	43.5 (39.2-48)	Hexagon head bolt M12 x 35
	300	180-12	R180-12		350MCM			
	350	325-12	R325-12S		500MCM			
	400	325-12	R325-12S		500MCM			
		R80-12	R80-12		3/0AWG(x2)			

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

• 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	14AWG	5.8 (5.8-6.4)	Slotted setscrew	
	20	12AWG			
	30	10AWG			
	40	8AWG			
	50				
	60	6AWG			
	70	4AWG			
	75				
	80				
	90	3AWG			
	100				
	125	1AWG			
EW250JAGU EW250RAGU	125	1AWG	23 (23-25.3)	Hexagon socket head setscrew: 6.35 mm (1/4 inch)	Screw head size 
	150	1/0AWG			
	175	2/0AWG			
	200	3/0AWG			
	225	4/0AWG			
	250	250MCM			
EW400SAGU EW400RAGU EW400HAGU	250	250MCM	43.5 (43.5-48)	Hexagon socket head setscrew: 9.53 mm (3/8 inch)	
	300	350MCM			
	350	500MCM			
	400	3/0AWG(x2)	31.9 (31.9-35.1)	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)

Type number, Standard series

● E series, 3-pole IEC and CE marking conformed

Breaker ampere frame	Rated current (A)	Type	□: Available mounting and connection
160	125	EW160EAG-3P125■ □	Blank, X, E, P
	150	EW160EAG-3P150■ □	
	160	EW160EAG-3P160■ □	
250	175	EW250EAG-3P175■ □	Blank, X, E, P
	200	EW250EAG-3P200■ □	
	225	EW250EAG-3P225■ □	
	250	EW250EAG-3P250■ □	
400	250	EW400EAG-3P250■ □	Blank, X, E, P
	300	EW400EAG-3P300■ □	
	350	EW400EAG-3P350■ □	
	400	EW400EAG-3P400■ □	
630	500	EW630EAG-3P500J □	Blank, X, E, P
	600	EW630EAG-3P600J □	
	630	EW630EAG-3P630J □	
800	700	EW800EAG-3P700J □	Blank, X, E, P
	800	EW800EAG-3P800J □	

● H series, 3-pole IEC and CE marking conformed

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

Sensitive current	■
30mA	**B**
100/300/500/1000mA selectable	**J**

● J, S, R series, 3-pole IEC and CE marking conformed

Breaker ampere frame	Rated current (A)	Type	□: Available mounting and connection
125	15	EW125JAG-3P15■ □	Blank, X, E, P
	20	EW125JAG-3P20■ □	
	30	EW125JAG-3P30■ □	
	40	EW125JAG-3P40■ □	
	50	EW125JAG-3P50■ □	
	60	EW125JAG-3P60■ □	
	75	EW125JAG-3P75■ □	
	100	EW125JAG-3P100■ □	
	125	EW125JAG-3P125■ □	
	15	EW125SAG-3P15■ □	
	20	EW125SAG-3P20■ □	
	30	EW125SAG-3P30■ □	
	40	EW125SAG-3P40■ □	
	50	EW125SAG-3P50■ □	
	60	EW125SAG-3P60■ □	
	75	EW125SAG-3P75■ □	
	100	EW125SAG-3P100■ □	
	125	EW125SAG-3P125■ □	
	15	EW125RAG-3P15■ □	
	20	EW125RAG-3P20■ □	
	30	EW125RAG-3P30■ □	
	40	EW125RAG-3P40■ □	
	50	EW125RAG-3P50■ □	
	60	EW125RAG-3P60■ □	
	75	EW125RAG-3P75■ □	
	100	EW125RAG-3P100■ □	
	125	EW125RAG-3P125■ □	
160	125	EW160JAG-3P125■ □	Blank, X, E, P
	150	EW160JAG-3P150■ □	
	160	EW160JAG-3P160■ □	
	125	EW160SAG-3P125■ □	
	150	EW160SAG-3P150■ □	
	160	EW160SAG-3P160■ □	
	125	EW160RAG-3P125■ □	
	150	EW160RAG-3P150■ □	
	160	EW160RAG-3P160■ □	
250	175	EW250JAG-3P175■ □	Blank, X, E, P
	200	EW250JAG-3P200■ □	
	225	EW250JAG-3P225■ □	
	250	EW250JAG-3P250■ □	
	175	EW250SAG-3P175■ □	
	200	EW250SAG-3P200■ □	
	225	EW250SAG-3P225■ □	
	250	EW250SAG-3P250■ □	
	175	EW250RAG-3P175■ □	
	200	EW250RAG-3P200■ □	
	225	EW250RAG-3P225■ □	
	250	EW250RAG-3P250■ □	
400	250	EW400SAG-3P250■ □	Blank, X, E, P
	300	EW400SAG-3P300■ □	
	350	EW400SAG-3P350■ □	
	400	EW400SAG-3P400■ □	
	250	EW400RAG-3P250■ □	
	300	EW400RAG-3P300■ □	
	350	EW400RAG-3P350■ □	
	400	EW400RAG-3P400■ □	
630	500	EW630RAG-3P500J □	Blank, X, E, P
	600	EW630RAG-3P600J □	
	630	EW630RAG-3P630J □	
800	700	EW800RAG-3P700J □	Blank, X, E, P
	800	EW800RAG-3P800J □	

G-TWIN series
Type number/Line protection

● J, S, R series, 4-pole IEC and CE marking conformed

Breaker ampere frame	Rated current (A)	Type	□: Available mounting and connection
125	15	EW125JAG-4P15■ □	Blank, X, E
	20	EW125JAG-4P20■ □	
	30	EW125JAG-4P30■ □	
	40	EW125JAG-4P40■ □	
	50	EW125JAG-4P50■ □	
	60	EW125JAG-4P60■ □	
	75	EW125JAG-4P75■ □	
	100	EW125JAG-4P100■ □	
	125	EW125JAG-4P125■ □	
	15	EW125SAG-4P15■ □	
	20	EW125SAG-4P20■ □	
	30	EW125SAG-4P30■ □	
	40	EW125SAG-4P40■ □	
	50	EW125SAG-4P50■ □	
	60	EW125SAG-4P60■ □	
	75	EW125SAG-4P75■ □	
	100	EW125SAG-4P100■ □	
	125	EW125SAG-4P125■ □	
	15	EW125RAG-4P15■ □	
	20	EW125RAG-4P20■ □	
	30	EW125RAG-4P30■ □	
	40	EW125RAG-4P40■ □	
	50	EW125RAG-4P50■ □	
	60	EW125RAG-4P60■ □	
	75	EW125RAG-4P75■ □	
	100	EW125RAG-4P100■ □	
	125	EW125RAG-4P125■ □	
160	125	EW160JAG-4P125■ □	Blank, X, E
	150	EW160JAG-4P150■ □	
	160	EW160JAG-4P160■ □	
	125	EW160SAG-4P125■ □	
	150	EW160SAG-4P150■ □	
	160	EW160SAG-4P160■ □	
	125	EW160RAG-4P125■ □	
	150	EW160RAG-4P150■ □	
	160	EW160RAG-4P160■ □	
250	175	EW250JAG-4P175■ □	Blank, X, E
	200	EW250JAG-4P200■ □	
	225	EW250JAG-4P225■ □	
	175	EW250SAG-4P175■ □	
	200	EW250SAG-4P200■ □	
	225	EW250SAG-4P225■ □	
	175	EW250RAG-4P175■ □	
	200	EW250RAG-4P200■ □	
	225	EW250RAG-4P225■ □	
400	250	EW400RAG-4P250■ □	Blank, X, E
	300	EW400RAG-4P300■ □	
	350	EW400RAG-4P350■ □	
	400	EW400RAG-4P400■ □	

Sensitive current	■
30mA	**B**
100/300/500/1000mA selectable	**J**

● H series, 4-pole IEC and CE marking conformed

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

Type number, Global series

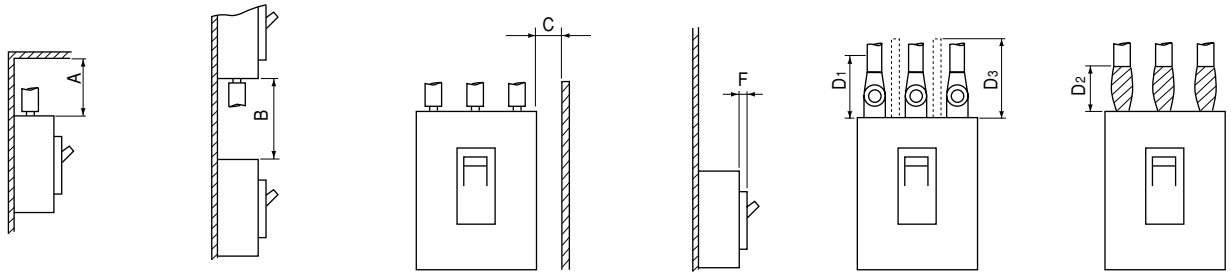
● 3-pole UL489 Listed

Breaker ampere frame	Rated current (A)	Type	□: Available mounting and connection
125	15	EW125JAGU-3P15■ □	Blank, SB, SF, S3
	20	EW125JAGU-3P20■ □	S4, S5, S6, S7, S8
	30	EW125JAGU-3P30■ □	
	40	EW125JAGU-3P40■ □	
	50	EW125JAGU-3P50■ □	
	60	EW125JAGU-3P60■ □	
	70	EW125JAGU-3P70■ □	
	75	EW125JAGU-3P75■ □	
	80	EW125JAGU-3P80■ □	
	90	EW125JAGU-3P90■ □	
	100	EW125JAGU-3P100■ □	
	125	EW125JAGU-3P125■ □	
	15	EW125RAGU-3P15■ □	
	20	EW125RAGU-3P20■ □	
	30	EW125RAGU-3P30■ □	
	40	EW125RAGU-3P40■ □	
	50	EW125RAGU-3P50■ □	
	60	EW125RAGU-3P60■ □	
	70	EW125RAGU-3P70■ □	
	75	EW125RAGU-3P75■ □	
	80	EW125RAGU-3P80■ □	
	90	EW125RAGU-3P90■ □	
	100	EW125RAGU-3P100■ □	
	125	EW125RAGU-3P125■ □	
250	125	EW250JAGU-3P125■ □	Blank, SB, SF, S3
	150	EW250JAGU-3P150■ □	S4, S5, S6, S7, S8
	160	EW250JAGU-3P160■ □	
	175	EW250JAGU-3P175■ □	
	200	EW250JAGU-3P200■ □	
	225	EW250JAGU-3P225■ □	
	250	EW250JAGU-3P250■ □	
	125	EW250RAGU-3P125■ □	
	150	EW250RAGU-3P150■ □	
	160	EW250RAGU-3P160■ □	
	175	EW250RAGU-3P175■ □	
	200	EW250RAGU-3P200■ □	
	225	EW250RAGU-3P225■ □	
	250	EW250RAGU-3P250■ □	
400	250	EW400SAGU-3P250■ □	Blank, SB, S7, S8
	300	EW400SAGU-3P300■ □	
	350	EW400SAGU-3P350■ □	
	400	EW400SAGU-3P400■ □	
	250	EW400RAGU-3P250■ □	
	300	EW400RAGU-3P300■ □	
	350	EW400RAGU-3P350■ □	
	400	EW400RAGU-3P400■ □	
	250	EW400HAGU-3P250■ □	
	300	EW400HAGU-3P300■ □	
	350	EW400HAGU-3P350■ □	
	400	EW400HAGU-3P400■ □	

Sensitive current	■
30mA	**B**
100/200/500/1000mA selectable	**K**

G-TWIN series
Arc space

Arc space, mm

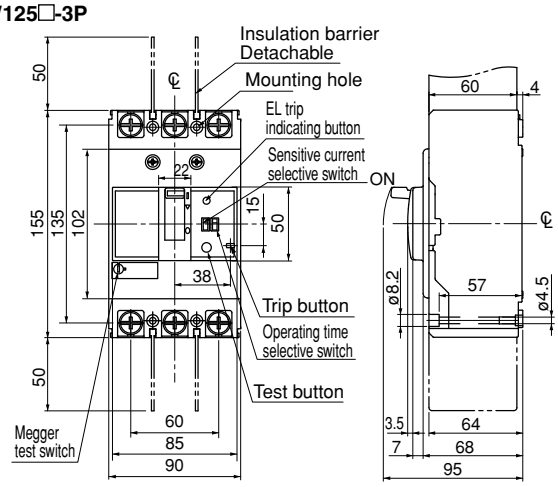


Frame size	ELCB basic type	Ceiling distance A		Vertical distance B		Side plate distance C		Front plate distance Painted F		Front plate distance No painted F		Taping Crimp type terminal lug	Taping Bus-bar	Barrier
		440V	230V	440V	230V	440V	230V	440V	230V	440V	230V	D1	D2	D3
125A	EW125J	40	40	50	50	25	20	0	0	10	5	Exposed live part dimension +20	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	5	0	20	10		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	5	0	20	10		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

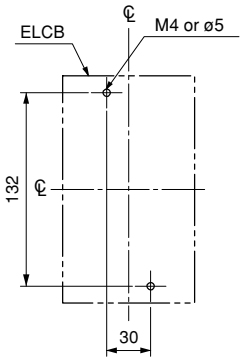
■ Dimensions, mm

● Front mounting, front connection

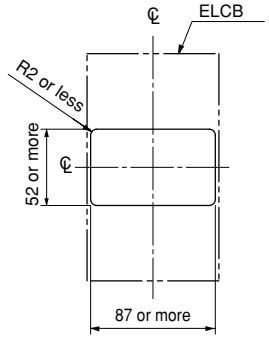
EW125□-3P



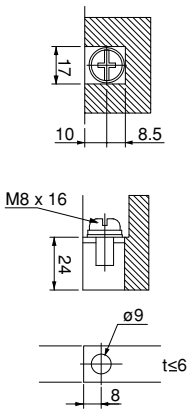
Panel drilling



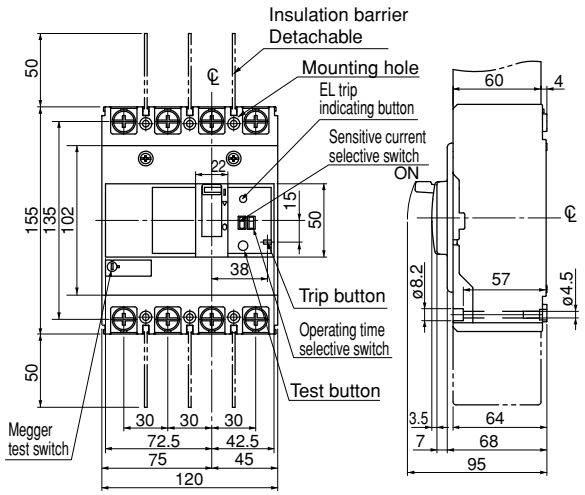
Front panel cutting



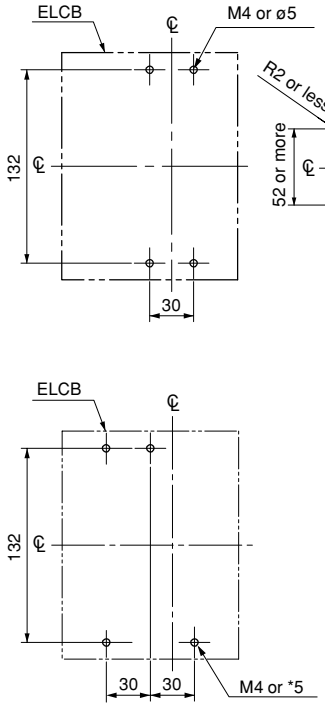
Terminal section



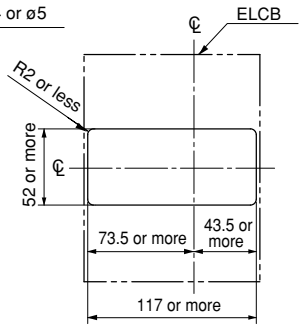
EW125□-4P



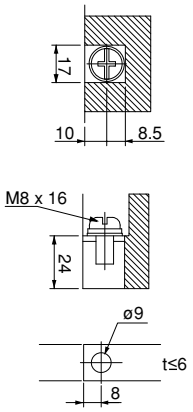
Panel drilling



Front panel cutting



Terminal section



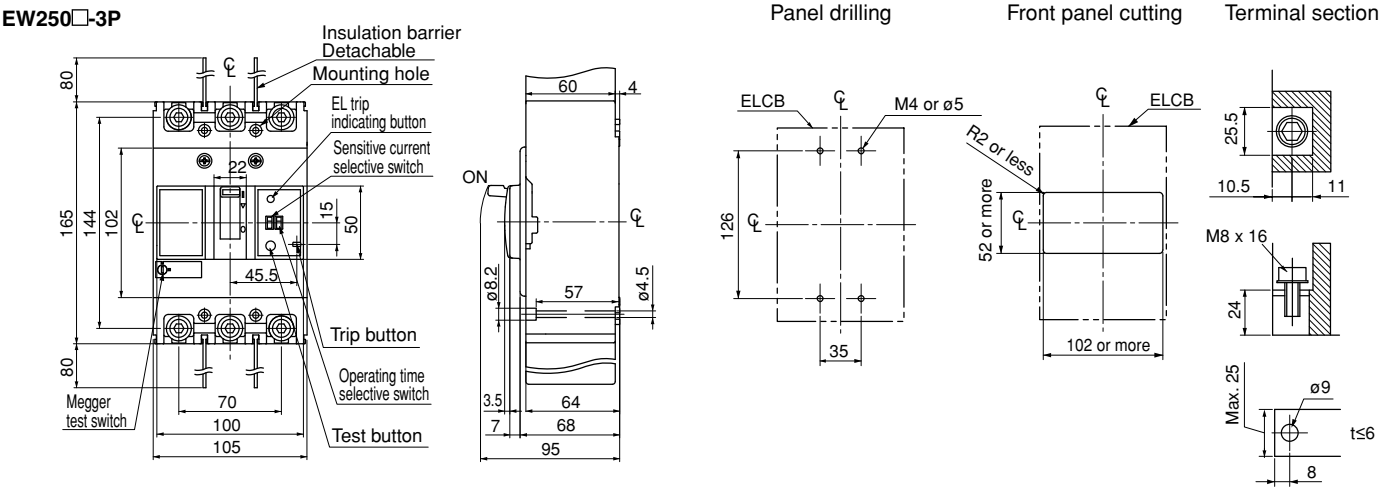
For N, V type handle

G-TWIN series
Dimensions

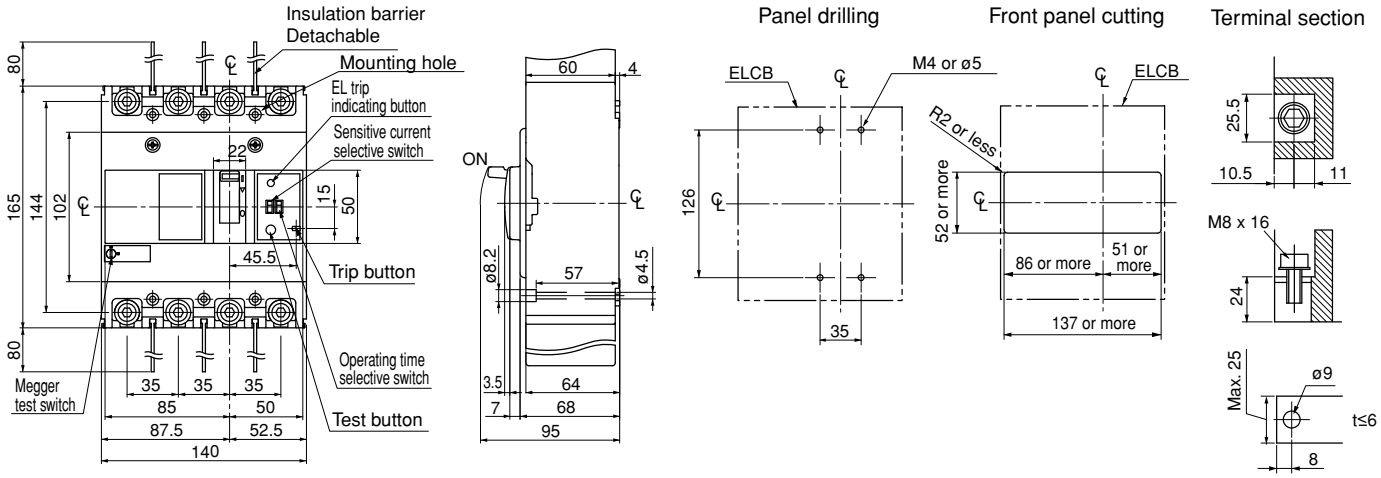
■ Dimensions, mm

● Front mounting, front connection

EW160□-3P
EW250□-3P



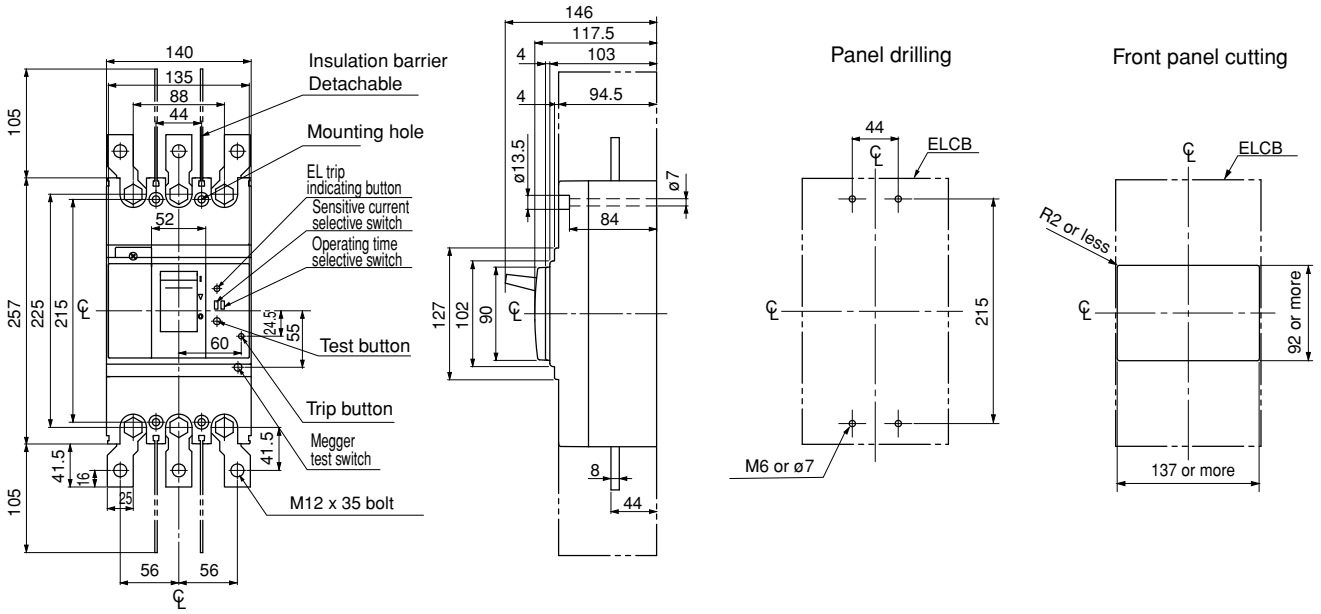
EW160□-4P
EW250□-4P



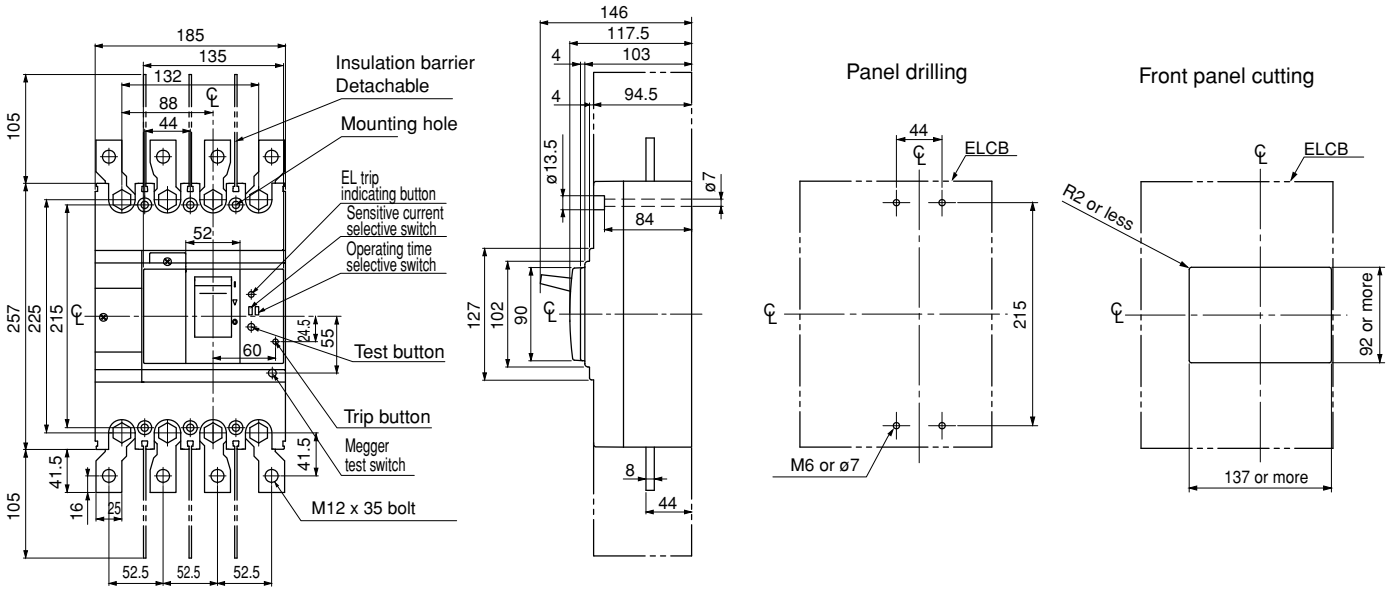
Dimensions, mm

● Front mounting, front connection

EW400□-3P



EW400□-4P

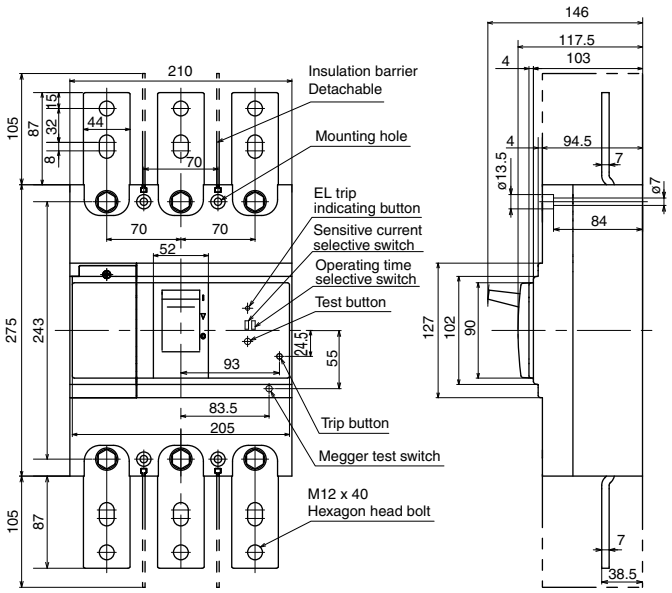


G-TWIN series
Dimensions

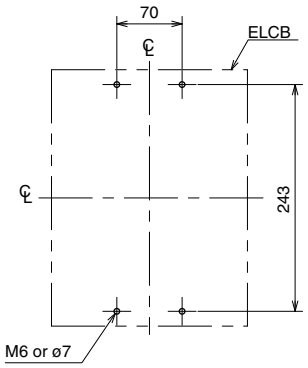
Dimensions, mm

● Front mounting, front connection

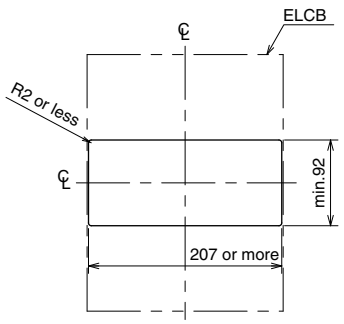
EW630□-3P



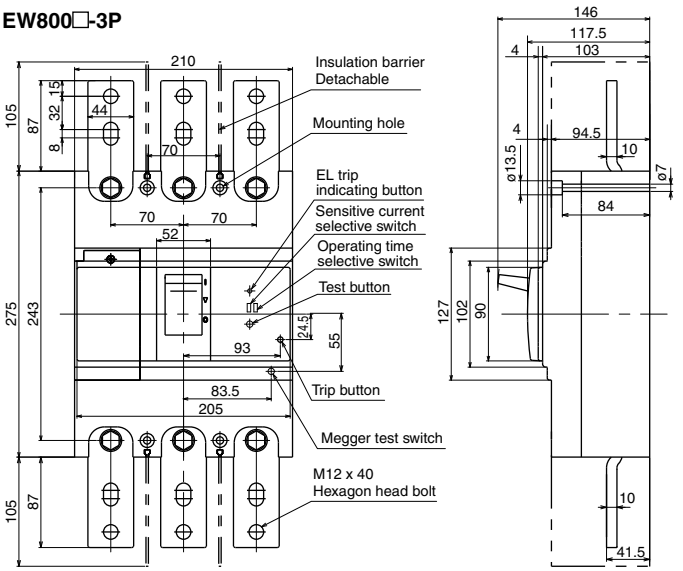
Panel drilling



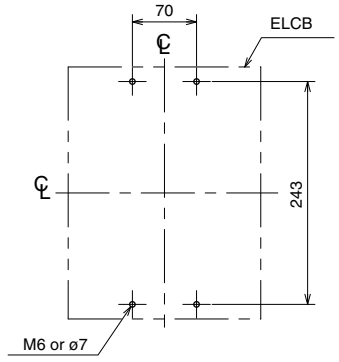
Front panel cutting



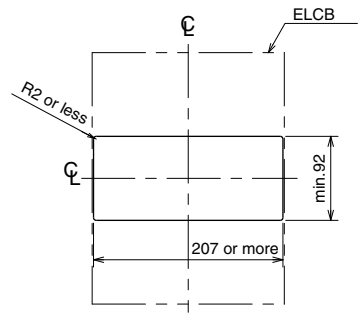
EW800□-3P



Panel drilling



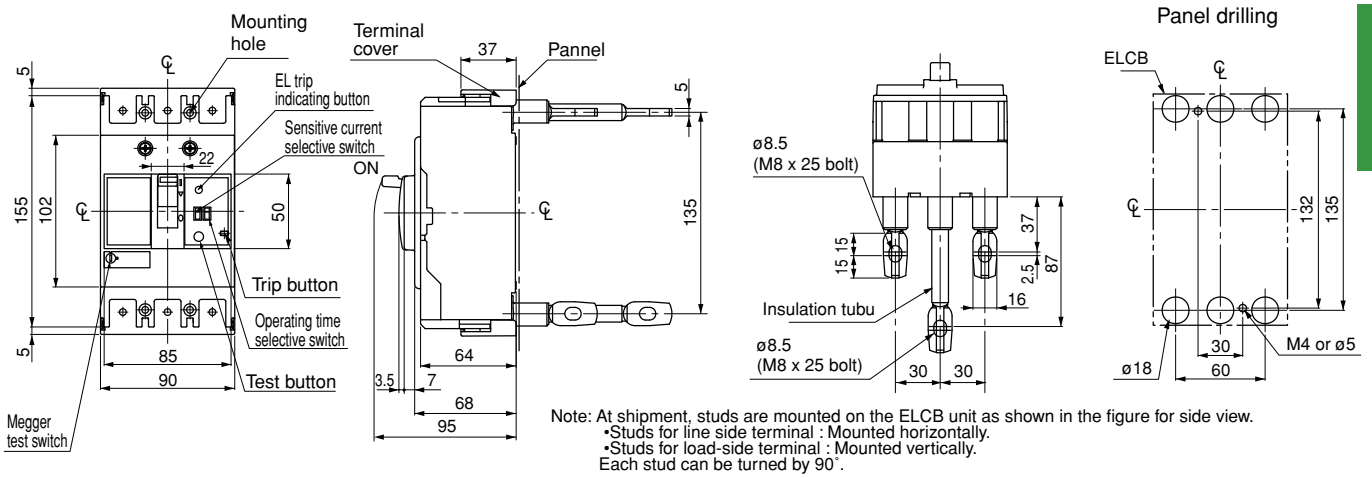
Front panel cutting



Dimensions, mm

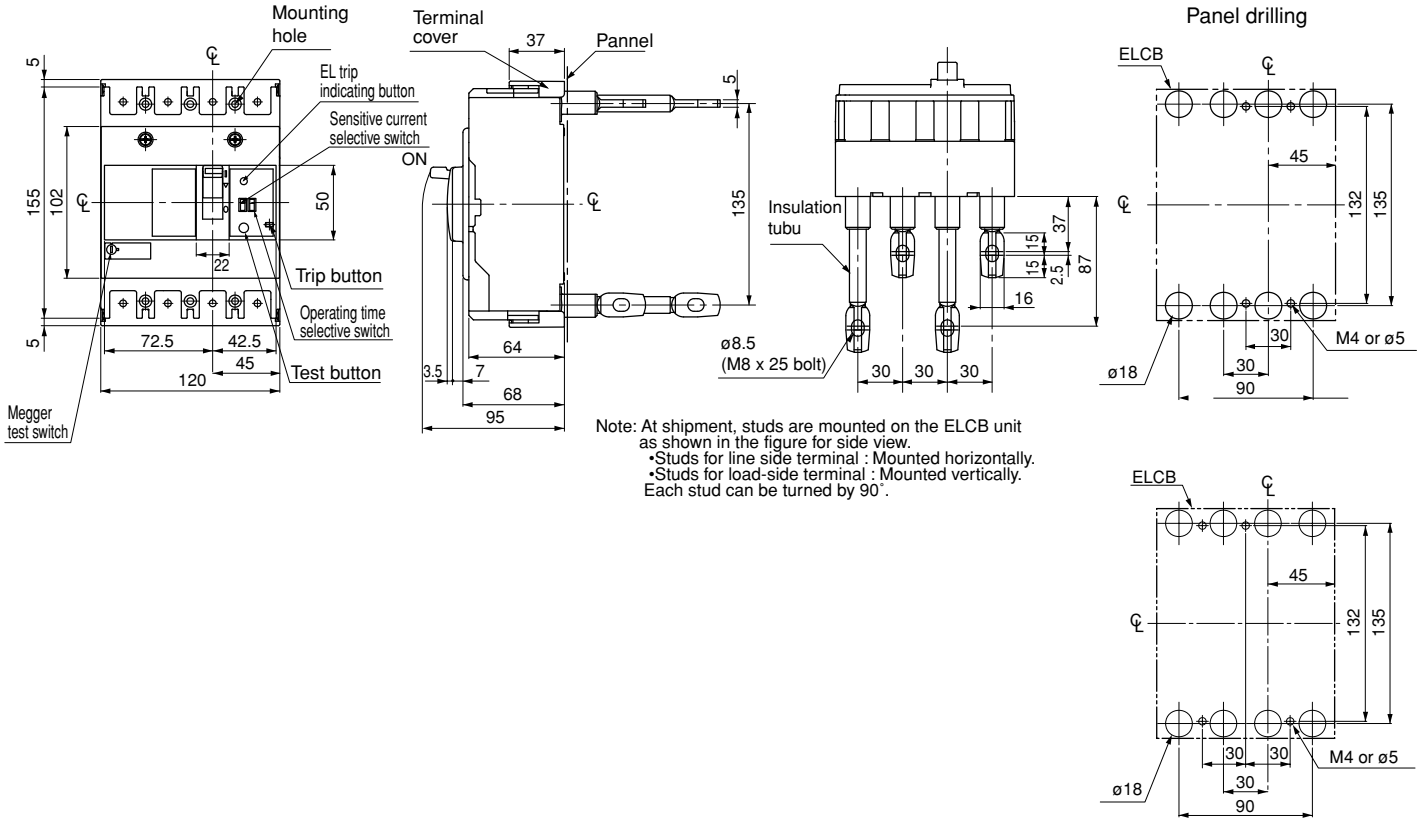
Front mounting, rear connection (X)

EW125□-3P



Note: At shipment, 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.
Each stud can be turned by 90˚.

EW125□-4P



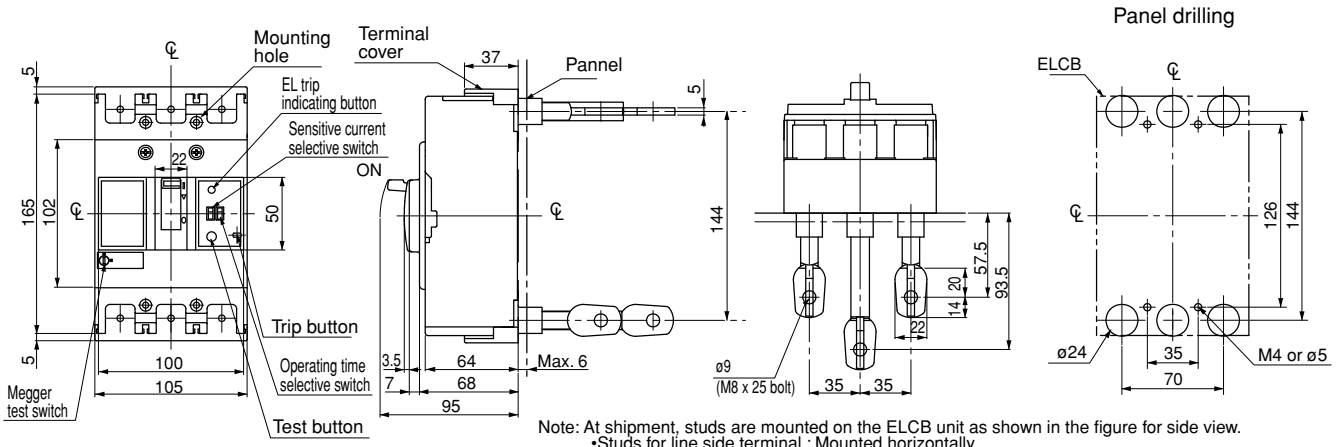
Note: At shipment, studs are mounted on the ELCB unit as shown in the figure for side view.
•Studs for line side terminal : Mounted horizontally.
•Studs for load-side terminal : Mounted vertically.
Each stud can be turned by 90˚.

For V, N type handle

Dimensions, mm

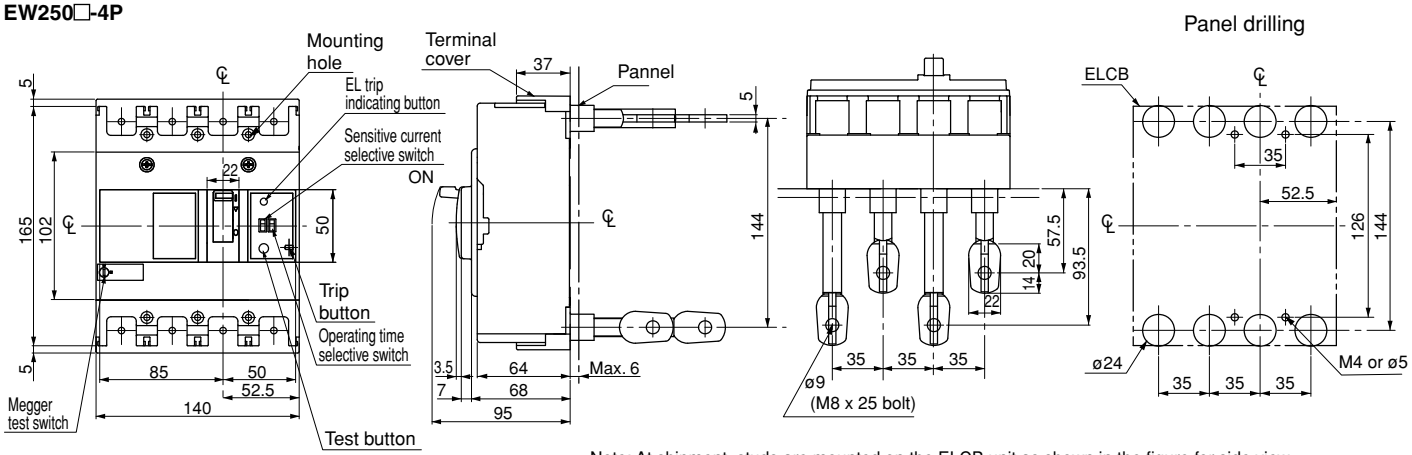
● Front mounting, rear connection (X)

EW160□-3P
EW250□-3P



Note: At shipment, 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.
Each stud can be turned by 90˚.

EW160□-4P
EW250□-4P

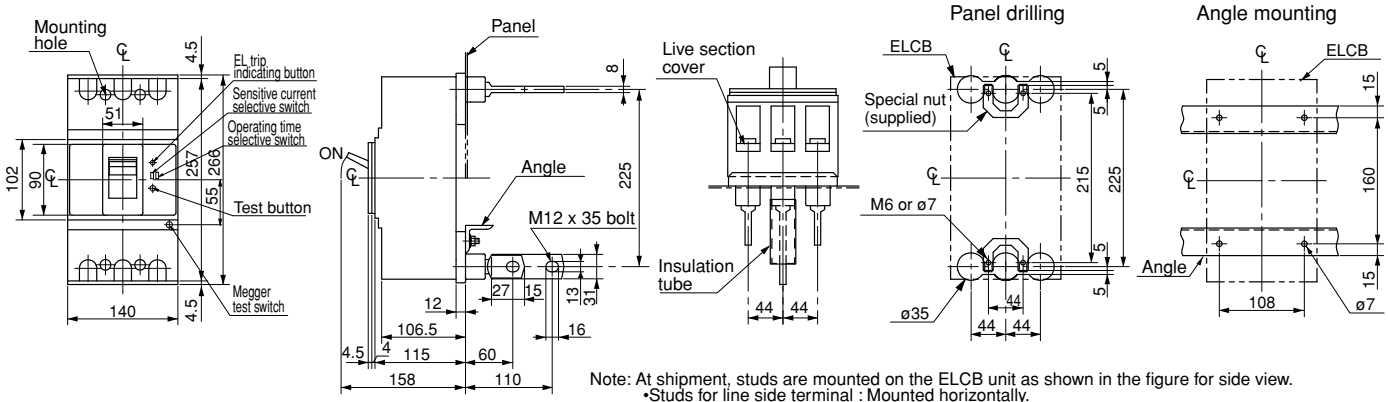


Note: At shipment, studs are mounted on the ELCB unit as shown in the figure for side view.
•Studs for line side terminal : Mounted horizontally.
•Studs for load-side terminal : Mounted vertically.
Each stud can be turned by 90˚.

Dimensions, mm

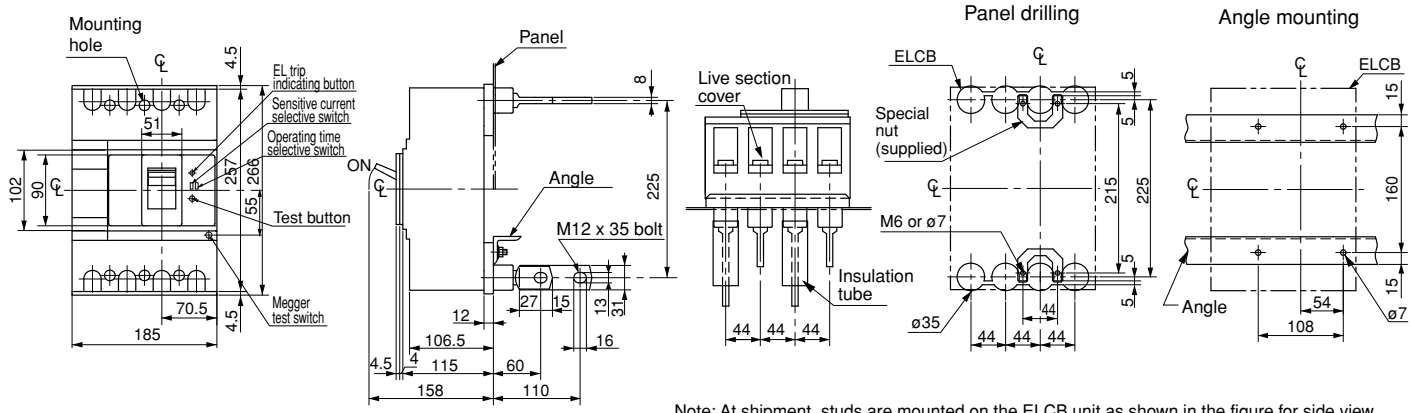
● Front mounting, rear connection (X)

EW400□-3P



Note: At shipment, 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.
Each stud can be turned by 90˚.

EW400□-4P



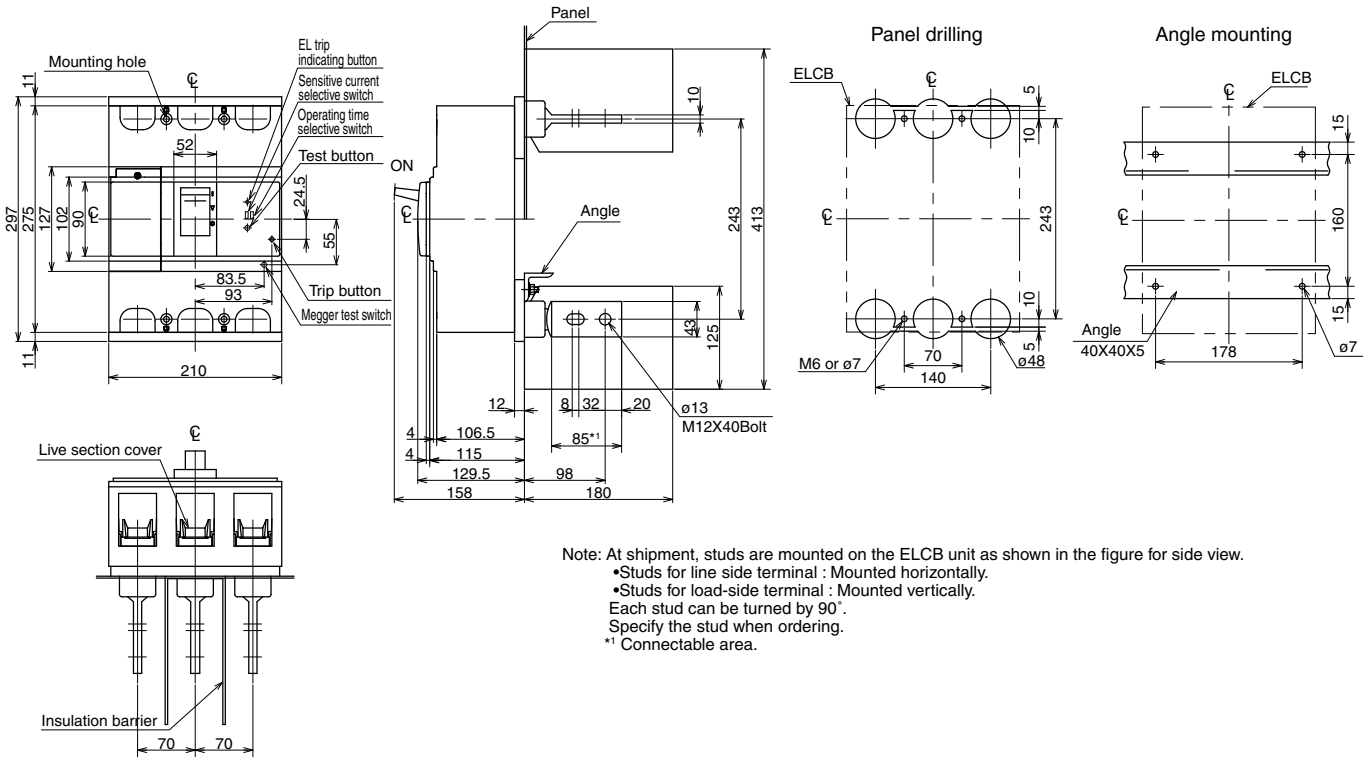
Note: At shipment, studs are mounted on the ELCB unit as shown in the figure for side view.
•Studs for line side terminal : Mounted horizontally.
•Studs for load-side terminal : Mounted vertically.
Each stud can be turned by 90˚.

G-TWIN series
Dimensions

Dimensions, mm

● Front mounting, rear connection (X)

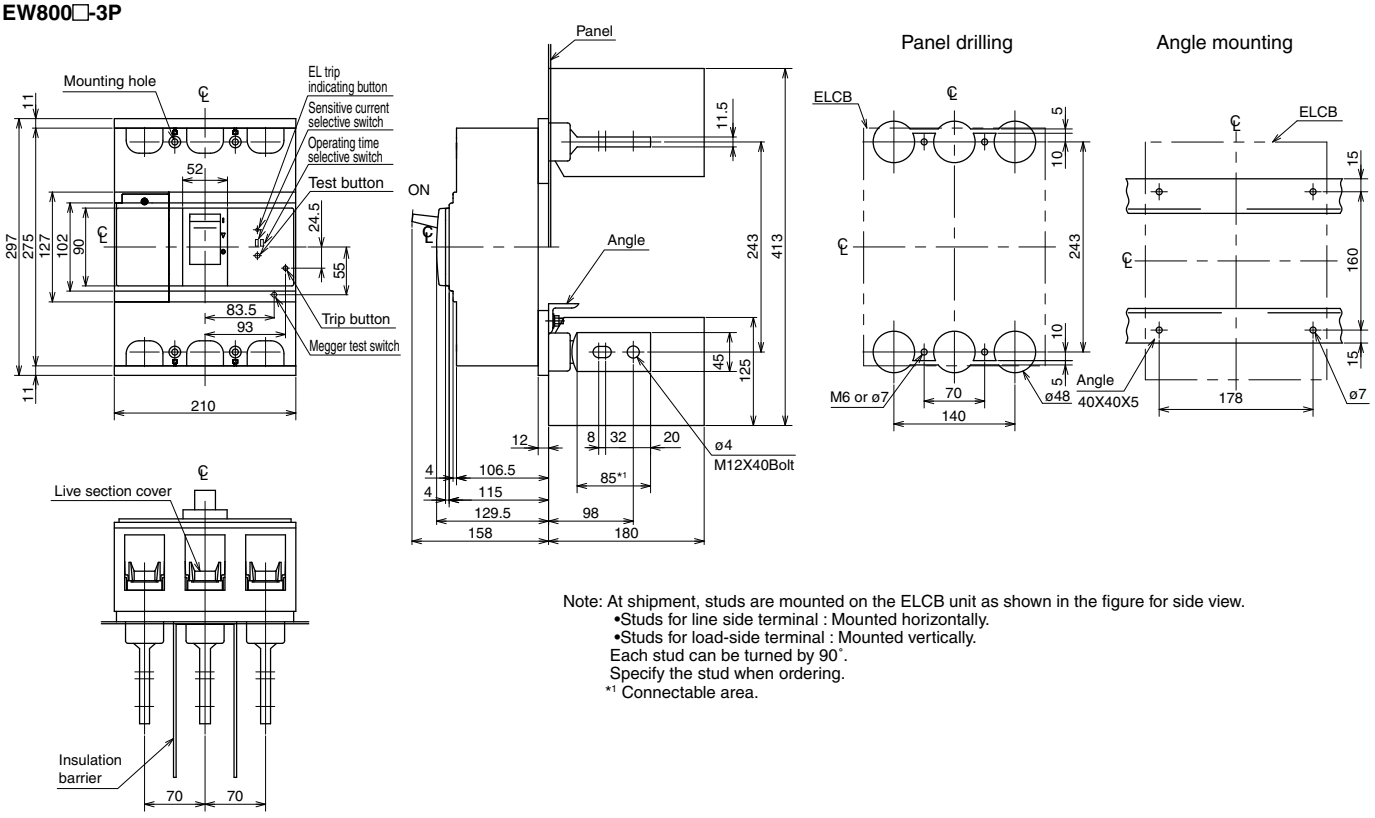
EW630□-3P



Note: At shipment, 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.

Each stud can be turned by 90˚.
Specify the stud when ordering.
*1 Connectable area.

EW800□-3P



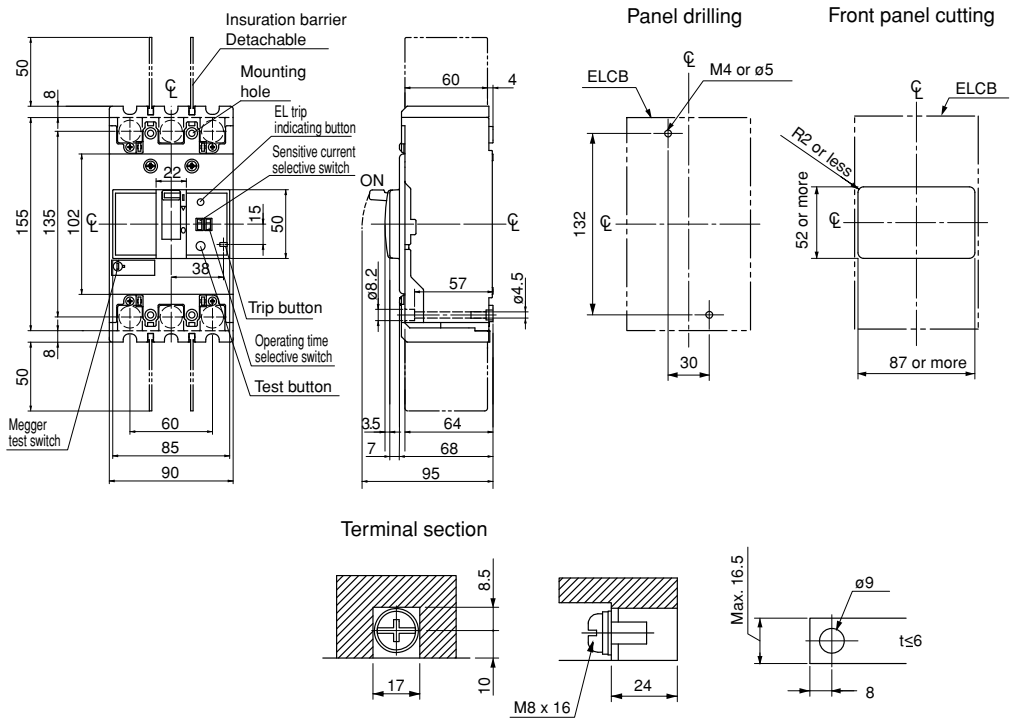
Note: At shipment, studs are mounted on the ELCB unit as shown in the figure for side view.
- •Studs for line side terminal : Mounted horizontally.
- •Studs for load-side terminal : Mounted vertically.

Each stud can be turned by 90˚.
Specify the stud when ordering.
*1 Connectable area.

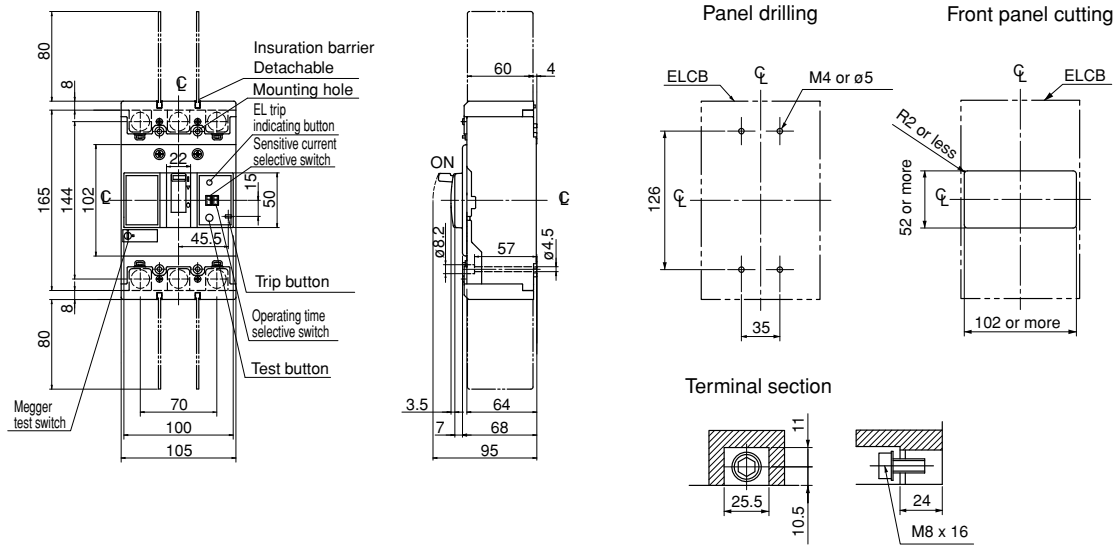
Dimensions, mm

Front mounting, front connection

EW125□U-3P



EW160□U-3P
EW250□U-3P

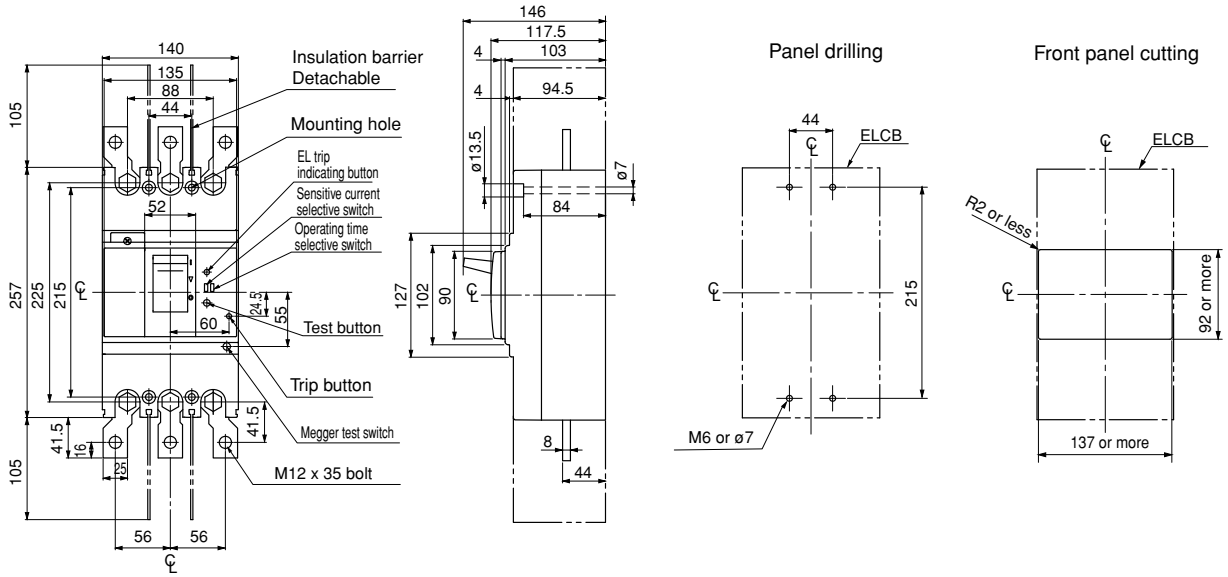


G-TWIN series
Dimensions

Dimensions, mm

● Front mounting, front connection

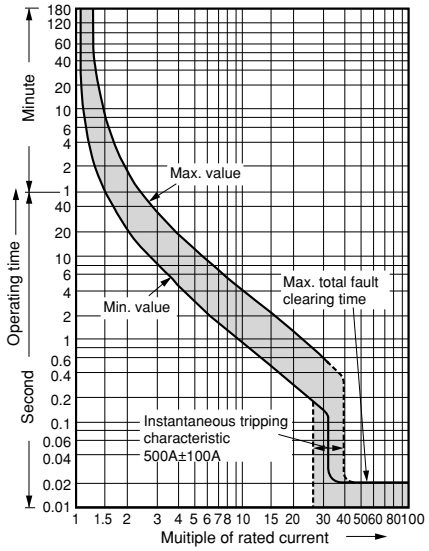
EW400□U-3P



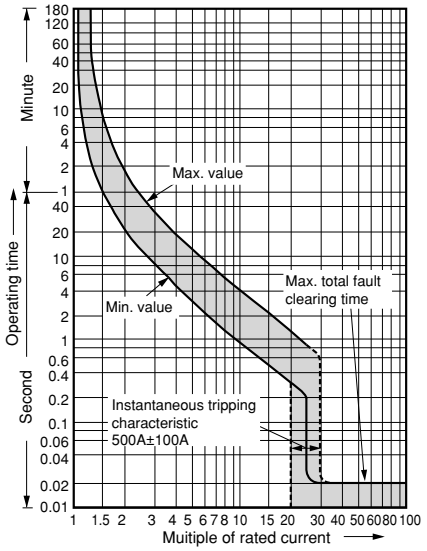
Characteristic curves

EW125

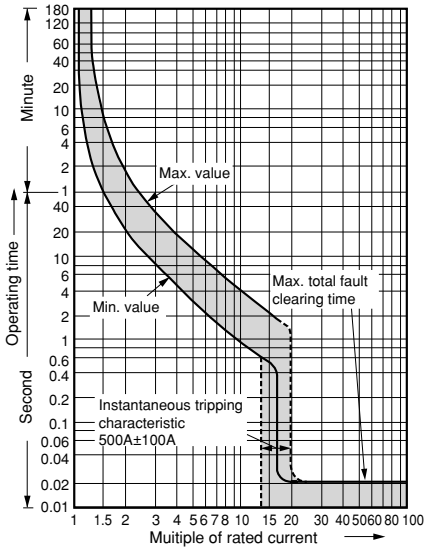
• 15A



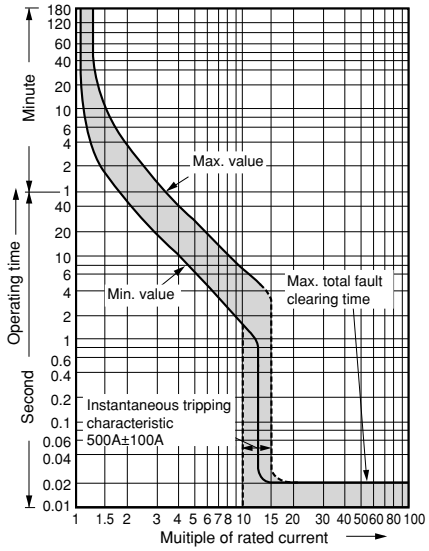
• 20A



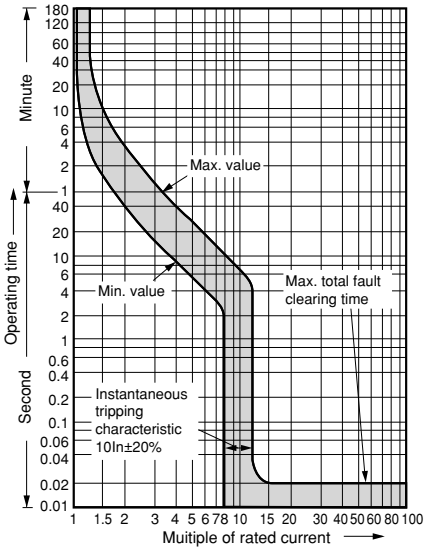
• 30A



• 40A

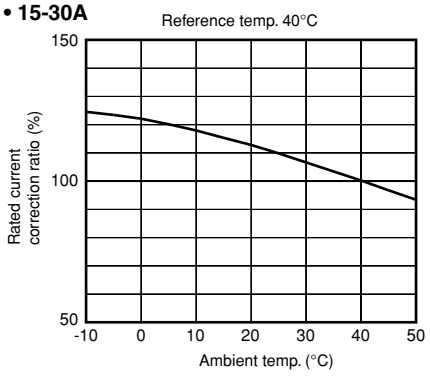


• 50-125A

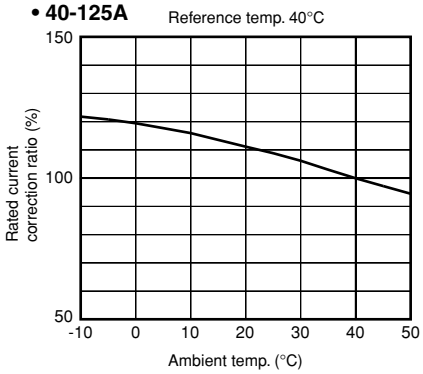


Temperature correction curve

• 15-30A



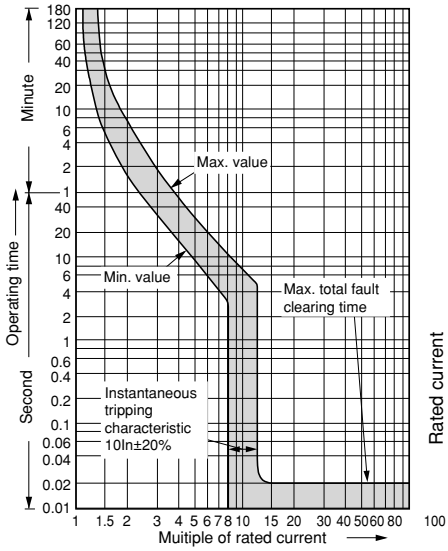
• 40-125A



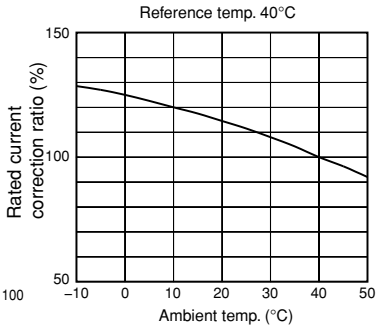
G-TWIN series
Characteristic curves

Characteristic curves

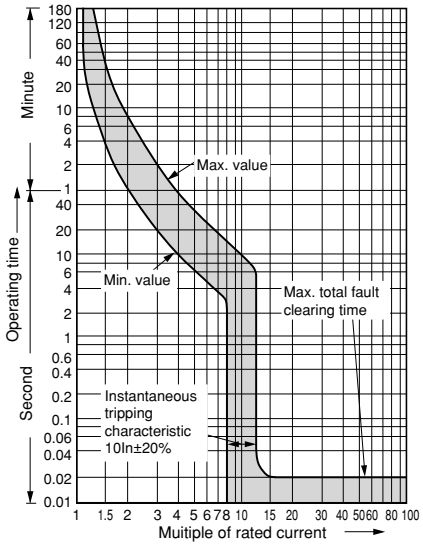
EW160, 250



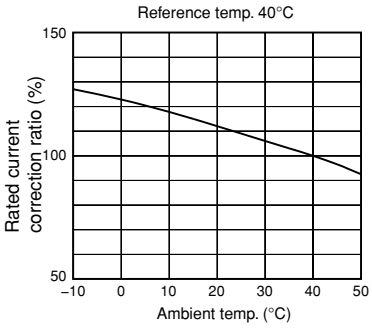
Temperature correction curve



EW400

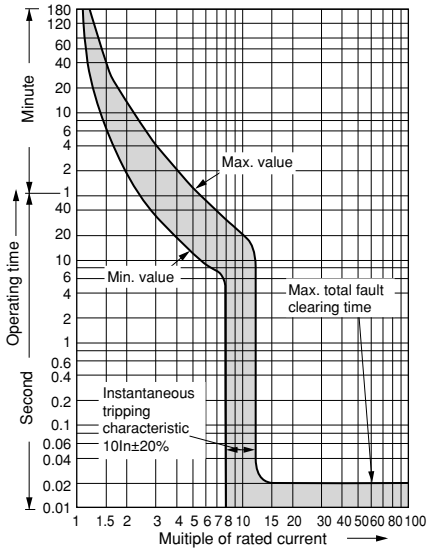


Temperature correction curve

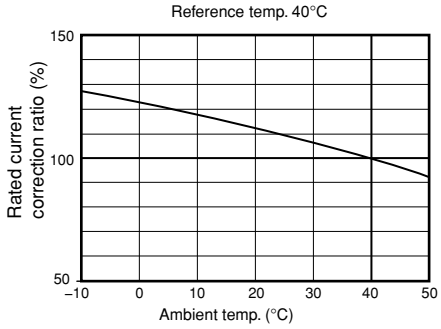


Characteristic curves

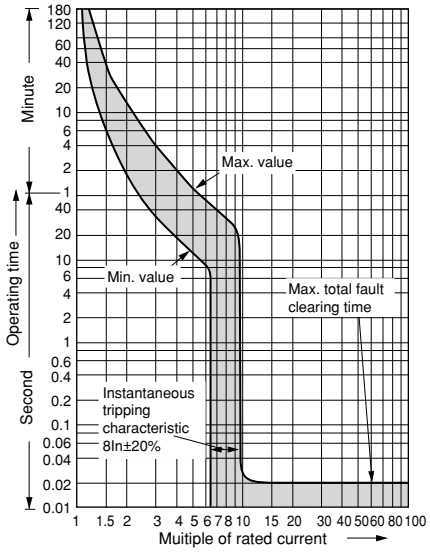
EW630



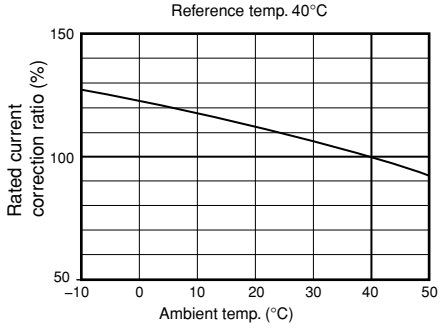
Temperature correction curve



EW800

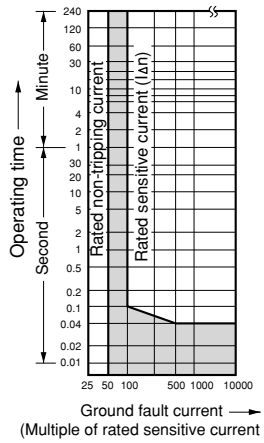


Temperature correction curve



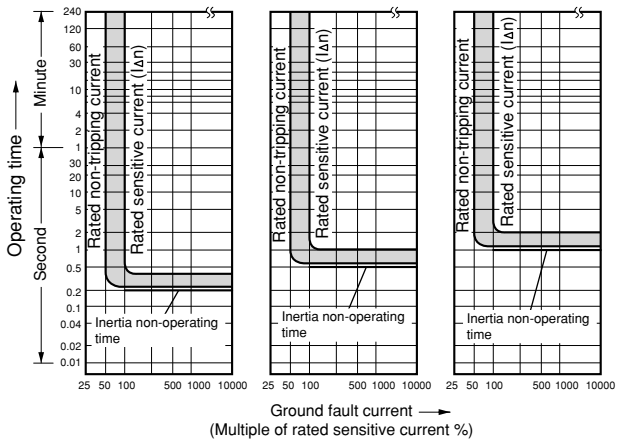
• **Earth leakage tripping** (EW125,160, 250, 400, 630, 800)

Instantaneous trip type



Time-delay trip type

Max. operating time: 0.4s Max. operating time: 1s Max. operating time: 2s



Variation of internal accessory

• 125 to 250AF

Auxiliary switch (Type W)

This switch is used for indicator lamp or control circuit.
See page 101.

Alarm switch (Type K)

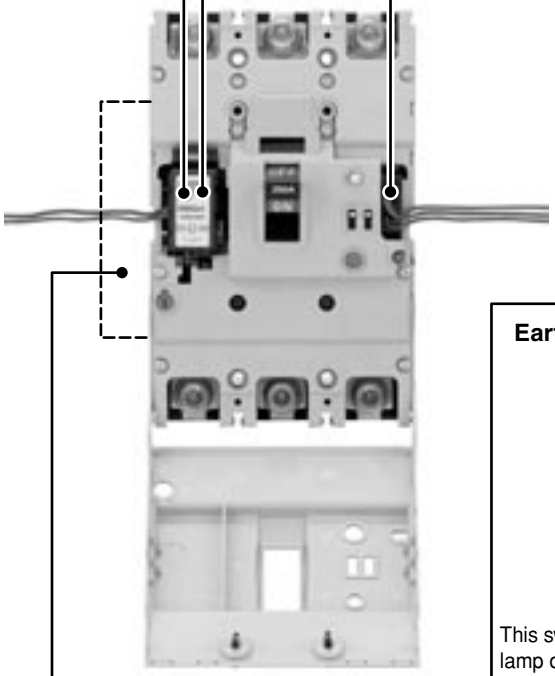
This switch can be connected to a warning lamp or buzzer to indicate when the breaker has been tripped.
See page 101.

Shunt trip device (Type F)

The purpose of this accessory is to trip the breaker from a distance.
See page 102.

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 102.



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 101.

Terminal block (Type A)

A wiring terminal for internal accessories (Factory-mounted)
See page 99.

Variation of internal accessory
• 400AF

Alarm switch (Type K)

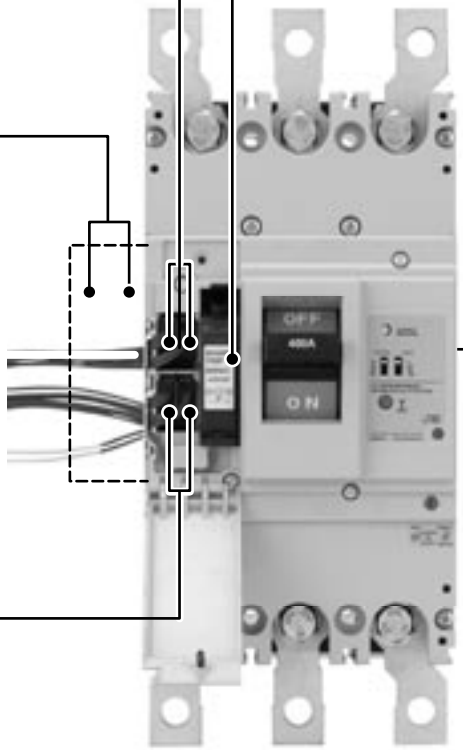
This switch can be connected to a warning lamp or buzzer to indicate when the breaker has been tripped.
See page 101.

Shunt trip device (Type F)

The purpose of this accessory is to trip the breaker from a distance.
See page 102.

Terminal block (Type A)

A wiring terminal for internal accessories (Factory-mounted)
See page 99.



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 102.

Auxiliary switch (Type W)

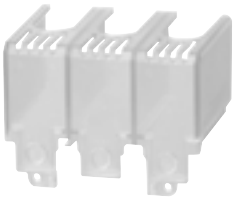
This switch is used for indicator lamp or control circuit.
See page 101.

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 101. (Factory-mounted)

Variation of external accessory

Terminal cover
Long type
See page 112.

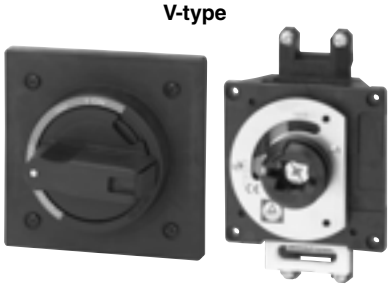


Interphase barrier
See page 113.

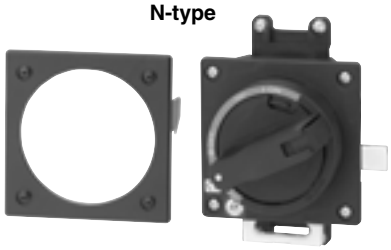
Terminal cover
Short type
See page 112.

External operating handles
See page 105.

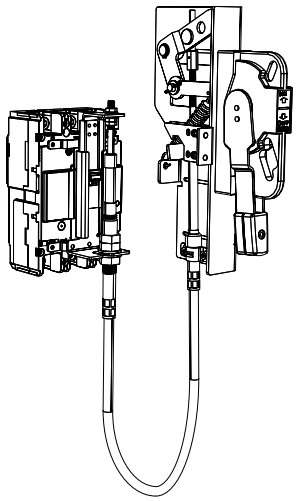
V-type



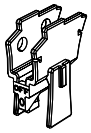
N-type



F-type



Handle locking cover
See page 113.



Padlocking device
See page 113.

Cap type (Q1)

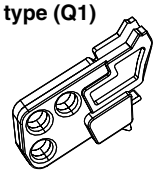
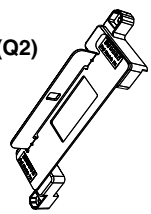


Plate type (Q2)



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 100.*

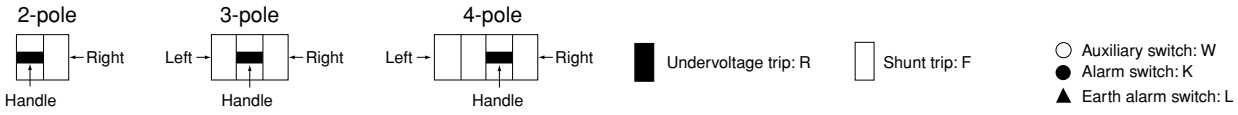
With terminal block

• Terminal number of internal accessory

Accessory		125 – 250AF		400 – 800AF
		Left side mounting	Right side mounting	Left side mounting
Auxiliary switch Accessory	SPDT: W (1)*	11 12 14 AXcL AXbL AXaL	21 22 24 AXcR AXbR AXaR	11 12 14 AXc AXb AXa
Auxiliary switch	2PDT: V (2)*	11 12 14 AXcL AXbL AXaL	21 22 24 AXcR AXbR AXaR	11 12 14 AXc AXb AXa 21 22 24 AXc AXb AXa
Alarm switch	SPDT: K (8)*	91 92 94 ALcL ALbL ALaL	01 02 04 ALcR ALbR ALaR	91 92 94 ALc ALb ALa
Alarm switch	2PDT: J (9)*	91 92 94 ALcL ALbL ALaL	01 02 04 ALcR ALbR ALaR	91 92 94 ALc ALb ALa 01 02 04 ALc ALb ALa
Shunt trip device : F	With 1NO contact to prevent coil burn-out	C2 C1 S2 S1		
Shunt trip device : F	Continuous rating			C2 C1 S2 S1
Undervoltage trip device : R		U< D2 D1 P2 P1		

Note: * ( ) Code of Low level circuit

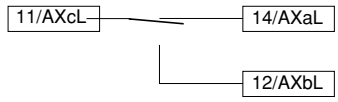
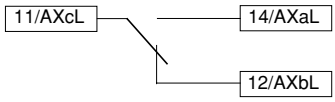
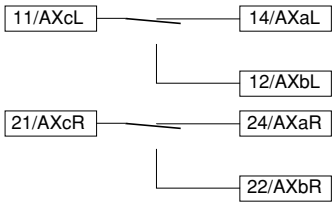
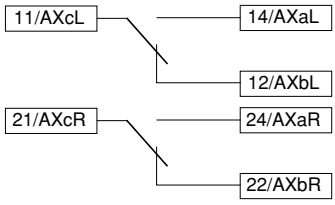
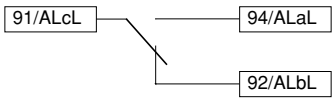
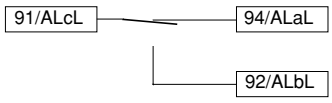
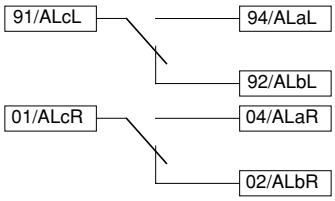
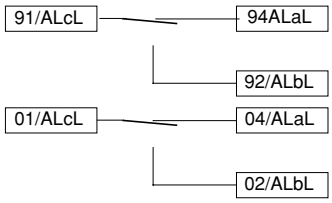
Available configurations



ELCB	**EW125 EW160 EW250**		**EW400 EW630 EW800**
Pole	3	4	3, 4
Auxliary switch SPDT: W (1)*			
Alarm switch SPDT: K (8)*			
Shunt trip: F			
Undervoltage trip: R			
W+K (1+8)			
Auxliary 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)		*1	
W+K+R (1+8+R)		*1	
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)			
Earth alarm switch SPDT: L *2			

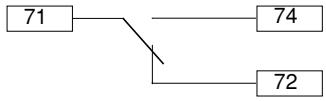
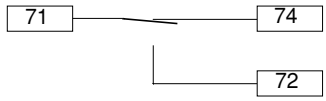
Notes: •The above table is applied to front mounting type, rear mounting type, flush mounting type, and plug-in mounting type.
• Terminal block is attached on the same side of the accessory.
• ( ) Code of low level circuit
*1 Configurations with terminal block are not available.
*2 Earth alarm switch can be mounted regardless of the combination of other accessories.

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)

• Standard type

Applicable breaker type **ELCB**	Rated thermal current (A)	Make/break current (A)						Minimum load current
		AC			DC			
		Voltage (V)	Res. load	Ind. load	Voltage (V)	Res. load	Ind. load	
EW125 **EW160** **EW250** **EW400** **EW630** **EW800**	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

Applicable breaker type **ELCB**	Rated thermal current (A)	Make/break current (A)				Minimum load current
		AC		DC		
		Voltage (V)	Res. load	Voltage (V)	Res. load	
EW125 **EW160** **EW250** **EW400** **EW630** **EW800**	0.1	30	0.1	30	0.1	5V DC 1mA

Rating of shunt trip (F)

ELCB type	AC		DC		Time rating of coil	Opearting time (ms)
	V	VA	V	W		
EW125	24	50	24	50	Continuous (With 1NO contact to prevent coil burn-out)	13-21
EW160	48	50	48	50		
EW250	100-120	50	100-110	50		
	120-130	50	–	–		
	200-240	50	200-220	50		
	277	50	–	–		
	380-440	50	–	–		
	440-480	50	–	–		
	500-550	50	–	–		
EW400	24-48	2	24-48	2	Continuous	8-20
EW630	100-240	3	100-220	3		
EW800	277	3		–		
	380-550	4		–		

Note: Allowable voltage function AC voltage: 85% to 110% of coil rated voltage
DC voltage: 75% to 125% of coil rated voltage

Rating of undervoltage trip (R)

ELCB type	AC		DC		Code
	V	VA	V	W	
EW125 *1	–	–	24	5	RR
EW160 *1	–	–	48	5	RS
EW250 *1	–	–	100-110	5	RL
	–	–	125	5	R5
	100-110	5	–	–	RA
	110-130	5	–	–	RT
	200-240	5	–	–	RK
	277	5	–	–	RB
	380-415	5	–	–	RP
	440-480	5	–	–	RH
EW400 *2	24	2	24	2	RR
EW630 *2	48	2	48	2	RS
EW800 *2	100-110	3	100-110	3	RA
	120-130	3	125	3	R1
	200-240	3	200-220	3	RK
	277	3	–	–	RB
	380-480	4	–	–	RP

Note: Allowable voltage function AC voltage: 85% to 110% of coil rated voltage
DC voltage: 75% to 125% of coil 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.

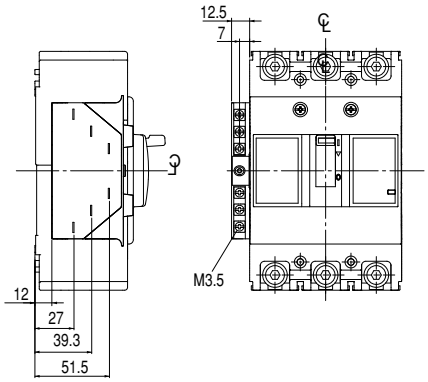
*2 Reset-prohibited type: When the R coil is not energized, reset operation cannot reset the tripped breaker to the OFF state.

Lead wire specification

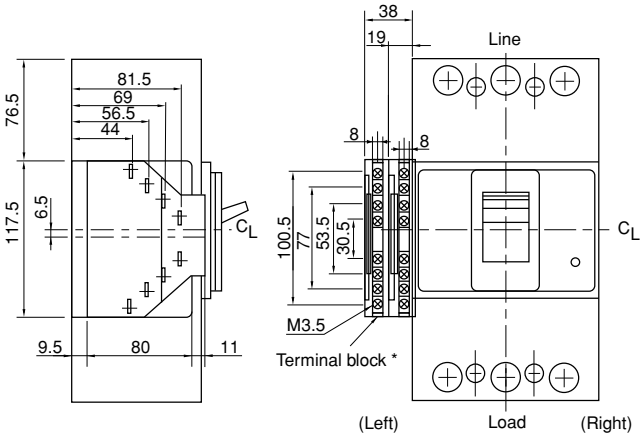
Wire size: 0.5mm^2 (AWG20)
Wire length: 500mm

Terminal blocks

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 100 for information on the accessory mounting position.
• Available wire: Solid wire: 1.6ø Stranded wire: 2mm^2
• For the earth alarm switch (L), only the lead wire system is available.
• Terminal blocks are available as factory mounted only.

■ Type number

Internal accessories (Sold separately)

• 125, 160, 250AF

Accessory	Type			Operating voltge
	Lead wire system		Terminal block system *	
	Left side	Right side		
Auxiliary switch	BW9W1SG0	BW9W1SG0-R	–	–
Auxiliary switch (low level circuit)	BW9W1DG0	BW9W1DG0-R		
Alarm switch	BW9K1SG0	BW9K1SG0-R		
Alarm switch (low level circuit)	BW9K1DG0	BW9K1DG0-R		
Auxiliary switch + Alarm switch	BW9WKSG0	BW9WK1SG0-R		
Auxiliary switch + Alarm switch (low level circuit)	BW9WKDG0	BW9WK1DG0-R		
Earth alarm switch	–	BW9L1SG0		
Shunt trip device	BW9FRG0	BW9FRG0		24V AC/DC
	BW9FSG0	BW9FSG0		48V AC/DC
	BW9FAG0	BW9FAG0		100-120V AC/100-110V DC
	BW9F1G0	BW9F1G0		120-130V AC
	BW9FKG0	BW9FKG0		200-240V AC/200-220V DC
	BW9FBG0	BW9FBG0		277V AC
	BW9FPG0	BW9FPG0		380-440V AC
	BW9FHG0	BW9FHG0		440-480V AC
	BW9FJG0	BW9FJG0		500-550V AC
Undervoltage trip devics	BW9RGAR	–		24V DC
	BW9RGAS			48V DC
	BW9RGAL			100-110V DC
	BW9RGA5			125V DC
	BW9RGAA			100-110V AC
	BW9RGAT			110-130V AC
	BW9RGAK			200-240V AC
	BW9RGAB			277V AC
	BW9RGAP			380-415V AC
	BW9RGAH			440-480V AC

Note: * Factory-mounted

• 400, 630, 800AF

Accessory	Type		Operating voltge
	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 devics	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

External operating handles

Description

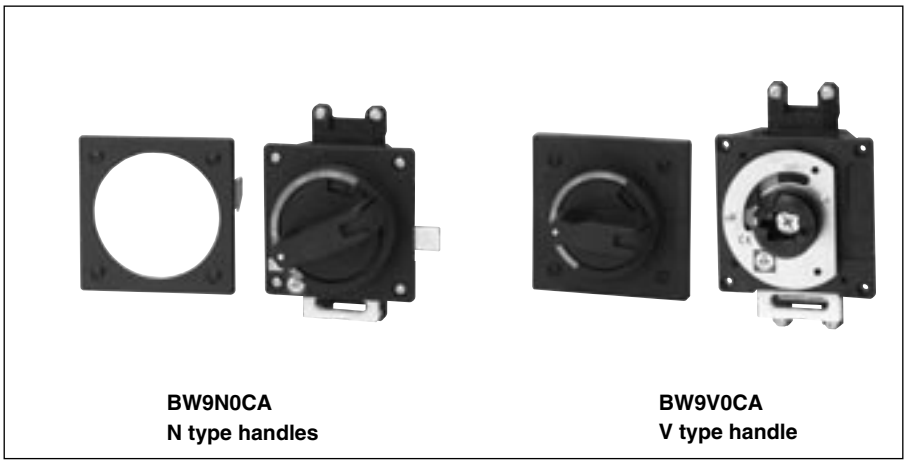
Molded case circuit breaker handles are generally directly manual-operated but when mounted in motor control centers or on control panels they are sometimes required to be operated externally. To meet such applications FUJI offers the following three types of handles.

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 up 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.

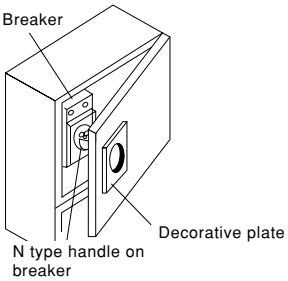
Conformed to UL489 (File No.E93289)

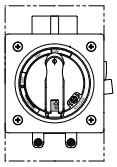


BW9N0CA
N type handles

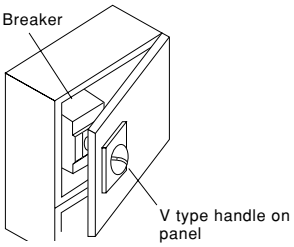
BW9V0CA
V type handle

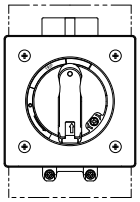
N type handles



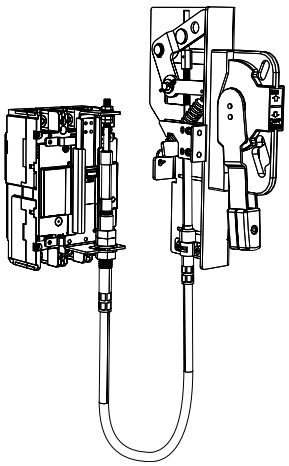


V type handles





F type handles



External accessories

N type handles

ELCB	N type handle
EW125	**BW9N0CA**
EW160 EW250	**BW9N0GA**
EW400	**BW9N0HA**
EW630 EW800	**BW9N0JA**

V type handles

ELCB	V type handle
EW125	**BW9V0CA**
EW160 EW250	**BW9V0GA**
EW400	**BW9V0HA**
EW630 EW800	**BW9V0JA**

F type handles

ELCB	F type handle
EW125	**BW9F0CA**
EW250	**BW9F0GA**
EW400	**BW9F0HA**

■ Type number nomenclature

• N type handle

BW9N0 □ A – □

- **Mounting** (For BW9N0HA, BW9N0JA)
  - Blank: Front mounting, front connection
  - X: Front mounting, rear connection
  - P: Plug-in mounting
- **Breaker type**
  - C: EW125
  - G: EW160, EW250
  - H: EW400
  - J: EW630, EW800
- **Basic type**

• V type handle

BW9V0 □ A – □

- **Mounting** (For BW9V0HA, BW9V0JA)
  - Blank: Front mounting, front connection
  - X: Front mounting, rear connection
  - P: Plug-in mounting
- **Breaker type**
  - C: EW125
  - G: EW160, EW250
  - H: EW400
  - J: EW630, EW800
- **Basic type**

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

• F type handle

BW9F0 □ A

- **Breaker type**
  - C: EW125□U
  - G: EW250□U
  - H: EW400□U
- **Basic type**

Cable (For F type)

BW9FW □ A – □ A

- **Cable length**
  - 15: 1.5m
  - 20: 2.0m
  - 30: 3.0m
- **Breaker type**
  - C: EW125□U
  - G: EW250□U
  - H: EW400□U
- **Basic type**

Terminal cover (For F type)

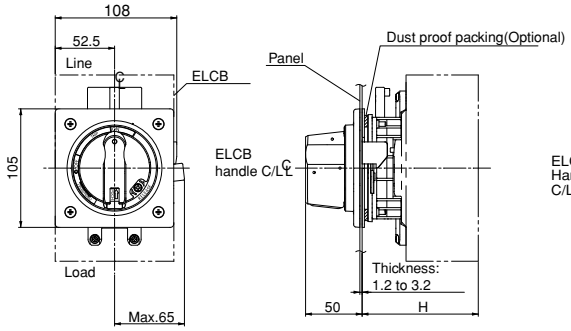
BW9FBT □ A – L3

- **Breaker type**
  - C: EW125□U
  - G: EW250□U
  - H: EW400□U
- **Basic type**

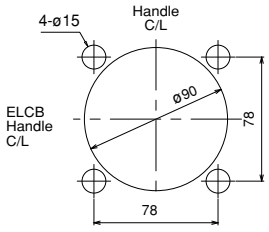
Dimensions, mm

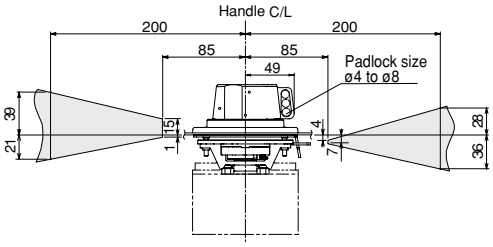
N type handle

• BW9N0CA, BW9N0GA (BZ-NP-1C: dust proof packing, optional)



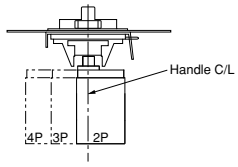
Door panel cutting





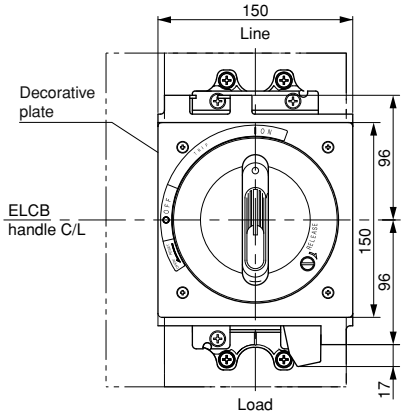
Install the hinge in the shaded area.

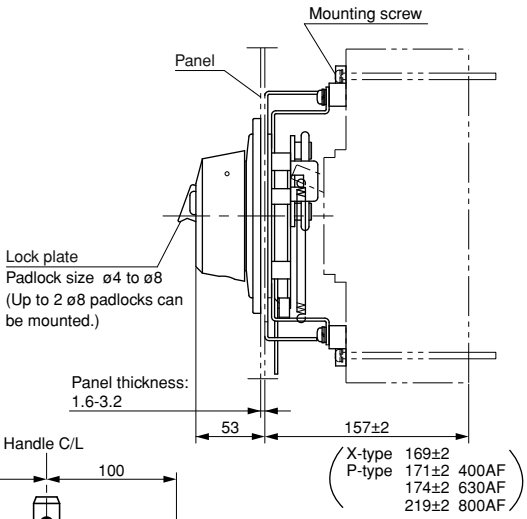
Note: Align the center of the hole cut in the panel with the center of the breaker handle.



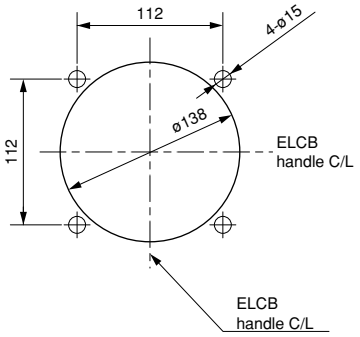
ELCB	Handle type	Mounting screw	H (mm)	Mass (kg)
EW125	**BW9N0CA**	M4 x 85	103±2	0.56
EW160 EW250	**BW9N0GA**	M4 x 85	103±2	0.56

• BW9N0HA, BW9N0JA (BZ-NP-2: dust proof packing, optional)

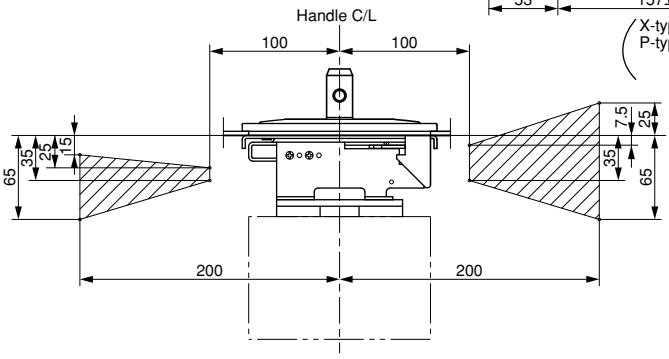




Door panel cutting



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



Install the door hinge in the shaded area.

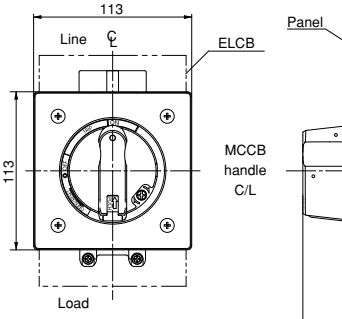
ELCB	Handle type	Mounting screw	Mass (kg)
EW400	**BW9N0HA** **BW9N0HA-X** **BW9N0HA-P**	M6 x 110 M6 x 125 Contact FUJI.	1.9
EW630 EW800	**BW9N0JA** **BW9N0JA-X** **BW9N0JA-P**	M6 x 110 M6 x 125 Contact FUJI.	1.9

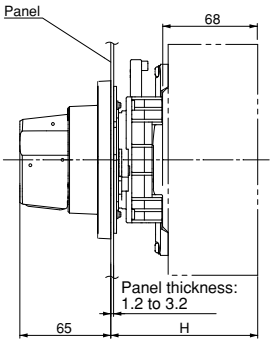
G-TWIN series
External accessories

■ Dimensions, mm

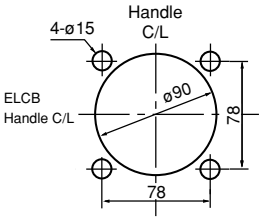
V type handle

• BW9V0CA, BW9V0GA

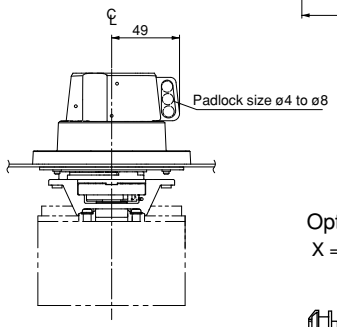


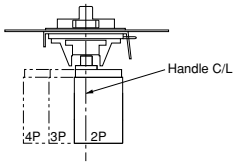


Door panel cutting



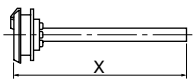
Note: Align the center of the hole cut in the panel with the center of the breaker handle.



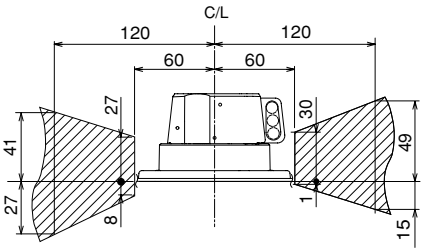


Optional shaft BW9VSG0

X = H - 95



Door hinge installation area



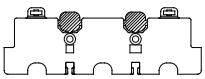
Install the door hinge in the shaded area.

ELCB	Handle type	Standard type H	With the optional shaft (X=154)		Mounting screw	Mass (kg)
			H	Area in which the hinge with H can be installed		
EW125*1	**BW9V0CA**	105±2	250±2	140 to 250	M4 x 85	0.67
EW160*2 EW250*2	**BW9V0GA**	105±2	250±2	140 to 250	M4 x 85	0.67

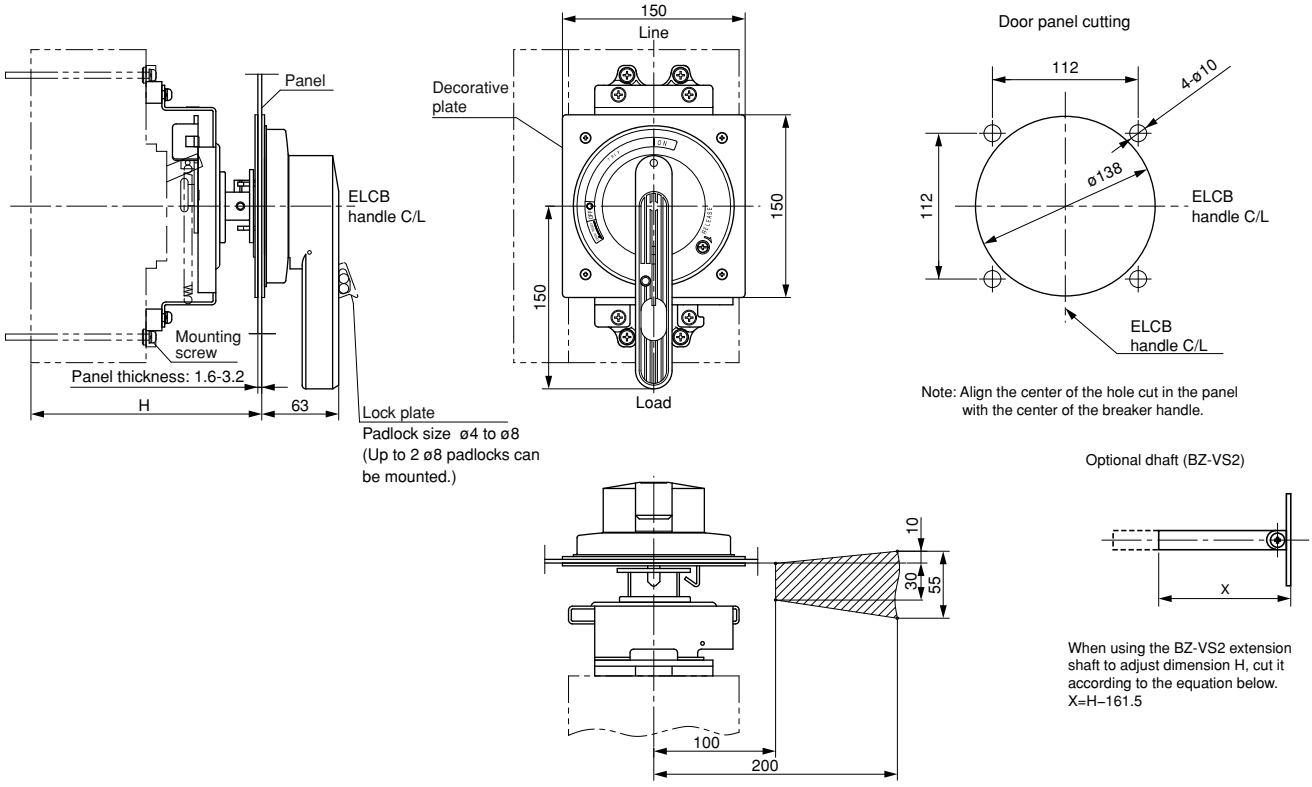
Notes:
- The handle does not have any means to hold the door. Provide it separately.
- Not available for side mounting.

*1 For the EW125JAG-2P with the external operating handle, the standard terminal cover is not available because it does not fit with the mounting base. Specify the terminal cover for the external operating handle. (Specify "-00635" at the end of the type number of the product with the standard terminal cover.)

*2 When mounting a terminal cover, cut away part of it because it hides the mounting screws for the breaker. Remove the shaded parts in the figure below.



• BW9V0HA, BW9V0JA



Install the door hinge in the shaded area.

ELCB	Handle type	Standard type H	With the optional shaft (X=154)		Mass (kg)
			H	Area in which the hinge with H can be installed	
EW400	**BW9V0HA**	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	

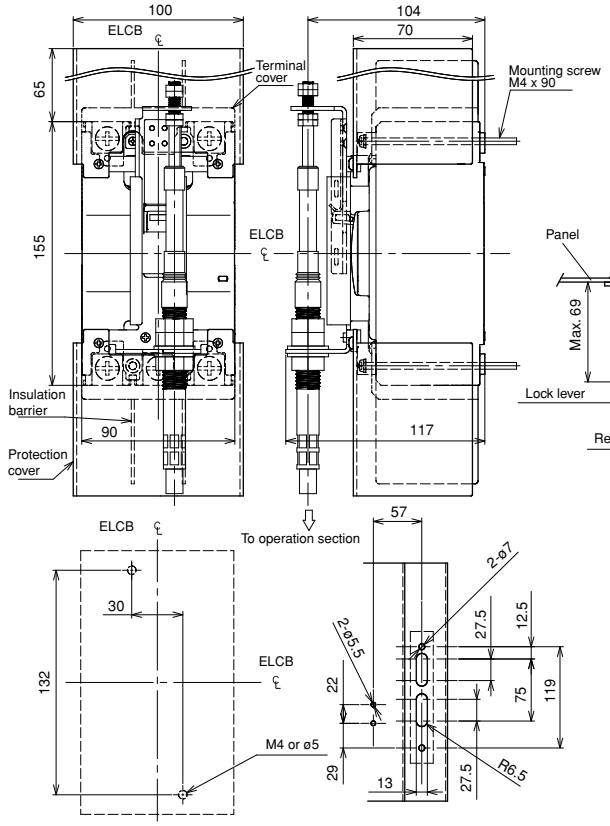
Note: • The handle cannot hold the door.
• Not available for side mountimg

Dimensions, mm

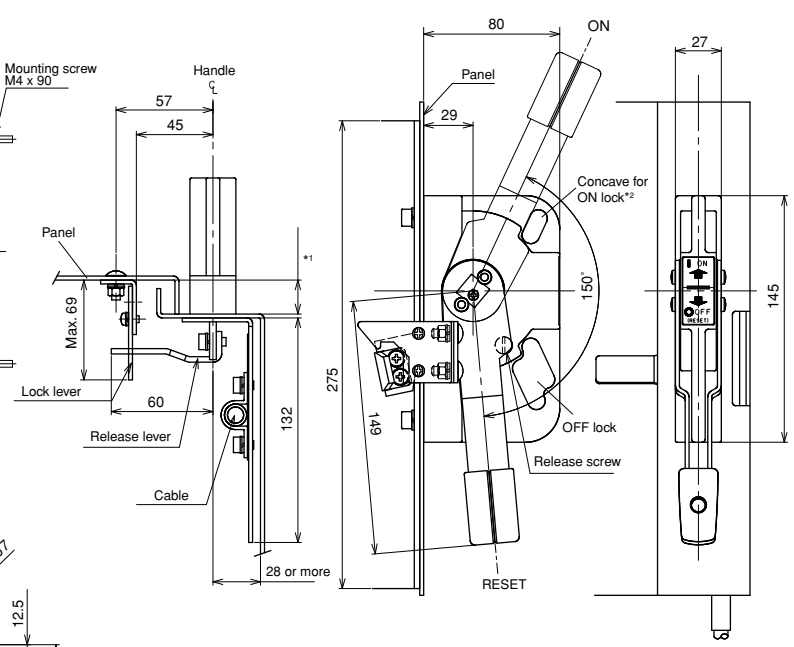
F type handle

• BW9F0CA

Drive section



Operation section



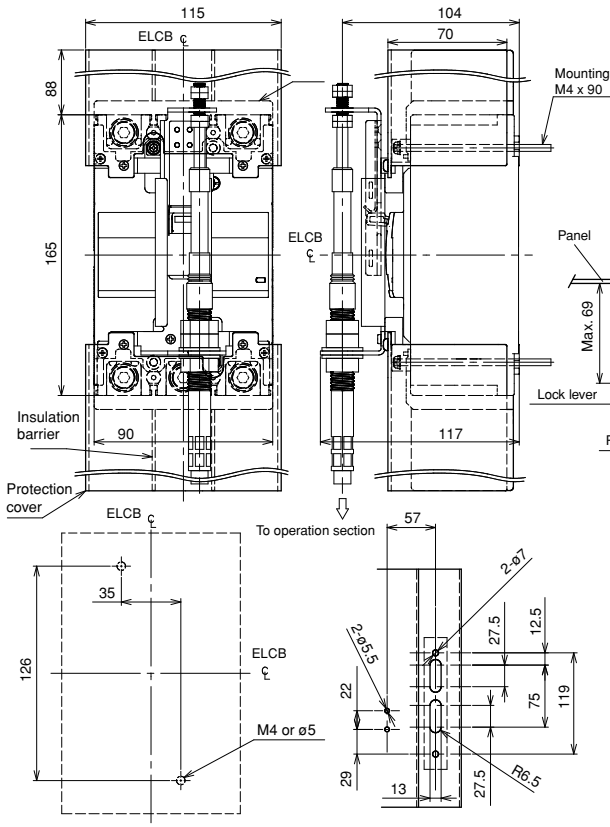
Panel drilling

- This product consists of a drive section and an operation section.
- The operation section can be mounted either to the right or to the left on the panel depending on the mounting position of the release lever.
- For the OFF lock, 3 ϕ10 padlocks can be mounted; for the ON lock, 2 ϕ10 padlocks.

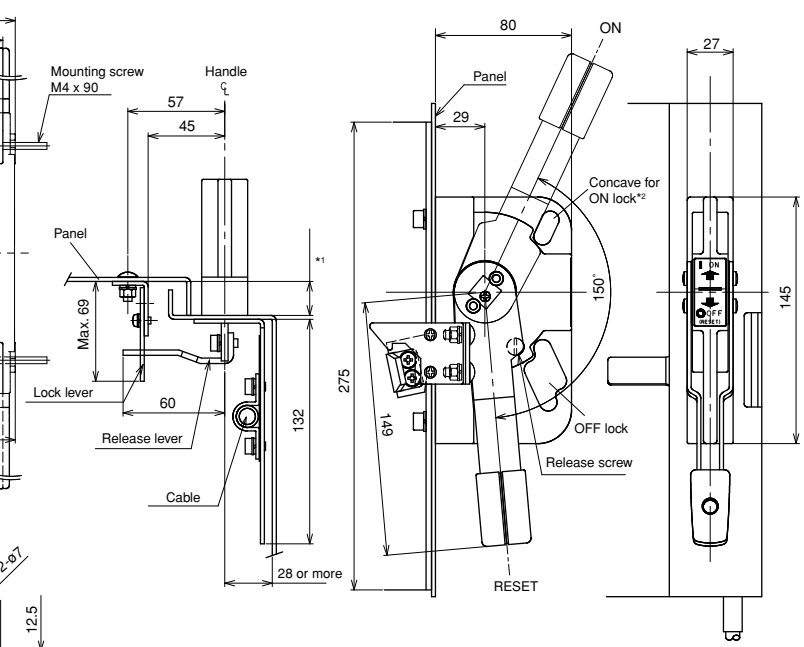
*1 Set the height to 20 or 30. Adjust the lock lever depending on the setting.
*2 The ON lock can be realized by additionally creating a concave for the ON lock.

• BW9F0GA

Drive section



Operation section



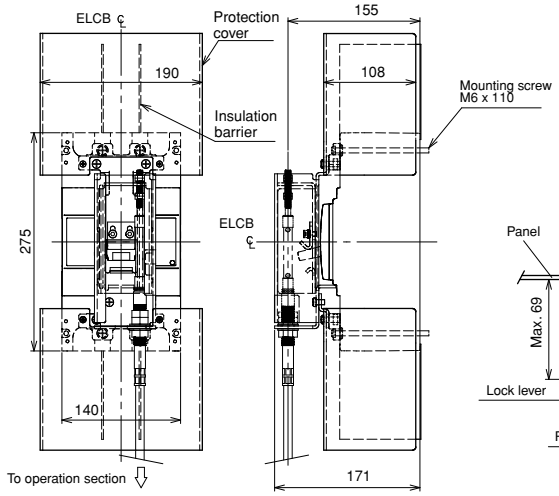
Panel drilling

- This product consists of a drive section and an operation section.
- The operation section can be mounted either to the right or to the left on the panel depending on the mounting position of the release lever.
- For the OFF lock, 3 ϕ10 padlocks can be mounted; for the ON lock, 2 ϕ10 padlocks.

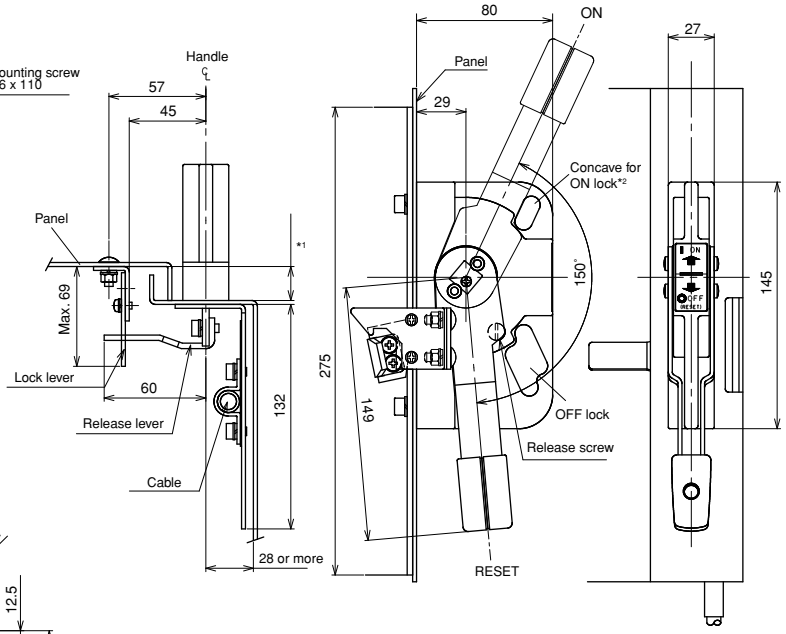
*1 Set the height to 20 or 30. Adjust the lock lever depending on the setting.
*2 The ON lock can be realized by additionally creating a concave for the ON lock.

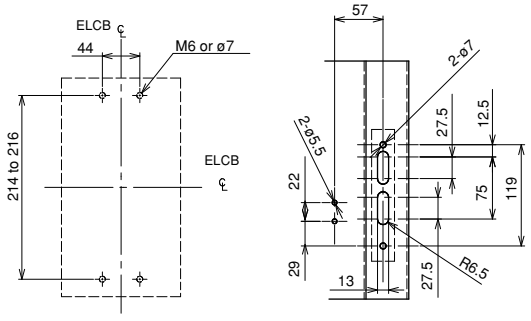
• BW9F0HA

Drive section



Operation section





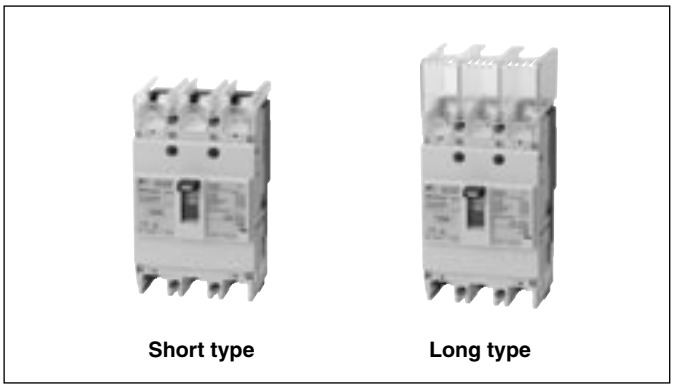
Panel drilling

- This product consists of a drive section and an operation section.
- The operation section can be mounted either to the right or to the left on the panel depending on the mounting position of the release lever.
- For the OFF lock, 3 ϕ10 padlocks can be mounted; for the ON lock, 2 ϕ10 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**

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

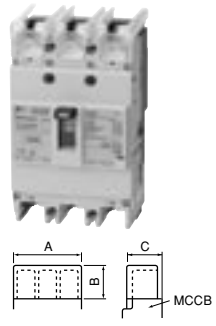
● **630, 800AF**
Long type: BW9BTJA-L ☐
• Transparent

Long type

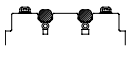
Type		No. of poles	ELCB	Dimensions (mm)			Packing quantity	Appearance
Transparent	Gray			A	B	C		
BW9BTCA-L2	**BW9BTCA-L2W**	2	EW125JAG-2P	60	40	66.5	2	• Preventing exposure of live section when amplifier's terminals are connected • Snap-on mounting
BW9BTCA-L3	**BW9BTCA-L3W**	2, 3	EW125JAG-3P EW125RAG-2P EW125RAG-3P	90	40	66.5	2	
BW9BTCA-L4	**BW9BTCA-L4W**	4	EW125JAG-4P EW125RAG-4P	120	40	66.5	2	
BW9BTGA-L3 *1	**BW9BTGA-L3W** *1	2, 3	EW160☐-2P EW160☐-3P	105	50	66.5	2	
BW9BTGA-L4 *1	**BW9BTGA-L4W** *1	4	EW160☐-4P	140	50	66.5	2	
BW9BTGA-L3 *1	**BW9BTGA-L3W** *1	2, 3	EW250☐-2P EW250☐-3P	105	50	66.5	2	
BW9BTGA-L4 *1	**BW9BTGA-L4W** *1	4	EW250☐-4P	140	50	66.5	2	
BW9BTHA-L3 *2	**BW9BTHA-L3W** *1	2, 3	EW400☐-2P EW400☐-3P	172	110	98	2	
BW9BTHA-L4 *2	**–**	4	EW400☐-4P	220	110	98	2	
BW9BTJA-L3	**BW9BTJA-L3W**	3	EW630 EW800	230	135	97.5	2	

Short type

Type		No. of poles	ELCB	Dimensions (mm)			Packing quantity	Appearance
Transparent	Gray			A	B	C		
BW9BTCA-S2	**BW9BTCA-S2W**	2	EW125JAG-2P	60	8	66.5	2	• Preventing exposure of live section when amplifier's terminals are connected • Snap-on mounting
BW9BTCA-S3	**BW9BTCA-S3W**	2, 3	EW125JAG-3P EW125RAG-2P EW125RAG-3P	90	8	66.5	2	
BW9BTCA-S4	**BW9BTCA-S4W**	4	EW125JAG-4P EW125RAG-4P	120	8	66.5	2	
BW9BTGA-S3		3	EW160☐-2P EW160☐-3P	105	8	66.5	2	
BW9BTGA-S4		4	EW160☐-4P	140	8	66.5	2	
BW9BTGA-S3 *1	**BW9BTGA-S3W** *1	2, 3	EW250☐-2P EW250☐-3P	105	8	66.5	2	
BW9BTGA-S4 *1	**BW9BTGA-S4W** *1	4	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 mm^2 are not available.
*3 This type of cover can be mounted on the 400AF when flat terminals are not used.



Insulation barriers

Description

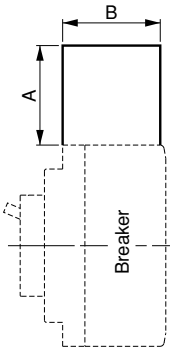
The interphase barriers are provided on frame size of 125AF to 800AF breakers for front mounting. The barriers are installed in the molded slots between terminals.
Installation of these barriers after wiring is possible even when an external accessory is installed.

Interphase barrier

Interphase barrier

ELCB	Interphase barrier				
	Type	Dimensions (mm)		Packing quantity	Mass (g)
		A	B		
EW125	**BW9BPCA**	50	60	4	30
EW160 EW250	**BW9BPGA**	80	60	4	50
EW400 EW630 EW800	**B-43A**	105	95	4	130

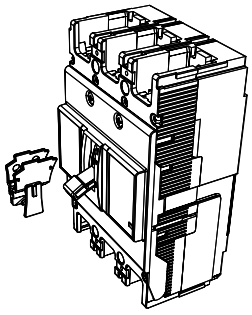
Interphase barrier



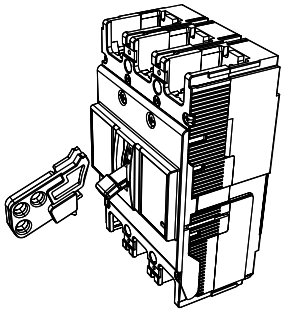
Padlocking device and handle locking cover

ELCB	Padlocking device		Handle locking cover
	Q1: Cap type	Q2: Plate type	
EW125	**BW9Q1CA**	**BW9Q2CA**	**BW9L1CA**
EW160 EW250		**BW9Q2GA**	
EW400	–	**BW9Q2HA**	**BW9L1HA**
EW630 EW800	–	**BW9Q2JA**	

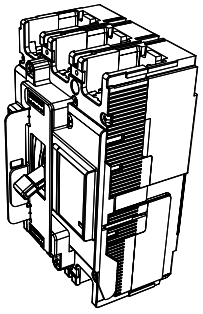
Handle locking cover



Padlocking device
• Cap type Q1



• Plate type Q2



⚠ Safety Considerations

- For safe operation, read the instruction manual or user manual that comes with the product carefully or consult the Fuji sales representative from whom you purchased the product, before using the product.
- Products introduced in this catalog have not been designed or manufactured for such applications in a system or equipment that will affect human bodies or lives.
- Customers, who want to use the products introduced in this catalog for special systems or devices such as for atomic-energy control, aerospace use, medical use, passenger vehicle, and traffic control, are requested to consult the Fuji sales division.
- Customers are requested to prepare safety measures when they apply the products introduced in this catalog to such systems or facilities that will affect human lives or cause severe damage to property if the products become faulty.
- For safe operation, wiring should be conducted only by qualified engineers who have sufficient technical knowledge about electrical work or wiring.

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