



GLOBAL TWIN SERIES

UL 489 LISTED

MOLDED CASE CIRCUIT BREAKERS
EARTH LEAKAGE CIRCUIT BREAKERS



50A Frame ~ 800A Frame | Max Voltage 600V

The new FUJI UL489 Molded Case Circuit Breaker and Earth Leakage Circuit Breaker (GLOBAL TWIN series) provides the ultimate in compact design, unprecedented value, and use anywhere in the world.



50A Frame



125A Frame



250A Frame



400A Frame



- MORE COMPACT (especially 50/100A Frame, 125A Frame, 250A Frame) than any breaker on the market, so control panels take up less space than ever before.
- Competitive pricing.
- Conformity to all WORLDWIDE STANDARDS, including UL / CSA / IEC / CE Marking / JIS (Japan) / CCC (China).



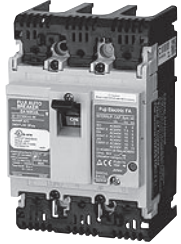
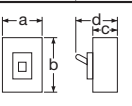
Fuji's GLOBAL TWIN series gives you the features and flexibility you need:

- 1) Suitable for branch circuit protection.
- 2) Rated current of 3-800A, Max 600V.
- 3) Standard type and High interrupting capacities are available in identically sized breakers.
- 4) Shunt trip (F), Under voltage release (R) and other accessories are available.
- 5) Screw, Flat, or Lug terminal are available.
- 6) Auxiliary switch, Alarm switch, and Shunt trip can be installed in the field.
- 7) Choose Breaker-Mounted (N type) or Panel Door-Mounted (V type), Frange-Mounted (F type), operating handles.

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Molded Case Circuit Breakers - Alpha-Twin, UL489 Listed SA/EA-UL Series

Frame size (A)		50		100			
Type		SA52RCUL	SA53RCUL	EA102CUL	EA103CUL		
Appearance (with Screw Terminals, 3 poles)							
SSCR=UL489 interrupting capacity							
Rated insulation voltage (V) (IEC60947-2)		AC	690	690			
		DC	-	-			
Rated voltage (V) (UL489)		AC	240	240			
Rated current (A)		3,5,10,15,20,30,40,50		60,70,75,80,90,100			
Poles		2	3	2	3		
Rated frequency (Hz)		50/60		50/60			
Rated interrupting capacity sym (kA)	UL489 CAN/CSA C22.2 No.5	AC	600V/Δ	-	-		
			600V/Y	-	-		
			480V/Δ	-	-		
			480V/Y	-	-		
			240V	14	14		
	IEC60947-2 JIS C 8201-2-1 lcu/lcs	AC	690V	-	-		
			600V	5/3	5/3		
			500V	7.5/4	7.5/4		
			440V	10/5	10/5		
			400V	10/5	10/5		
	GB14048.2 lcu/lcs	AC	230V	25/13	25/13		
			250V	5/3	5/3		
			400V	-	-		
			230V	-	-		
Dimension inch (mm)		a	1.969(50)	2.953(75)	1.969(50)	2.953(75)	
		b	4.724(120)		4.724(120)		
		c	2.362(60)		2.362(60)		
		d	3.307(84)		3.307(84)		
Terminal construction	Screw terminals	None	●	●			
	Flat terminals	L1	●	●			
	Lug terminals	L	-	-			
Internal accessories	Auxiliary switch	W	BZ6WR10CU	BZ6W*10CU	BZ6WR10CU	BZ6W*10CU	
	Auxiliary switch for low current	WD	BZ6WDR10CU	BZ6WD*10CU	BZ6WDR10CU	BZ6WD*10CU	
	Alarm switch	K	BZ6KR10CU	BZ6K*10CU	BZ6KR10CU	BZ6K*10CU	
	Alarm switch for low current	KD	BZ6KDR10CU	BZ6KD*10CU	BZ6KDR10CU	BZ6KD*10CU	
	Auxiliary & Alarm switch	WK	BZ6WKR10CU	BZ6WK*10CU	BZ6WKR10CU	BZ6WK*10CU	
	Aux and Alarm for low current	WDKD	BZ6WDKDR10CU	BZ6WDKD*10CU	BZ6WDKDR10CU	BZ6WDKD*10CU	
	Shunt trip	F	BZ6F*10CU	BZ6F*10CU	BZ6F*10CU	BZ6F*10CU	
	Under voltage trip	R	BZ6R*10CAU	BZ6R*10CU	BZ6R*10CAU	BZ6R*10CU	
	Accessories with terminal block	A	*1	*1	*1	*1	
External accessories	Handle locking cover, Cap type	Q1	BZ6L10C	BZ6L10C	BZ6L10C	BZ6L10C	
		External operating handle	V	BZ6V10C	BZ6V10C	BZ6V10C	BZ6V10C
			N	BZ6N10CP	BZ6N10CP	BZ6N10CP	BZ6N10CP
	Field Installable terminal Kit	Flat terminal kit	BZ-SU20B	BZ-SU20B	BZ-SU25B	BZ-SU25B	
		Lug terminal kit	-	-	-	-	
	Terminal covers *3	for screw, short type	Provided	Provided	Provided	Provided	
		for screw, long type	BZ6TB10C2U	BZ6TB10C3U	BZ6TB10C2U	BZ6TB10C3U	
		for Flat terminal	-	-	-	-	
		for Lug terminal	-	-	-	-	
	Insulation barrier *2		BZ6B10C	BZ6B10C	BZ6B10C	BZ6B10C	
Mass: lb. (kg) (screw terminals)		0.88(0.4)	1.10(0.5)	0.88(0.4)	1.10(0.5)		

Notes: *1 For internal accessories with terminal block, specify "A" in the accessory P/N. When 50A Frame & 100A Frame are ordered w/UVT, the UVT is supplied with terminal block as standard.



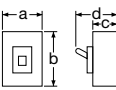
*2 Insulation barriers are only required with flat terminal.

*3 Short terminal covers are supplied as standard. If long terminal covers are required, please order BZ6TB10C2U or BZ6TB10C3U.

*4 These internal accessories can be installed in the field.

●: Available, -: Not available


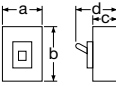
Molded Case Circuit Breakers - New G-Twin, UL489 Listed BW Series

Frame size (A)		125				250					
Type		BW125JAGU		BW125RAGU		BW250EAGU		BW250JAGU		BW250RAGU	
Appearance (with Screw Terminals, 3 poles)											
SSCR=UL489 interrupting capacity											
Rated insulation voltage (V) (IEC60947-2)		AC 690 DC 250		690 250		690 250		690 250		690 250	
Rated voltage (V) (UL489)		AC 600Y/347		600Y/347		240		600Y/347		600Y/347	
Rated current (A)		15,20,30,40,50,60,70,75,80,90,100,125				125,150,160,175,200,225,250					
Poles		2 3		2 3		2 3		2 3		2 3	
Rated frequency (Hz)		50/60		50/60		50/60		50/60		50/60	
Rated interrupting capacity sym (kA)	UL489 CAN/CSA C22.2 No.5	AC	600V/Δ	-	-	-	-	-	-	-	-
			600V/Y	10	10	18	-	10	25		
			480V/Δ	-	30	50	-	30	50		
			480V/Y	30	30	50	-	30	50		
			240V	50	50	100	22	50	100		
		DC	250V	10	10	10	10	10			
	IEC60947-2 JIS C 8201-2-1 Icu/Ics	AC	690V	-	5/3	-	-	5/3			
			500V	15/8	36/18	10/5	18/9	36/18			
			440V	30/15	50/25	18/9	30/15	50/25			
			400V	30/15	50/25	18/9	30/15	50/25			
			380V	30/15	50/25	18/9	30/15	50/25			
		240V	50/25	100/50	36/18	50/25	100/50				
DC	250V	15/8	40/20	10/5	20/10	40/20					
GB14048.2 Icu/Ics	AC	400V	30/15	50/25	18/9	30/15	50/25				
		230V	50/25	100/50	36/18	50/25	100/50				
Dimension inch (mm)		a	2.362(60)	3.543(90)	3.543(90)	4.134(105)	4.134(105)	4.134(105)			
		b	6.372(171)		6.372(171)	7.126(181)	7.126(181)	7.126(181)			
		c	2.677(68)		2.677(68)	2.677(68)	2.677(68)	2.677(68)			
		d	3.740(95)		3.740(95)	3.740(95)	3.740(95)	3.740(95)			
Terminal construction	Screw terminals (standard)	None	●	●	●	●	●				
	Flat terminals	SF	●	●	●	●	●				
	Lug terminals	SB	●	●	●	●	●				
Internal accessories	Auxiliary switch	W	BW9W1SG0(-R)	BW9W1SG0(-R)	BW9W1SG0(-R)	BW9W1SG0(-R)	BW9W1SG0(-R)				
	Auxiliary switch for low current	1	BW9W1DG0(-R)	BW9W1DG0(-R)	BW9W1DG0(-R)	BW9W1DG0(-R)	BW9W1DG0(-R)				
	Alarm switch	K	BW9K1SG0(-R)	BW9K1SG0(-R)	BW9K1SG0(-R)	BW9K1SG0(-R)	BW9K1SG0(-R)				
	Alarm switch for low current	8	BW9K1DG0(-R)	BW9K1DG0(-R)	BW9K1DG0(-R)	BW9K1DG0(-R)	BW9K1DG0(-R)				
	Auxiliary & Alarm switch	WK	BW9WKSG0(-R)	BW9WKSG0(-R)	BW9WKSG0(-R)	BW9WKSG0(-R)	BW9WKSG0(-R)				
	Aux & Alarm for low current	18	BW9WKDG0(-R)	BW9WKDG0(-R)	BW9WKDG0(-R)	BW9WKDG0(-R)	BW9WKDG0(-R)				
	Shunt trip	F	BW9F*G0	BW9F*G0	BW9F*G0	BW9F*G0	BW9F*G0				
	Under voltage trip	R	-	BW9RGA*	BW9RGA*	BW9RGA*	BW9RGA*				
Accessories with terminal block			▲	▲	▲	▲	▲				
External accessories	Padlocking device	Q1	BW9Q1CA	BW9Q1CA	BW9Q1CA	BW9Q1CA	BW9Q1CA				
		Q2	BW9Q2CA	BW9Q2CA	BW9Q2GA	BW9Q2GA	BW9Q2GA				
	External operating handle	V	-	BW9V0CA	BW9V0CA	BW9V0GA	BW9V0GA				
		N	-	BW9N0CA	BW9N0CA	BW9N0GA	BW9N0GA				
		F	-	BW9F0CA	BW9F0CA	BW9F0GA	BW9F0GA				
	Field Installable terminal kit	Flat terminal kit	BZ-S50B-2253 GLOBAL				BW9SS0CA-3 GLOBAL				
		Lug terminal kit	BW9SL0CA-3 GLOBAL				Please see page 28.				
	Terminal covers *1	Short type,gray-white	Provided		Provided	Provided	Provided	Provided			
		Short type,transparent	BW9BTCA-S2	BW9BTCA-S3	BW9BTCA-S3	BW9BTGA-S3	BW9BTGA-S3	BW9BTGA-S3			
		Long type,gray-white	BW9BTCA-L2W	BW9BTCA-L3W	BW9BTCA-L3W	BW9BTGA-L3W	BW9BTGA-L3W	BW9BTGA-L3W			
Long type,transparent		BW9BTCA-L2	BW9BTCA-L3	BW9BTCA-L3	BW9BTGA-L3	BW9BTGA-L3	BW9BTGA-L3				
Insulation barrier		BW9BPCA		BW9BPCA	BW9BPGA	BW9BPGA	BW9BPGA				
Mass: lb. (kg) (screw terminals)		1.76(0.8)	2.65(1.2)	2.20(1.0)	2.65(1.2)	3.09(1.4)	3.53(1.6)	3.09(1.4)	3.53(1.6)	3.09(1.4)	3.53(1.6)

*1 Short type terminal covers (gray-white) are supplied as standard.

●: Available, -: Not available, ▲: Factory-installed


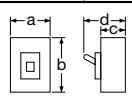
Molded Case Circuit Breakers - New G-Twin, UL489 Listed BW Series

Frame size (A)		400							
Type		BW400EAGU		BW400SAGU		BW400RAGU		BW400HAGU	
Appearance (with Flat Terminals, 3 poles)									
SSCR=UL489 interrupting capacity									
Rated insulation voltage (V) (IEC60947-2)		AC	690	690	690	690	690	690	690
		DC	250	250	250	250	250	250	250
Rated voltage (V) (UL489)		AC	240	480	480	480	480	600	600
Rated current (A)		250, 300, 350, 400							
Poles		2		3		2		3	
Rated frequency (Hz)		50/60		50/60		50/60		50/60	
Rated interrupting capacity sym (kA)	UL489 CAN/CSA C22.2 No.5	AC	600V/Δ	–	–	–	–	25	25
			600V/Y	–	–	–	–	25	25
			480V/Δ	–	35	35	50	65 (50: with lug terminals)	65 (50: with lug terminals)
		480V/Y	–	35	35	50	65 (50: with lug terminals)	65 (50: with lug terminals)	
		240V	22	50	50	100	125	125	
		DC	250V	10	10	10	10	10	
	IEC60947-2 JIS C 8201-2-1 Icu/Ics	AC	690V	–	10/5	15/8	15/8	15/8	
			500V	18/9	20/10	36/18	42/21	42/21	
			440V	30/15	36/18	50/25	70/35	70/35	
		400V	30/15	36/18	50/25	70/35	70/35		
		380V	30/15	36/18	50/25	70/35	70/35		
		240V	50/25	85/43	100/50	125/63	125/63		
DC	250V	20/10	20/10	40/20	40/20	40/20			
GB14048.2 Icu/Ics	AC	400V	30/15	36/18	50/25	70/35	70/35		
		230V	50/25	85/43	100/50	125/63	125/63		
Dimension inch (mm)		a	5.512(140)	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)	10.12(257)		
		c	4.055(103)	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)	5.748(146)		
Terminal construction	Screw terminals	–	–	–	–	–	–		
	Flat terminals (standard)	None	●	●	●	●	●		
	Lug terminals	SB	●	●	●	●	●		
Internal accessories	Auxiliary switch	W	BW9W1SHA	BW9W1SHA	BW9W1SHA	BW9W1SHA	BW9W1SHA		
	Auxiliary switch 2 contacts	V	BW9W2SHA	BW9W2SHA	BW9W2SHA	BW9W2SHA			
	Aux. low current	1	BW9W1DHA	BW9W1DHA	BW9W1DHA	BW9W1DHA			
	Aux. low current 2 contacts	2	BW9W2DHA	BW9W2DHA	BW9W2DHA	BW9W2DHA			
	Alarm switch	K	BW9K1SHA	BW9K1SHA	BW9K1SHA	BW9K1SHA			
	Alarm switch 2 contacts	J	BW9K2SHA	BW9K2SHA	BW9K2SHA	BW9K2SHA			
	Alarm low current	8	BW9K1DHA	BW9K1DHA	BW9K1DHA	BW9K1DHA			
	Alarm low current 2 contacts	9	BW9K2DHA	BW9K2DHA	BW9K2DHA	BW9K2DHA			
	Shunt trip	F	BW9FHA-*	BW9FHA-*	BW9FHA-*	BW9FHA-*			
	Under voltage trip	R	BW9RHA-*	BW9RHA-*	BW9RHA-*	BW9RHA-*			
Accessories with terminal block			▲	▲	▲	▲	▲		
External accessories	Padlocking device	Q1	BW9QNHA	BW9QNHA	BW9QNHA	BW9QNHA	BW9QNHA		
		Q2	BW9Q2HA	BW9Q2HA	BW9Q2HA	BW9Q2HA			
	External operating handle	V	BW9V0HA	BW9V0HA	BW9V0HA	BW9V0HA			
		N	BW9N0HA	BW9N0HA	BW9N0HA	BW9N0HA			
		F	BW9F0HA	BW9F0HA	BW9F0HA	BW9F0HA			
	Field Installable terminal		–	–	–	–	–		
	Terminal covers *1	Short type, gray-white	BW9BTHA-S3W	BW9BTHA-S3W	BW9BTHA-S3W	BW9BTHA-S3W	BW9BTHA-S3W		
		Short type, transparent	BW9BTHA-S3	BW9BTHA-S3	BW9BTHA-S3	BW9BTHA-S3			
		Long type, gray-white	BW9BTHA-L3W	BW9BTHA-L3W	BW9BTHA-L3W	BW9BTHA-L3W			
		Long type, transparent	BW9BTHA-L3	BW9BTHA-L3	BW9BTHA-L3	BW9BTHA-L3			
Insulation barrier		B-43A	B-43A	B-43A	B-43A	B-43A			
Mass: lb. (kg) (screw terminals)		10.14(4.6)	12.35(5.6)	10.14(4.6)	12.35(5.6)	10.14(4.6)	12.35(5.6)		

*1 Terminal covers are NOT supplied as standard.

●: Available, -: Not available, ▲: Factory-installed

Molded Case Circuit Breakers - New G-Twin, UL489 Listed BW Series

Frame size (A)		630		800			
Type		BW630RAGU	BW630HAGU	BW800RAGU	BW800HAGU		
Appearance (with Flat Terminals, 3 poles)							
SSCR=UL489 interrupting capacity							
Rated insulation voltage (V) (IEC60947-2)		AC 690 DC 250	690 250	690 250	690 250		
Rated voltage (V) (UL489)		AC 480	600	480	600		
Rated current (A)		500, 600, 630		700, 800			
Poles		3	3	3	3		
Rated frequency (Hz)		50/60		50/60			
Rated interrupting capacity sym (kA)	UL489 CAN/CSA C22.2 No.5	AC	600V/Δ	–	25	–	25
			600V/Y	–	25	–	25
			480V/Δ	50	65 (50: with lug terminals)	50	65 (50: with lug terminals)
			480V/Y	50	65 (50: with lug terminals)	50	65 (50: with lug terminals)
			240V	100	100	100	125
	IEC60947-2 JIS C 8201-2-1 Icu/Ics	AC	690V	15/8	15/8	15/8	15/8
			500V	36/18	42/21	36/18	42/21
			440V	50/25	70/35	50/25	70/35
			400V	50/25	70/35	50/25	70/35
			380V	50/25	70/35	50/25	70/35
	GB14048.2 Icu/Ics	AC	240V	100/50	125/63	100/50	125/63
			250V	40/20	40/20	40/20	40/20
Dimension inch (mm)		a	8.268(210)	8.268(210)	8.268(210)	8.268(210)	
		b	10.83(275)	10.83(275)	10.83(275)	10.83(275)	
		c	4.055(103)	4.055(103)	4.055(103)	4.055(103)	
		d	5.748(146)	5.748(146)	5.748(146)	5.748(146)	
		Terminal construction	Screw terminals	–	–	–	–
	Flat terminals	None	●	● *2	● *2		
	Lug terminals	SB	● *1	●	●		
Internal accessories	Auxiliary switch	W	BW9W1SHA	BW9W1SHA	BW9W1SHA	BW9W1SHA	
	Auxiliary switch 2 contacts	V	BW9W2SHA	BW9W2SHA	BW9W2SHA	BW9W2SHA	
	Aux. low current	1	BW9W1DHA	BW9W1DHA	BW9W1DHA	BW9W1DHA	
	Aux. low current 2 contacts	2	BW9W2DHA	BW9W2DHA	BW9W2DHA	BW9W2DHA	
	Alarm switch	K	BW9K1SHA	BW9K1SHA	BW9K1SHA	BW9K1SHA	
	Alarm switch 2 contacts	J	BW9K2SHA	BW9K2SHA	BW9K2SHA	BW9K2SHA	
	Alarm low current	8	BW9K1DHA	BW9K1DHA	BW9K1DHA	BW9K1DHA	
	Alarm low current 2 contacts	9	BW9K2DHA	BW9K2DHA	BW9K2DHA	BW9K2DHA	
	Shunt trip	F	BW9FHA-*	BW9FHA-*	BW9FHA-*	BW9FHA-*	
	Under voltage trip	R	BW9RHA-*	BW9RHA-*	BW9RHA-*	BW9RHA-*	
	Accessories with terminal block		▲	▲	▲		
External accessories	Padlocking device	QN	BW9QNHA	BW9QNHA	BW9QNHA	BW9QNHA	
		Q2	BW9Q2JA	BW9Q2JA	BW9Q2JA	BW9Q2JA	
	External operating handle	V	BW9V0JA	BW9V0JA	BW9V0JA	BW9V0JA	
		N	BW9N0JA	BW9N0JA	BW9N0JA	BW9N0JA	
	Field Installable terminal		–	–	–	–	
	Terminal covers *3	Short type, gray-white	–	–	–	–	
			–	–	–	–	
BW9BTJA-L3W			BW9BTJA-L3W	BW9BTJA-L3W	BW9BTJA-L3W		
BW9BTJA-L3			BW9BTJA-L3	BW9BTJA-L3	BW9BTJA-L3		
Insulation barrier		B-43A	B-43A	B-43A	B-43A		
Mass: lb. (kg) (screw terminals)		19.62(8.9)	19.62(8.9)	20.72(9.4)	20.72(9.4)		

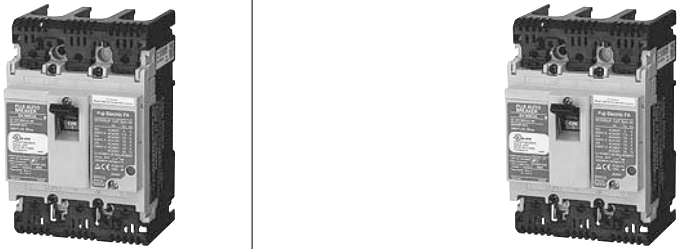
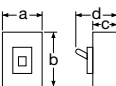
*1 Lug terminal is NOT available for 630 ampere.

*2 Flat terminal is NOT available for 800 ampere.

*3 Terminal covers are NOT supplied as standard.

●: Available, –: Not available, ▲: Factory-installed

Earth Leakage Circuit Breakers - Alpha-Twin, UL489 Listed SG/EG-UL Series

Frame size (A)		50	100			
Type		SG53RCUL	EG102CUL EG103CUL			
Appearance (with Screw Terminals, 3 poles)						
SSCR=UL489 interrupting capacity						
Rated voltage AC (V)		UL 240 IEC 100-230-440	240 100-230 100-230-440			
Rated current (A)		3, 5, 10, 15, 20, 30, 40, 50	60, 70, 75, 80, 90, 100			
Rated Sensitive Current (mA)		30, 100/200/500	30, 100/200 30, 100/200/500			
Poles		3	2 3			
Rated frequency (Hz)		50/60	50/60 50/60			
Rated interrupting capacity sym (kA)	UL489 CAN/CSA C22.2 No.5	AC	480V/Δ	-	-	
			480V/Y	-	-	
			240V	14	14	
	IEC60947-2 JIS C 8201-2-2 Icu/Ics	AC	440V	10/5	-	10/5
			415V	10/5	-	10/5
			380V	10/5	-	10/5
			230V	25/13	10/5	25/13
			100V	25/13	10/5	25/13
	GB14048.2 Icu/Ics	AC	400V	-	-	-
			230V	-	-	-
Dimension inch (mm)			a	2.953(75)	2.953(75)	
			b	4.724(120)	4.724(120)	
			c	2.362(60)	2.362(60)	
			d	3.307(84)	3.307(84)	
Terminal construction	Screw terminals		None	●	●	
	Flat terminals		L1	●	●	
	Lug terminals		L	-	-	
Internal accessories *4	Auxiliary switch		W	BZ6W*10CU	BZ6W*10CU	
	Alarm switch		K	BZ6K*10CU	BZ6K*10CU	
	Shunt trip		F	BZ6F*10CAU	BZ6F*10CAU	
	Under voltage trip		R	BZ6R*10CAU	BZ6R*10CAU	
	Accessories with terminal block		A	*1	*1	
External accessories	Handle locking cover, Cap type		Q1	BZ6L10C	BZ6L10C	
	External operating handle		V	BZ6V10C	BZ6V10C	
			N	BZ6N10CP	BZ6N10CP	
	Field Installable terminal kit	Flat terminal kit		BU-SU20B	BU-SU25B	BU-SU25B
		Lug terminal kit		-	-	-
	Terminal covers *3	for screw, short type		Provided	Provided	Provided
		for screw, long type		BZ6TB10C3U	BZ6TB10C3U	BZ6TB10C3U
		for flat terminal		-	-	-
		for Lug terminal		-	-	-
Insulation barrier *2			BZ6B10C	BZ6B10C	BZ6B10C	
Mass: lb. (kg) (screw terminals)			1.32(0.6)	1.32(0.6)	1.32(0.6)	

*1 For Internal accessories with terminal block, specify "A" in the accessory P/N. When 50A Frame & 100A Frame are ordered w/UVT, the UVT is supplied with terminal block as standard.



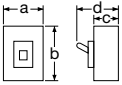
*2 Insulation barriers are only required with flat terminal.

*3 Short terminal covers are supplied as standard. If long terminal covers are required, please order BZ6TB10C2U or BZ6TB10C3U.

*4 These internal accessories can be installed in the field.

●: Available, -: Not available

Earth Leakage Circuit Breakers - New G-Twin, UL489 Listed EW Series


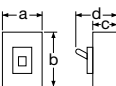
Frame size (A)		125		250			
Type		EW125JAGU	EW125RAGU	EW250JAGU	EW250RAGU		
Appearance (with Screw Terminals, 3 poles)							
SSCR=UL489 interrupting capacity							
Rated voltage AC (V)		UL 240-480 IEC 100-230-440	240-480 100-230-440	240-480 100-230-440	240-480 100-230-440		
Rated current (A)		15,20,30,40,50,60,75,100,125		125,150,160,175,200,225,250			
Instantaneous trip type	Rated Sensitive Current (mA)	B	30	30	30	30	
	Tripping time (s)		0.1 or less	0.1 or less	0.1 or less	0.1 or less	
Instantaneous /time-delay trip type	Rated Sensitive Current (mA)	K	100/200/500/1000	100/200/500/1000	100/200/500/1000	100/200/500/1000	
	Tripping time (s)		0.1/0.4/1/2	0.1/0.4/1/2	0.1/0.4/1/2	0.1/0.4/1/2	
	Inertia non-tripping time (s)		0/0.2/0.5/1	0/0.2/0.5/1	0/0.2/0.5/1	0/0.2/0.5/1	
Poles			3	3	3	3	
Rated frequency (Hz)			50/60	50/60	50/60	50/60	
Rated interrupting capacity sym (kA)	UL489 CAN/CSA C22.2 No.5	AC	480V/Δ	30	50	30	50
			480V/Y	30	50	30	50
			240V	50	100	50	100
	IEC60947-2 JIS C 8201-2-2 lcu/lcs	AC	440V	30/15	50/25	30/15	50/25
			415V	30/15	50/25	30/15	50/25
			380V	30/15	50/25	30/15	50/25
			240V	50/25	100/50	50/25	100/50
	GB14048.2 lcu/lcs	AC	400V	30/15	50/25	30/15	50/25
			230V	50/25	100/50	50/25	100/50
Dimension inch (mm)			a	3.543(90)	3.543(90)	4.134(105)	4.134(105)
			b	6.372(171)	6.372(171)	7.126(181)	7.126(181)
			c	2.677(68)	2.677(68)	2.677(68)	2.677(68)
			d	3.740(95)	3.740(95)	3.740(95)	3.740(95)
Terminal construction	Screw terminals		None	●	●	●	●
	Flat terminals		SF	●	●	●	●
	Lug terminals		SB	●	●	●	●
Internal accessories	Auxiliary switch		W	BW9W1SG0(-R)	BW9W1SG0(-R)	BW9W1SG0(-R)	BW9W1SG0(-R)
	Auxiliary switch for low current		1	BW9W1DG0(-R)	BW9W1DG0(-R)	BW9W1DG0(-R)	BW9W1DG0(-R)
	Alarm switch		K	BW9K1SG0(-R)	BW9K1SG0(-R)	BW9K1SG0(-R)	BW9K1SG0(-R)
	Alarm switch for low current		8	BW9K1DG0(-R)	BW9K1DG0(-R)	BW9K1DG0(-R)	BW9K1DG0(-R)
	Auxiliary & Alarm switch		WK	BW9WKS0(-R)	BW9WKS0(-R)	BW9WKS0(-R)	BW9WKS0(-R)
	Aux. & Alarm for low current		18	BW9WKDG0(-R)	BW9WKDG0(-R)	BW9WKDG0(-R)	BW9WKDG0(-R)
	Shunt trip		F	BW9F*G0	BW9F*G0	BW9F*G0	BW9F*G0
	Under voltage trip		R	BW9RGA*	BW9RGA*	BW9RGA*	BW9RGA*
	Earth alarm switch *2		L	BW9L1SG0	BW9L1SG0	BW9L1SG0	BW9L1SG0
	Accessories with terminal block			▲	▲	▲	▲
External accessories	Padlocking device		Q1	BW9Q1CA	BW9Q1CA	BW9Q1CA	BW9Q1CA
			Q2	BW9Q2CA	BW9Q2CA	BW9Q2GA	BW9Q2GA
	External operating handle		V	BW9V0CA	BW9V0CA	BW9V0GA	BW9V0GA
			N	BW9N0CA	BW9N0CA	BW9N0GA	BW9N0GA
			F	BW9F0CA	BW9F0CA	BW9F0GA	BW9F0GA
	Field Installable terminal kit	Flat terminal kit		BZ-S50B-2253 GLOBAL		BW9SS0CA-3 GLOBAL	
		Lug terminal kit		BW9SL0CA-3 GLOBAL		Please see page 28.	
	Terminal covers *1	Short type, gray-white		Provided		Provided	
		Short type, transparent		BW9BTCA-S3	BW9BTCA-S3	BW9BTGA-S3	BW9BTGA-S3
Long type, gray-white		BW9BTCA-L3W	BW9BTCA-L3W	BW9BTGA-L3W	BW9BTGA-L3W		
Long type, transparent		BW9BTCA-L3	BW9BTCA-L3	BW9BTGA-L3	BW9BTGA-L3		
Insulation barrier			BW9BPCA	BW9BPCA	BW9BPGA	BW9BPGA	
Mass: lb. (kg) (screw terminals)			2.65(1.2)	2.65(1.2)	3.53(1.6)	3.53(1.6)	

*1 Short type terminal covers (gray-white) are supplied as standard.

*2 Right-side mount only.

●: Available, -: Not available, ▲: Factory-installed

Earth Leakage Circuit Breakers - New G-Twin, UL489 Listed EW Series

Frame size (A)		400				
Type		EW400SAGU	EW400RAGU	EW400HAGU		
Appearance (with Flat Terminals, 3 poles)						
SSCR=UL489 interrupting capacity						
Rated voltage AC (V)		UL 240-480 IEC 100-230-440	240-480 100-230-440	240-480 100-230-440		
Rated current (A)		250, 300, 350, 400				
Instantaneous trip type	Rated Sensitive Current (mA)	B	30	30		
	Tripping time (s)		0.1 or less	0.1 or less		
Instantaneous /time-delay trip type	Rated Sensitive Current (mA)	K	100/200/500/1000	100/200/500/1000		
	Tripping time (s)		0.1/0.4/1/2	0.1/0.4/1/2		
	Inertia non-tripping time (s)		0/0.2/0.5/1	0/0.2/0.5/1		
Poles		3				
Rated frequency (Hz)		50/60				
Rated interrupting capacity sym (kA)	UL489 CAN/CSA C22.2 No.5	AC	480V/Δ	35	50	65 (50: with lug terminals)
			480V/Y	35	50	65 (50: with lug terminals)
			240V	50	100	125
	IEC60947-2 JIS C 8201-2-2 lcu/lcs	AC	440V	36/18	50/25	70/35
			415V	36/18	50/25	70/35
			380V	36/18	50/25	70/35
			240V	85/43	100/50	125/63
	GB14048.2 lcu/lcs	AC	100V	85/43	100/50	125/63
			400V	36/18	50/25	70/35
			230V	85/43	100/50	125/63
Dimension 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)
Terminal construction	Screw terminals	-	-	-	-	
	Flat terminals	None	●	●	●	
	Lug terminals	SB	●	●	●	
Internal accessories	Auxiliary switch	W	BW9W1SHA	BW9W1SHA	BW9W1SHA	
	Auxiliary switch, 2 contacts	V	BW9W2SHA	BW9W2SHA	BW9W2SHA	
	Aux. low current	1	BW9W1DHA	BW9W1DHA	BW9W1DHA	
	Aux. low current, 2 contacts	2	BW9W2DHA	BW9W2DHA	BW9W2DHA	
	Alarm switch	K	BW9K1SHA	BW9K1SHA	BW9K1SHA	
	Alarm switch, 2 contacts	J	BW9K2SHA	BW9K2SHA	BW9K2SHA	
	Alarm low current	8	BW9K1DHA	BW9K1DHA	BW9K1DHA	
	Alarm low current, 2 contacts	9	BW9K2DHA	BW9K2DHA	BW9K2DHA	
	Shunt trip	F	BW9FHA-*	BW9FHA-*	BW9FHA-*	
	Under voltage trip	R	BW9RHA-*	BW9RHA-*	BW9RHA-*	
	Earth alarm switch	L	-	-	-	
Accessories with terminal block			▲	▲	▲	
External accessories	Padlocking device	QN	BW9QNHA	BW9QNHA	BW9QNHA	
		Q2	BW9Q2HA	BW9Q2HA	BW9Q2HA	
	External operating handle	V	BW9V0HA	BW9V0HA	BW9V0HA	
		N	BW9N0HA	BW9N0HA	BW9N0HA	
		F	BW9F0HA	BW9F0HA	BW9F0HA	
	Field Installable terminal			-	-	-
	Terminal covers *1	Short type, gray-white		BW9BTHA-S3W	BW9BTHA-S3W	BW9BTHA-S3W
				BW9BTHA-S3	BW9BTHA-S3	BW9BTHA-S3
			BW9BTHA-L3W	BW9BTHA-L3W	BW9BTHA-L3W	
			BW9BTHA-L3	BW9BTHA-L3	BW9BTHA-L3	
Insulation barrier			B-43A	B-43A	B-43A	
Mass: lb. (kg) (screw terminals)			12.35(5.6)	12.35(5.6)	12.35(5.6)	

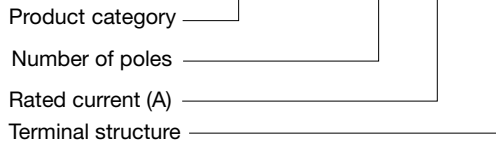
*1 Terminal covers are NOT supplied as standard.

●: Available, -: Not available, ▲: Factory-installed

Part Number Structure

G-TWIN; MCCB

BW250EAGU - 3P 100 SF

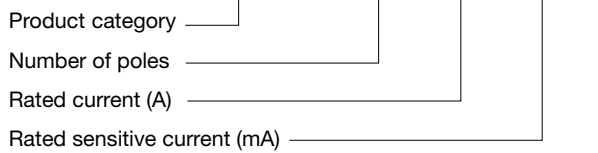


Code	Line side	Load side	BW125JAGU, BW125RAGU, BW250EAGU, BW250JAGU	BW400EAGU, BW400SAGU, BW400RAGU, BW400HAGU BW630RAGU, BW630HAGU, BW800RAGU, BW800HAGU
None	Screw	Screw	●	-
None	Flat	Flat	-	●
SB	Lug	Lug	●	●
SF	Flat	Flat	●	-

●: Available, -: Not available

G-TWIN; ELCB

EW250JAGU - 3P 100 K SF



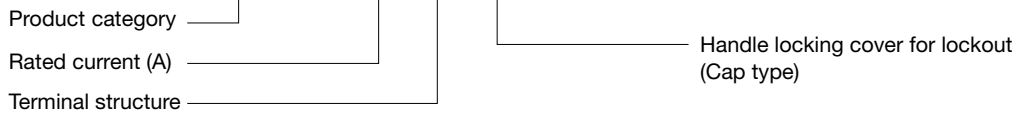
Code	Rated sensitive current (mA)
B	30mA
K	100/200/500/1000 changeable

Code	Line side	Load side	EW125JAGU, EW125RAGU, EW250JAGU, EW250RAGU	EW400SAGU, EW400RAGU, EW400HAGU
None	Screw	Screw	●	-
None	Flat	Flat	-	●
SB	Lug	Lug	●	●
SF	Flat	Flat	●	-

●: Available, -: Not available

Alpha-TWIN; MCCB

SA53RCUL / 50 L1 Q1

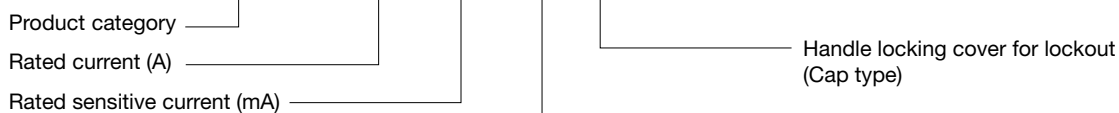


Code	Line side	Load side	SA52RCUL, SA53RCUL EA102CUL, EA103CUL
None	Screw	Screw	●
L	Lug	Lug	-
L1	Flat	Flat	●

●: Available, -: Not available

Alpha-TWIN; ELCB

SG53RCUL / 50 - 30MA L1 Q1



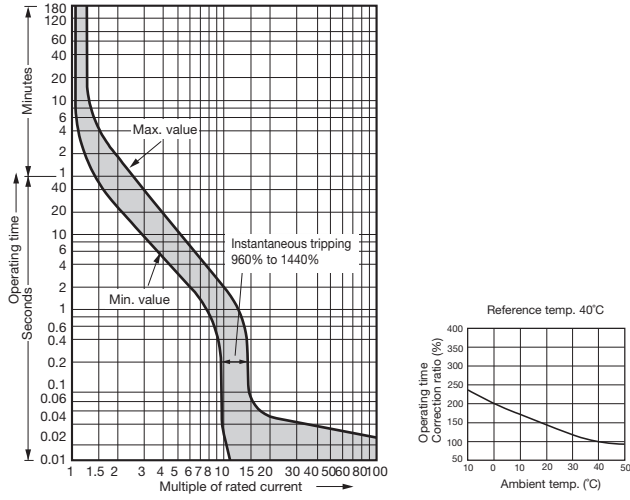
Code	Line side	2 poles	3 poles
30MA	30mA	●	●
CO	100/200mA changeable	●	-
CO	100/200/500mA changeable	-	●

Code	Line side	Load side	SG53RCUL, EG103CUL
None	Screw	Screw	●
L1	Flat	Flat	●

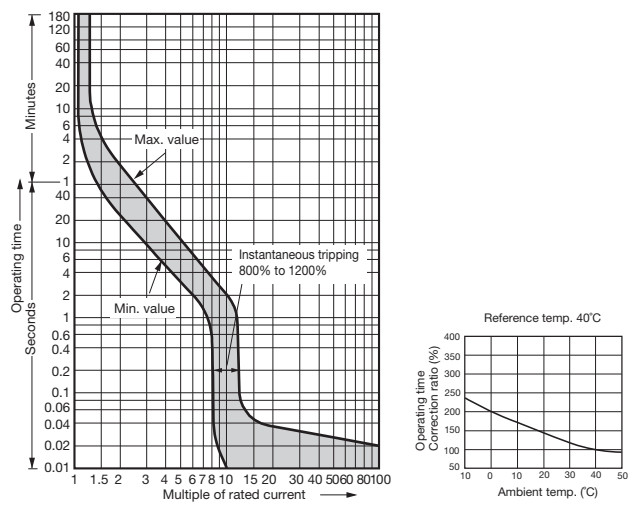
●: Available, -: Not available

Characteristic Curves

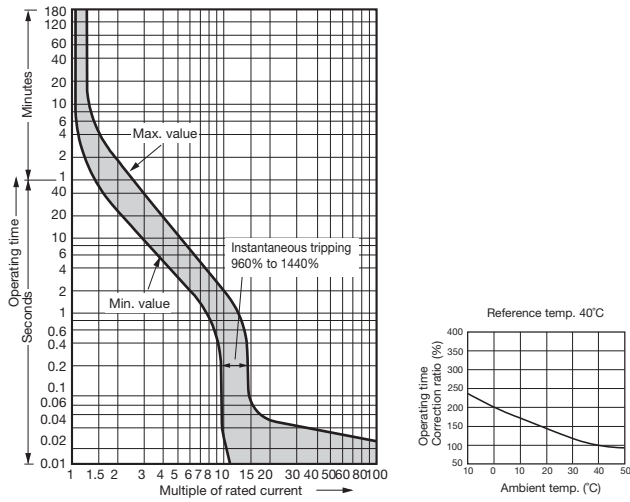
● SA52RCUL, SA53RCUL, SG53RCUL
(Rated current: 5A, 10A, 40A)



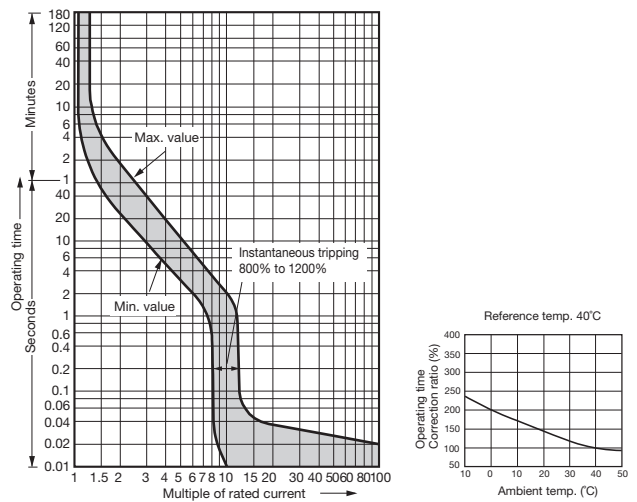
● SA52RCUL, SA53RCUL, SG53RCUL
(Rated current: 3A, 15A, 20A, 30A, 50A)



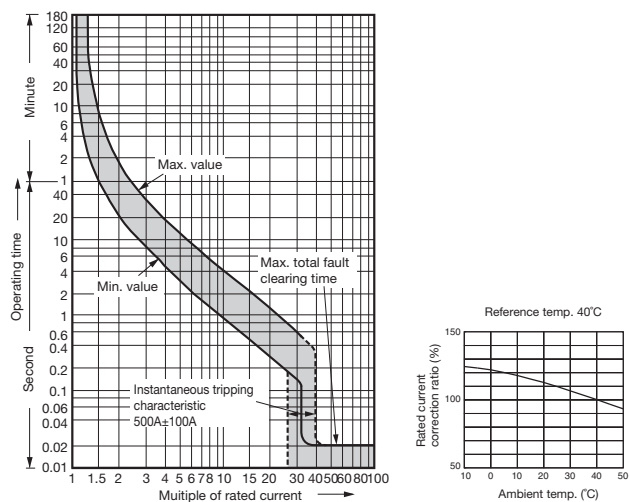
● EA102CUL, EA103CUL, EG102CUL, EG103CUL
(Rated current: 60A, 75A)



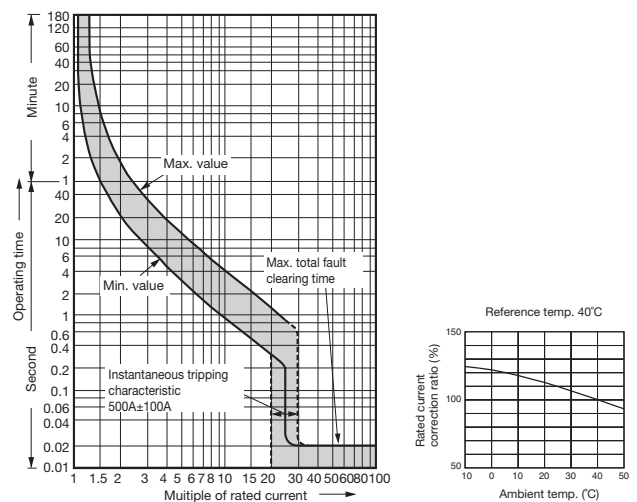
● EA102CUL, EA103CUL, EG102CUL, EG103CUL
(Rated current: 80A, 90A, 100A)



● BW125, EW125
(Rated current: 15A)

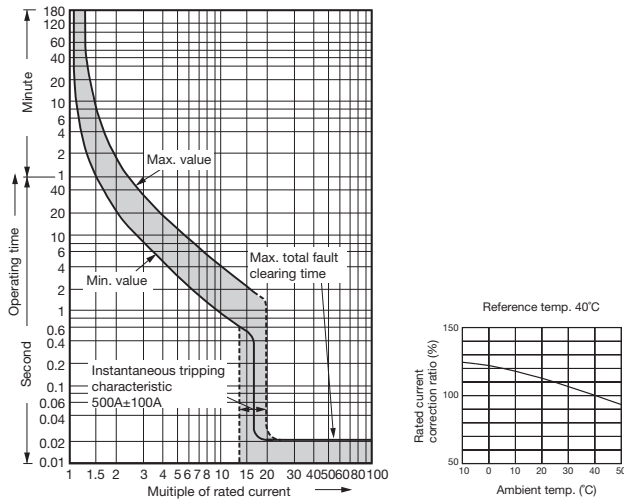


● BW125, EW125
(Rated current: 20A)

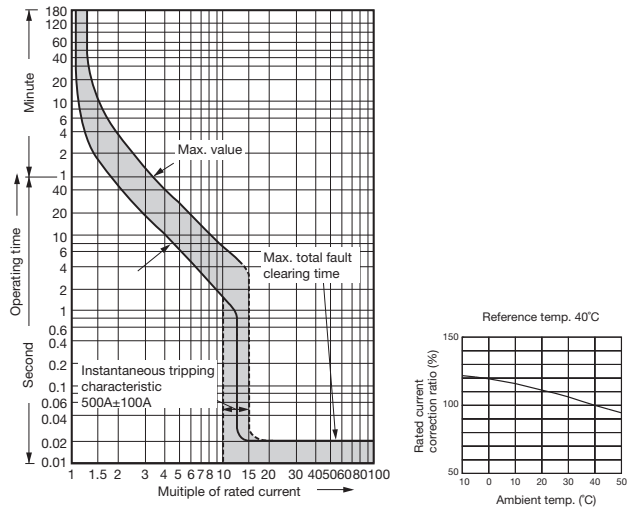


Characteristic Curves

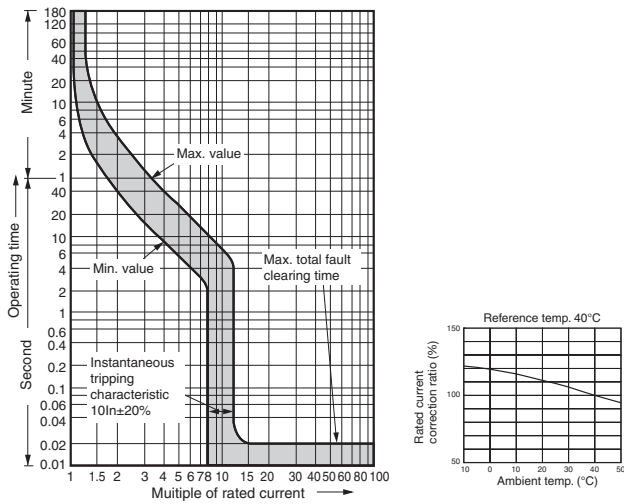
BW125, EW125 (Rated current: 30A)



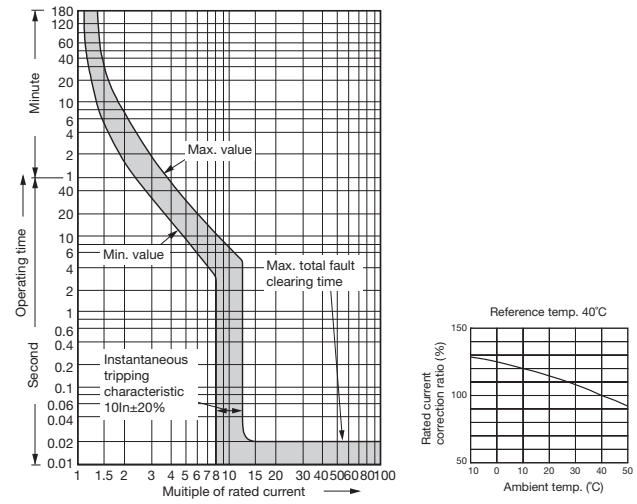
BW125, EW125 (Rated current: 40A)



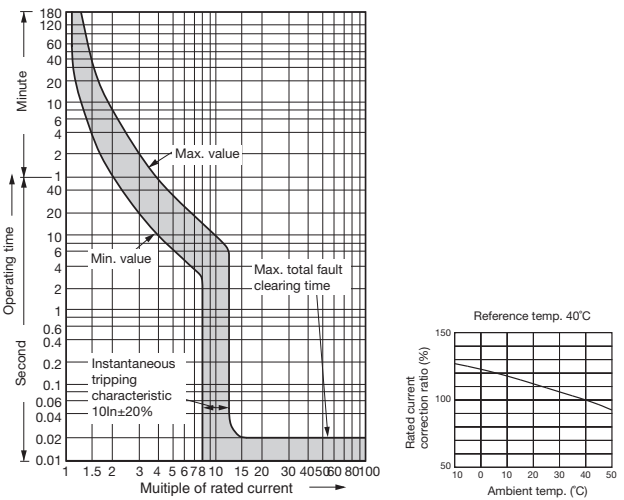
BW125, EW125 (Rated current: 50 - 125A)



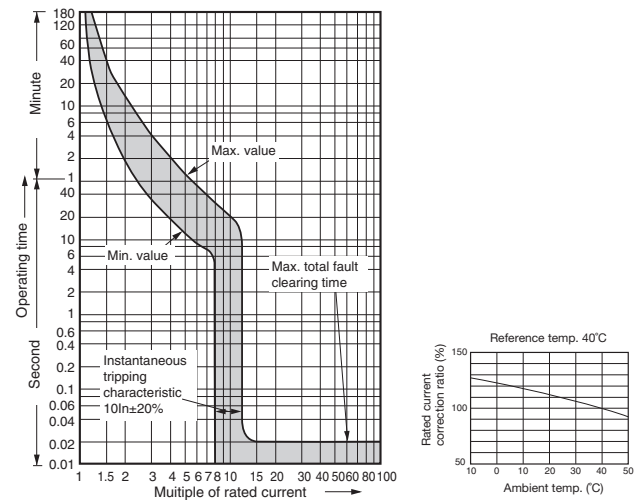
BW250, EW250



BW400, EW400

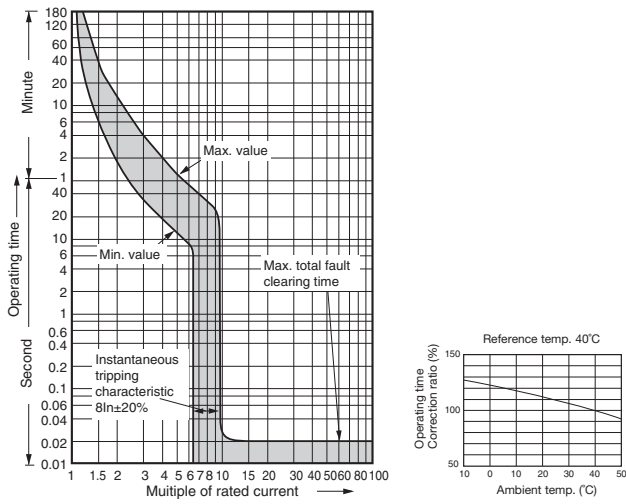


BW630

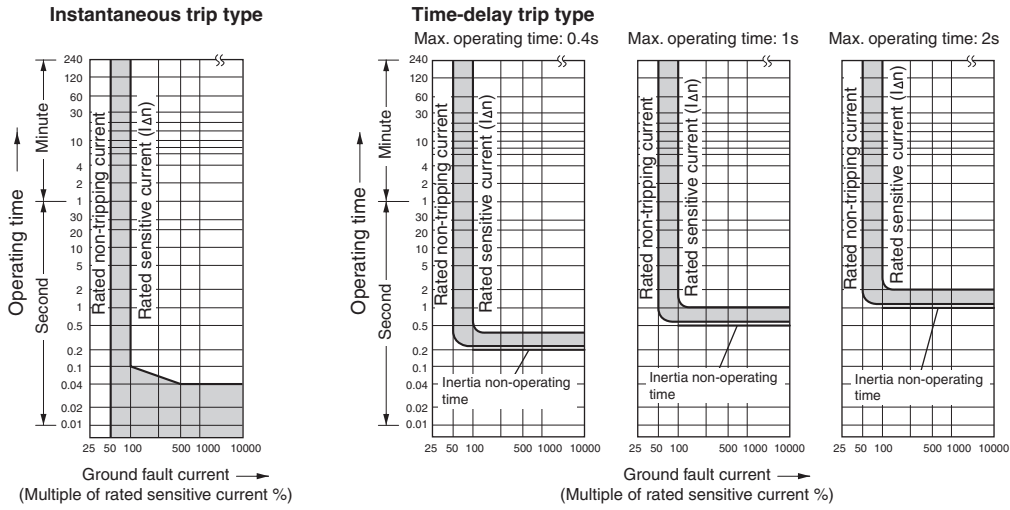


Characteristic Curves

BW800

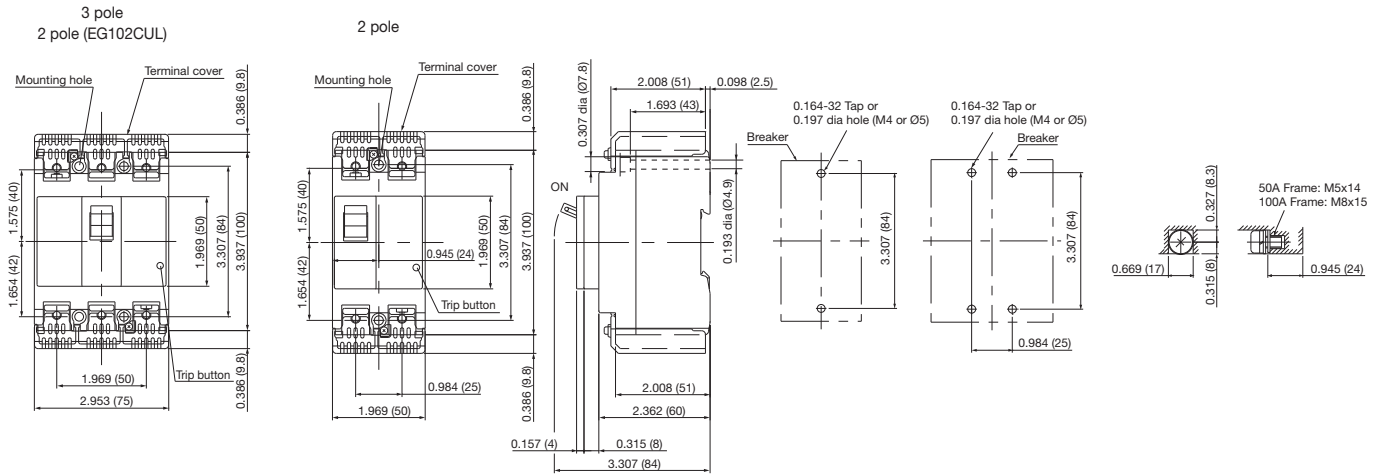


Earth leakage tripping (EW125, EW250, EW400)

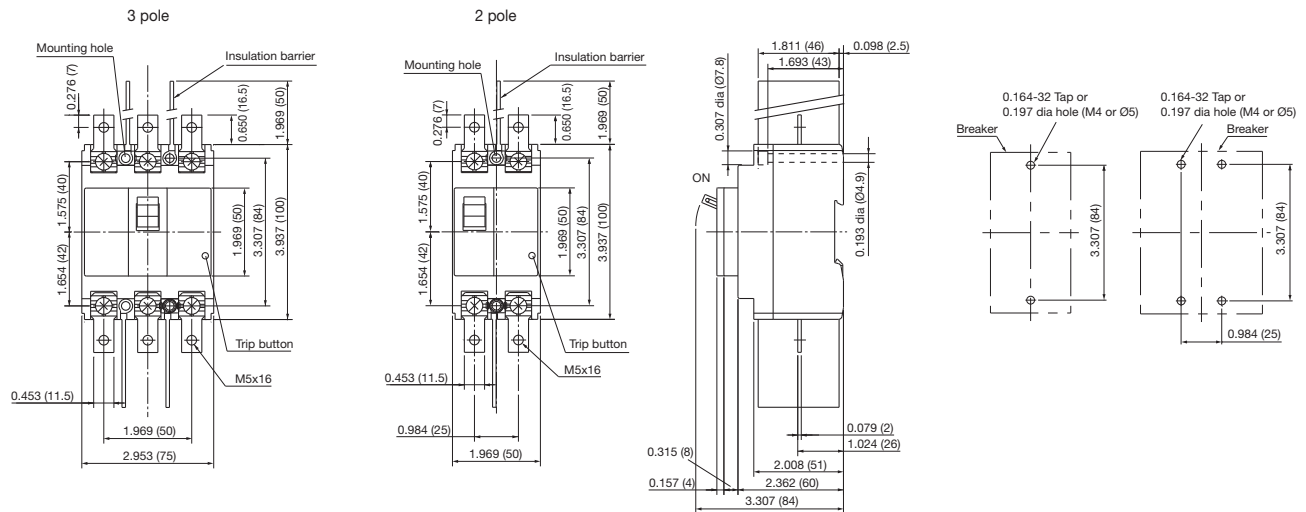


Dimensions: inch (mm)

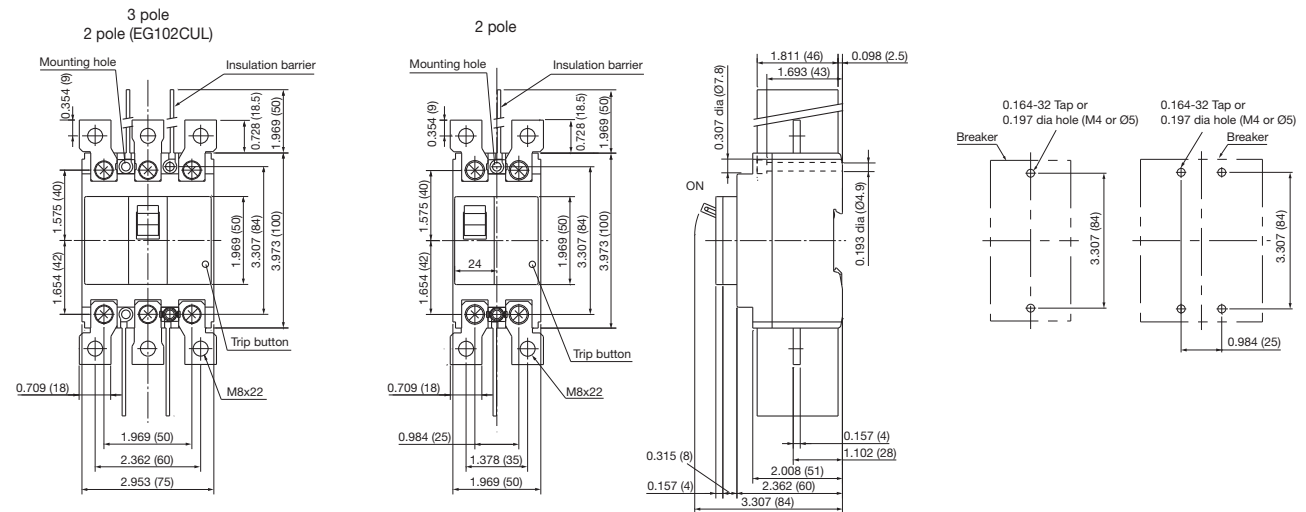
SA52RCUL, SA53RCUL, SG53RCUL, EA102CUL, EA103CUL, EG102CUL, EG103CUL



SA52RCUL/*L1, SA53RCUL/*L1, SG53RCUL/*L1

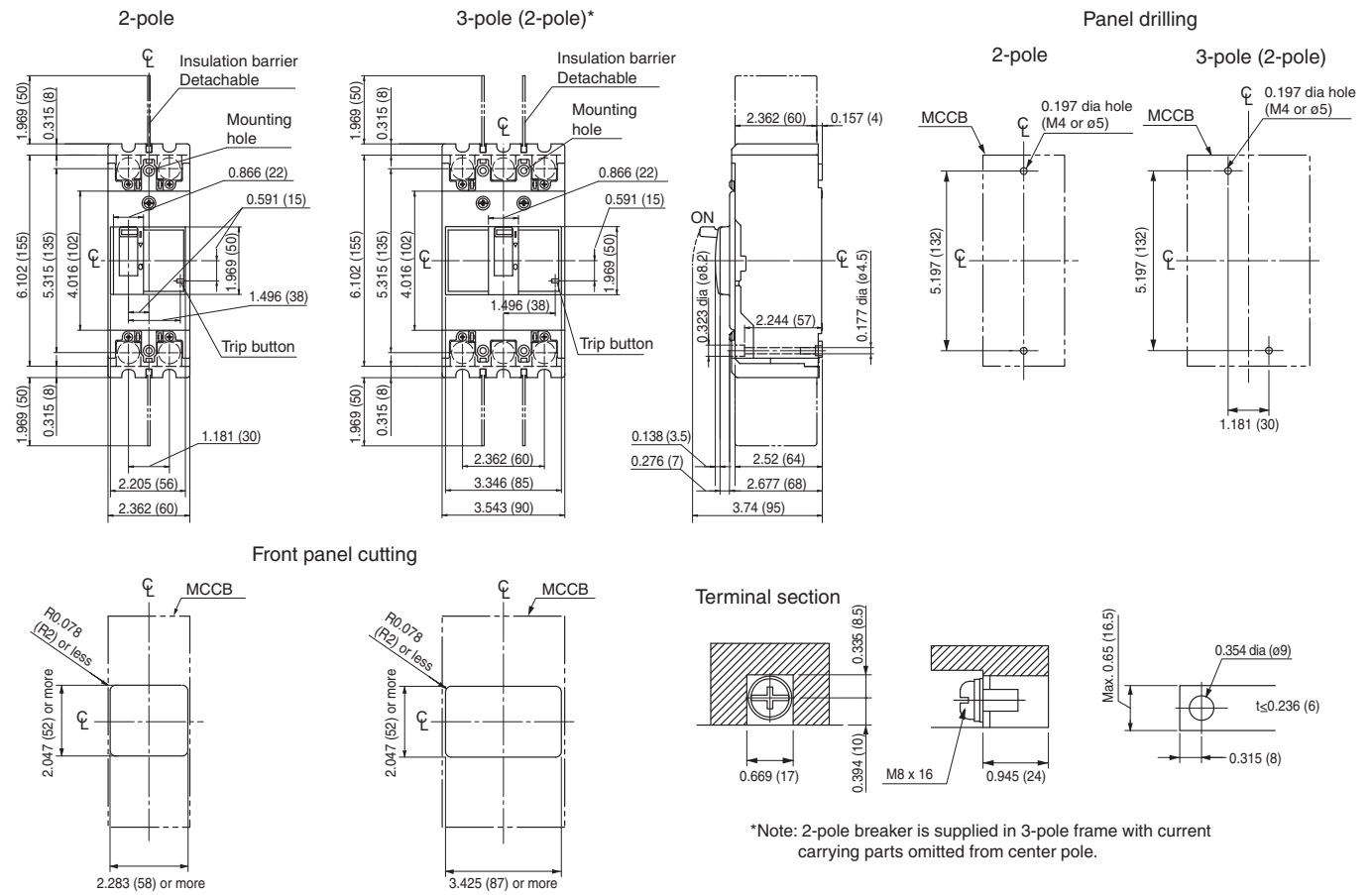


EA102CUL/*L1, EA103CUL/*L1, EG102CUL/*L1, EG103CUL/*L1

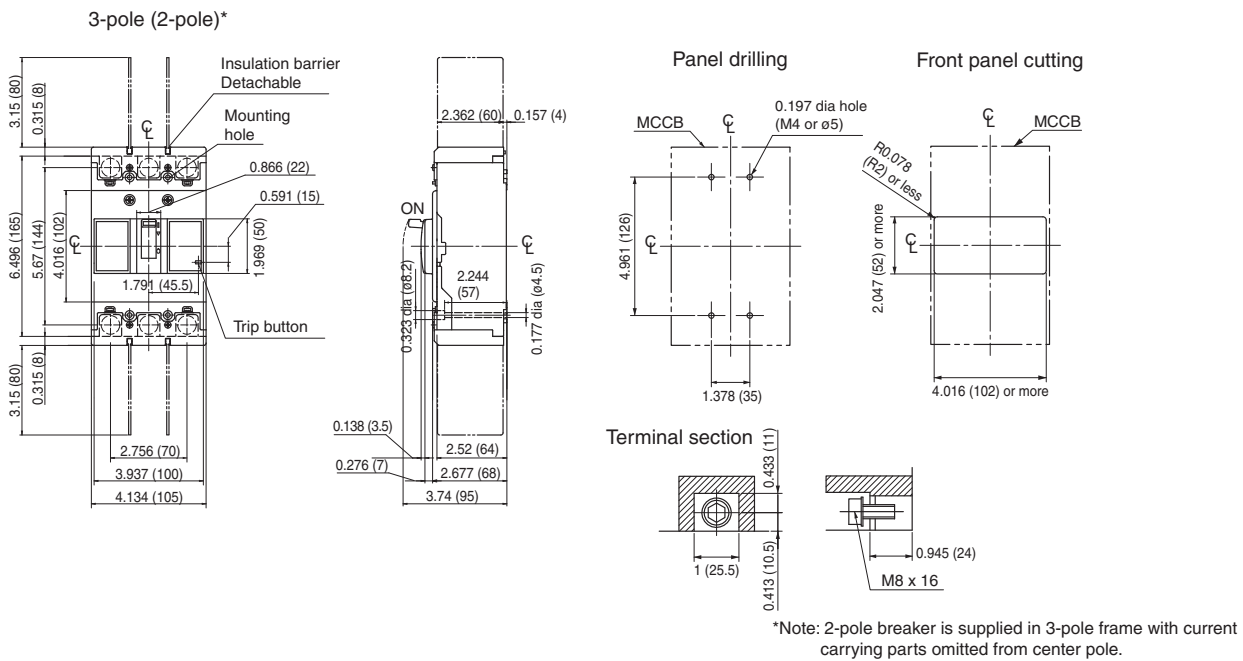


Dimensions: inch (mm)

BW125*U-2P, 3P

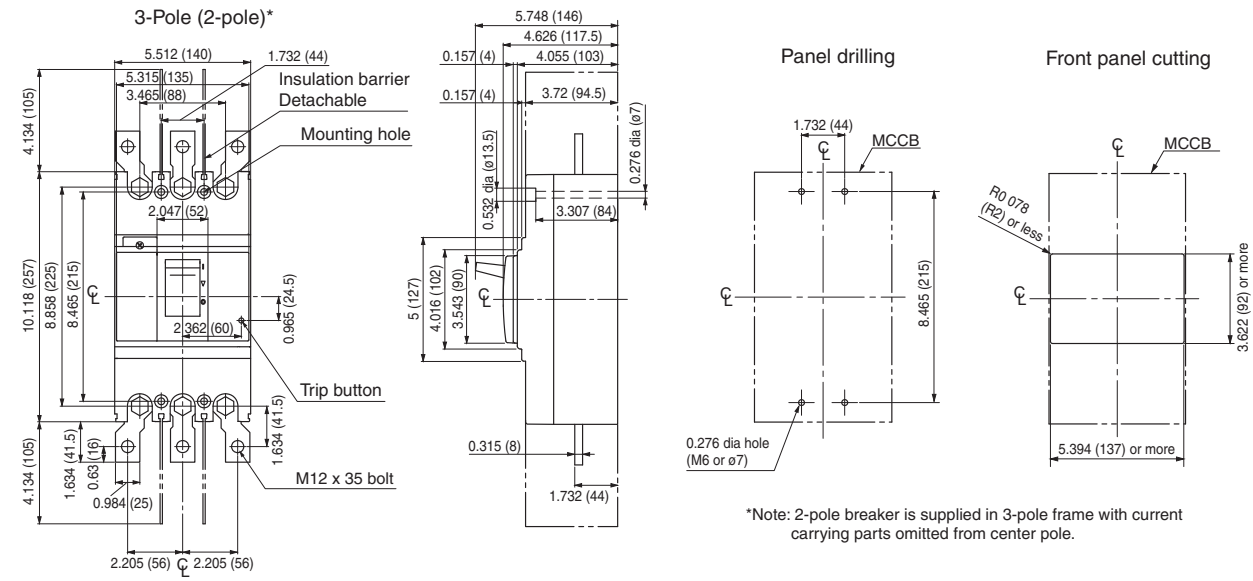


BW250*U-2P, 3P

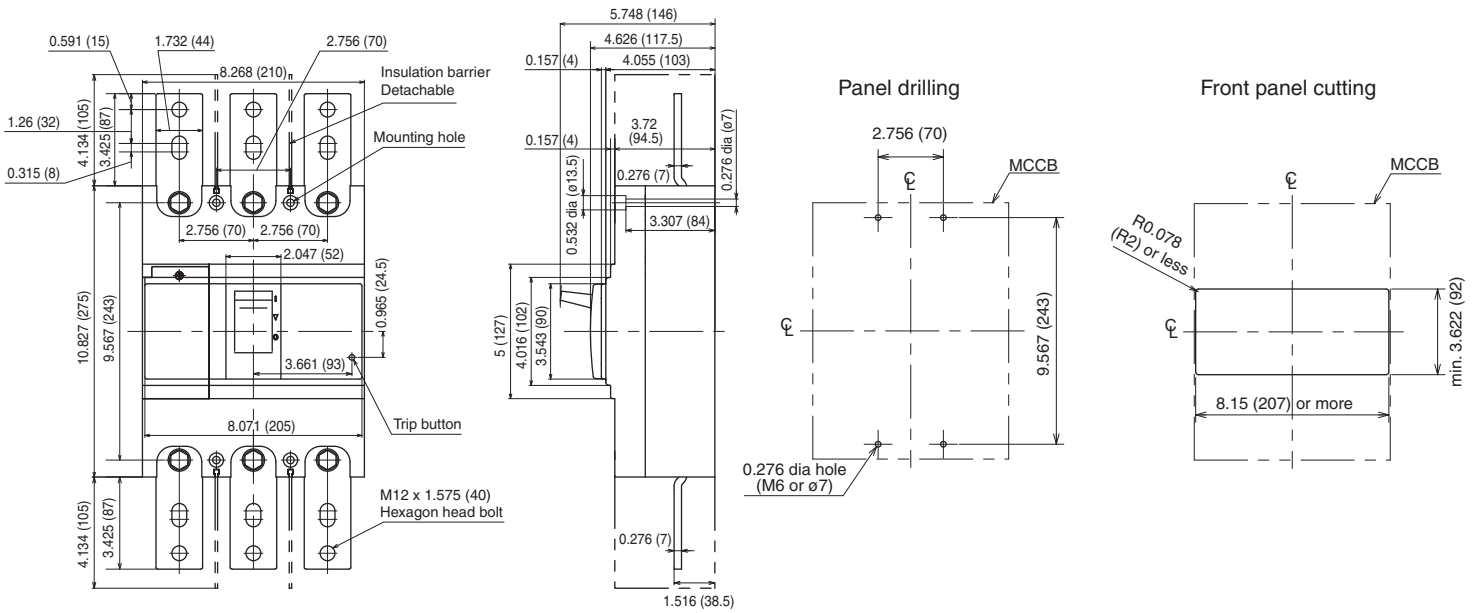


Dimensions: inch (mm)

BW400*U-2P, 3P

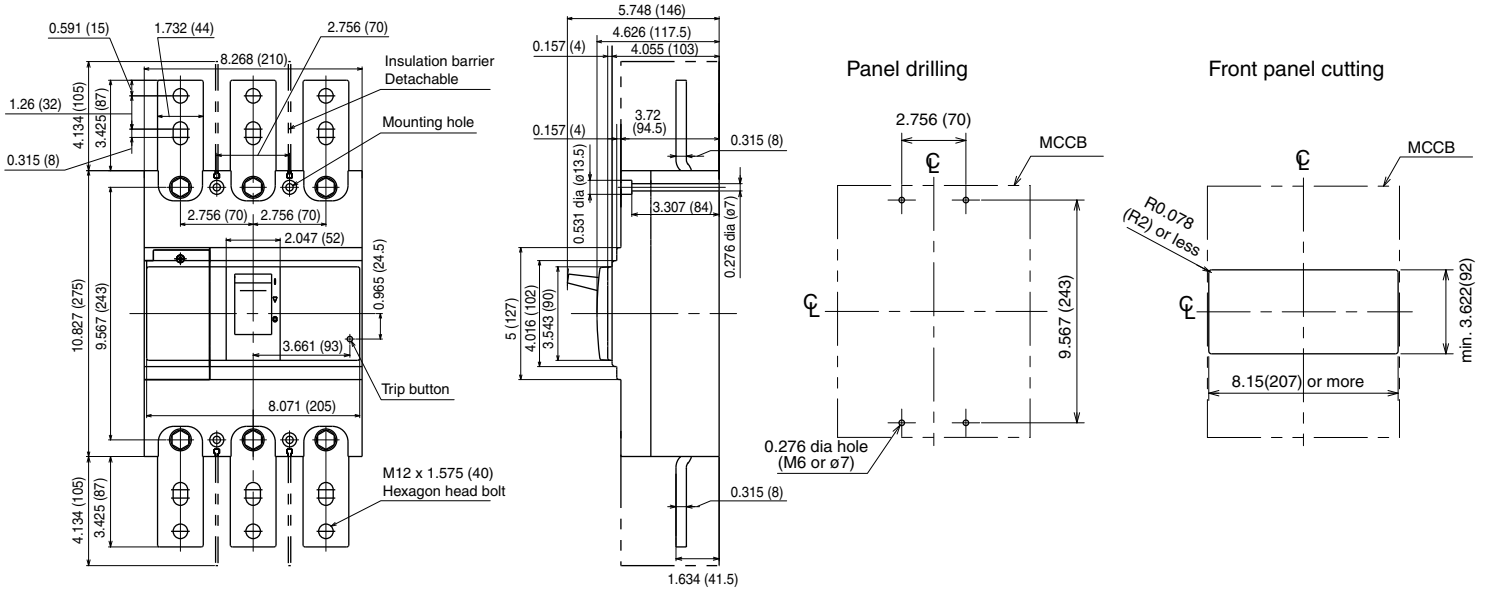


BW630*U-3P

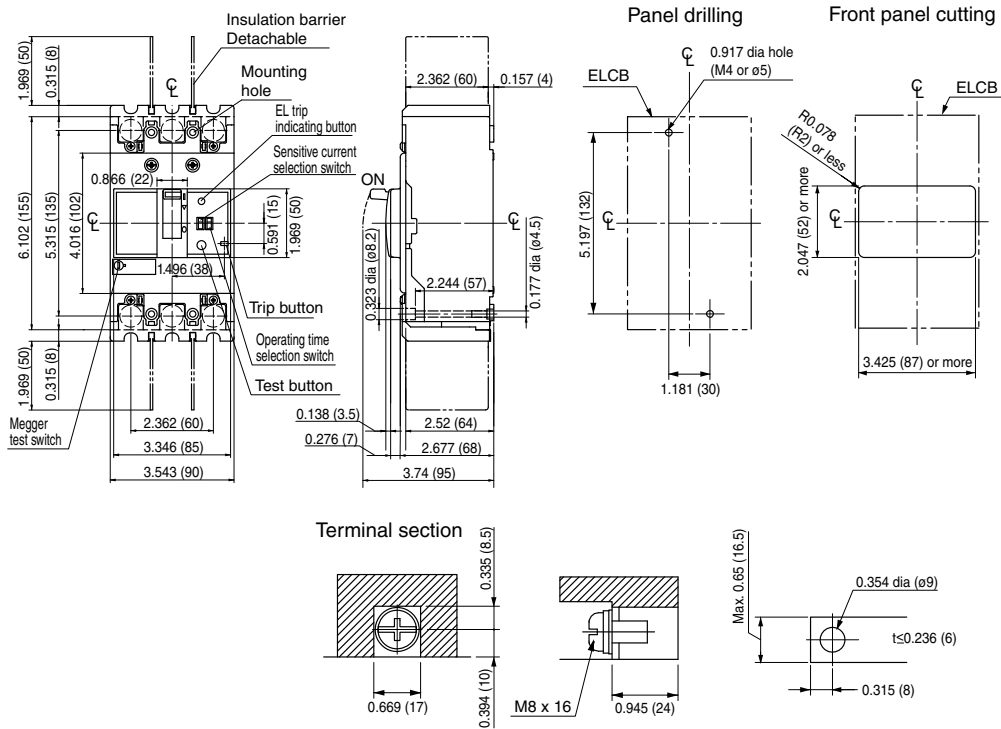


Dimensions: inch (mm)

BW800*U-3P

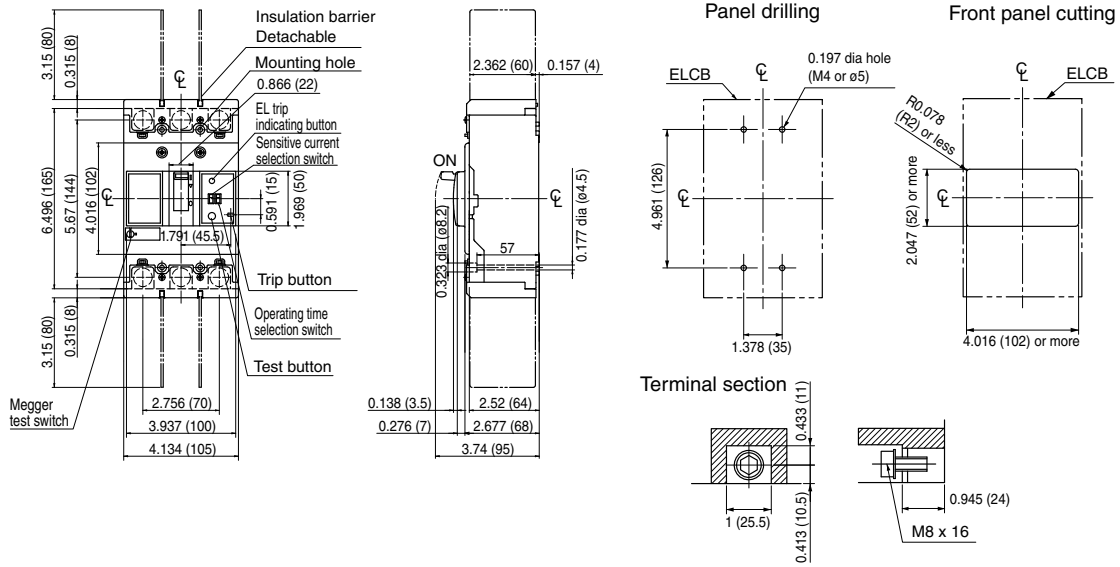


EW125*U-3P

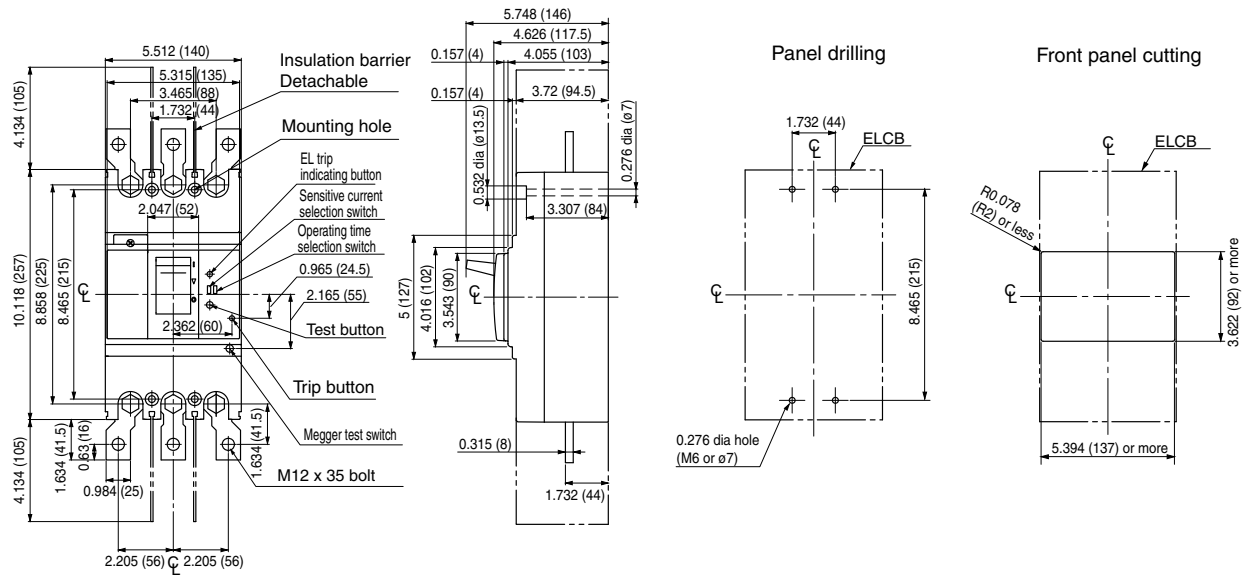


Dimensions: inch (mm)

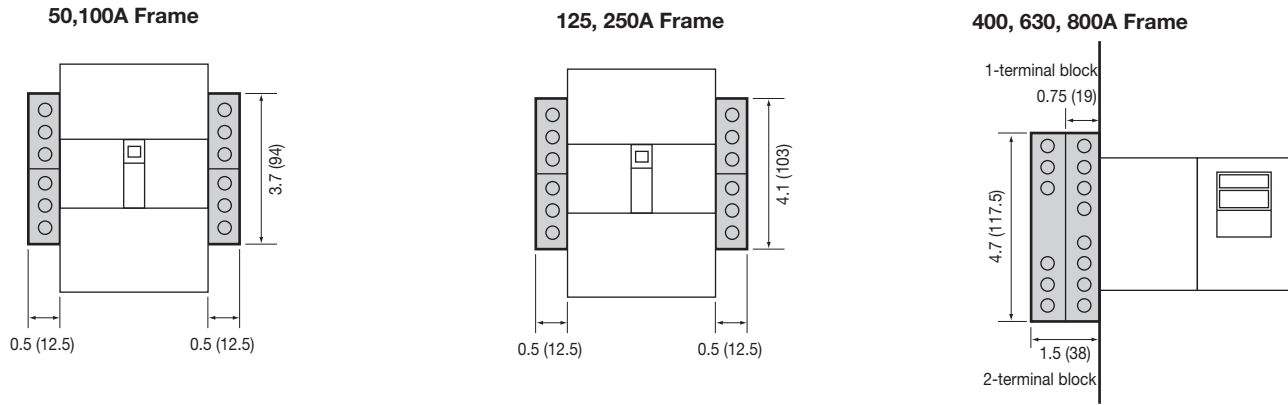
EW250°U-3P



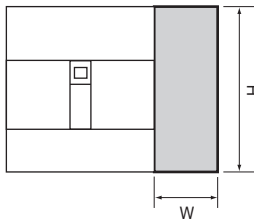
EW400°U-3P



Dimensions of Terminal Blocks for Internal Accessories: inch (mm)

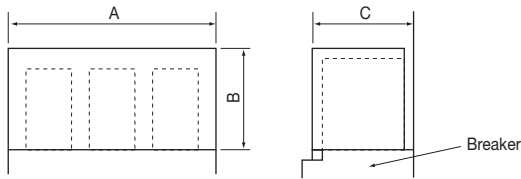


Dimensions of Undervoltage/Shunt trip device 50 and 100AF Only



Breakers	W x H
SA52RCUL, EA102CUL	1.0 (25) x 3.94 (100)
SA53RCUL, EA103CUL SG53RCUL, EG102CUL, EG103CUL	1.0 (25) x 3.94 (100)

Dimensions of Terminal Covers: inch (mm)



Type			Dimensions: Inch(mm)			Applicable Breakers
Black	Transparent	Gray-white	A	B	C	
BU6TS10C2U (Short)	-	-	1.969 (50)	0.386 (9.8)	2.106 (53.5)	SA52RCUL, EA102CUL
BU6TB10C2U (Long)			1.969 (50)	1.575 (40)	2.106 (53.5)	
BU6TS10C3U (Short)	-	-	2.953 (75)	0.386 (9.8)	2.106 (53.5)	SA53RCUL, EA103CUL SG53RCUL, EG102CUL, EG103CUL
BU6TB10C3U (Long)			2.953 (75)	1.575 (40)	2.106 (53.5)	
-	BW9BTCA-S2 (Short)	BW9BTCA-S2W (Short)	2.362 (60)	0.315 (8)	2.618 (66.5)	BW125JAGU-2P
-	BW9BTCA-L2 (Long)	BW9BTCA-L2W (Long)	2.362 (60)	1.575 (40)	2.618 (66.5)	
-	BW9BTCA-S3 (Short)	BW9BTCA-S3W (Short)	3.543 (90)	0.315 (8)	2.618 (66.5)	BW125JAGU-3P BW125RAGU-2P, BW125RAGU-3P EW125*U-3P
-	BW9BTCA-L3 (Long)	BW9BTCA-L3W (Long)	3.543 (90)	1.575 (40)	2.618 (66.5)	
-	BW9BTGA-S3 (Short)	BW9BTGA-S3W (Short)	4.134 (105)	0.315 (8)	2.618 (66.5)	BW250*U-2P, BW250*U-3P EW250*U-3P
-	BW9BTGA-L3 (Long)	BW9BTGA-L3W (Long)	4.134 (105)	1.969 (50)	2.618 (66.5)	
-	BW9BTHA-S3 (Short)	BW9BTHA-S3W (Short)	5.512 (140)	2.559 (65)	3.858 (98)	BW400*U-2P, BW400*U-3P EW400*U-3P
-	BW9BTHA-L3 (Long)	BW9BTHA-L3W (Long)	6.772 (172)	4.331 (110)	3.858 (98)	
-	BW9BTJA-L3 (Long)	BW9BTJA-L3W (Long)	8.268 (210)	6.102 (155)	3.858 (98)	BW630*U-3P BW800*U-3P

Internal Accessories for 50, 100AF (Alpha-TWIN)

Auxiliary switches and alarm switches

Lead wire type		SA5*RCUL, SG53RCUL, EA10*CUL, EG10*CUL	
		Left side	Right side
Aux	W	BZ6WL10CU*1	BZ6WR10CU
Aux low current	WD	BZ6WDL10CU*1	BZ6WDR10CU
Alarm	K	BZ6KL10CU*1	BZ6KR10CU
Alarm low current	KD	BZ6KDL10CU*1	BZ6KDR10CU
Aux & Alarm	WK	BZ6WKL10CU*1	BZ6WKR10CU
Aux & Alarm low current	WDKD	BZ6WDKDL10CU*1	BZ6WDKDR10CU

*1 for 3 pole type only

With terminal block type		SA5*RCUL, SG53RCUL, EA10*CUL, EG10*CUL	
		Left side	Right side
Aux	W	BZ6WL10CAU*1	BZ6WR10CAU
Aux low current	WD	BZ6WDL10CAU*1	BZ6WDR10CAU
Alarm	K	BZ6KL10CAU*1	BZ6KR10CAU
Alarm low current	KD	BZ6KDL10CAU*1	BZ6KDR10CAU
Aux & Alarm	WK	BZ6WKL10CAU*1	BZ6WKR10CAU
Aux & Alarm low current	WDKD	BZ6WDKDL10CAU*1	BZ6WDKDR10CAU

*1 for 3 pole type only

Rating

Standard; Aux, Alarm

Breaker type	SA5*RCUL, SG53RCUL, EA10*CUL, EG10*CUL	Minimum load
	Operating voltage	
120V AC	3.6	5V DC 160mA 30V DC 30mA
240V AC	1.8	
125V DC	0.55	
250V DC	0.27	

For low current; Aux, Alarm

Breaker type	SA5*RCUL, SG5*RCUL, EA10*CUL, EG103CUL	Minimum load
	Operating voltage	
30V DC	0.1	5V DC 1mA 30V DC 1mA

Operation

Type of switch	Condition of MCCB		
	ON	OFF	TRIP
Auxiliary switch (W)			
Alarm switch (K)			

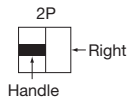
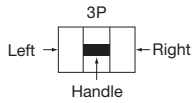
Shunt trip devices

Breaker type	Operating voltage	Code	Part number		Spec		
			Lead wire type	With terminal block type	Input (VA)	Internal circuit	Time rating (ms)
SA52RCUL, SA53RCUL EA102CUL, EA103CUL	24VAC, 24VDC	FR	BZ6FR10CU	BZ6FR10CAU	150	Continuous with burnout prevention circuit	7-13
	100-120VAC 100-110VDC	FA	BZ6FA10CU	BZ6FA10CAU	150		
	200-240VAC	FK	BZ6FK10CU	BZ6FK0CAU	150		
	380-450VAC	FP	BZ6FP10CU	BZ6FP10CAU	200		
SG53RCUL EG102CUL, EG103CUL	100VAC 50Hz	F2	-	BZ6F210CAU	16	Continuous	7-13
	100-110VAC 60Hz						
	200VAC 50Hz 200-220VAC 60Hz	F7	-	BZ6F710CAU	16		
	400VAC 50Hz 400-440VAC 60Hz	F8	-	BZ6F810CAU	22		

Undervoltage trip devices

Breaker type	Operating voltage	Code	Part number		Spec	
			Lead wire type	With terminal block type	Input (VA)	Operating voltage
SA52RCUL, SA53RCUL EA102CUL, EA103CUL	100VAC 50Hz 100-110VAC 60Hz	R2	-	BZ6R210CAU	3	Tripping voltage: 70% to 35% of rated voltage
	200VAC 50Hz 200-220VAC 60Hz	RW	-	BZ6RW10CAU	3	
SG53RCUL EG102CUL, EG103CUL	400VAC 50Hz 400-440VAC 60Hz	R9	-	BZ6R910CAU	4	Closing voltage: 85% or more of rated voltage

Internal Accessory Combinations for 50, 100AF (Alpha-TWIN)



○ Auxiliary switch: W

□ Shunt trip: F

▤ Shunt trip: F (External mounting method)

● Alarm switch: K

■ Undervoltage trip: R

MCCB	S series	SA52RCUL	SA53RCUL
	E series	EA102CUL	EA103CUL
Pole		2	3
Auxiliary switch SPDT W			
Alarm switch SPDT K			
Shunt trip F			
Undervoltage trip R			
W2		N/A	
W+K			
W2+K		N/A	
K2		N/A	
W+K2		N/A	
W2+K2		N/A	
W+F		N/A	
W2+F		N/A	N/A
W+R			
W2+R		N/A	
K+F		N/A	
K+R			
W+K+F		N/A	
W+K+R			
K2+F		N/A	N/A
K2+R		N/A	
W2+K+F		N/A	N/A
W2+K+R		N/A	
W+K2+F		N/A	N/A
W+K2+R		N/A	
W2+K2+F		N/A	N/A
W2+K2+R		N/A	

ELCB	SG series	SG53RCUL
	EG series	EG102CUL EG103CUL
Pole		2, 3
Auxiliary switch SPDT W		
Alarm switch SPDT K		
Shunt trip F		
Undervoltage trip R		
W2		
W+K		
W2+K		
K2		
W+K2		
W2+K2		
W+F		
W+R		
W2+R		
K+F		
K+R		
K2+R		
W+K+F		
W+K+R		
W2+K+R		
W+K2+R		
W2+K2+R		

Internal Accessories for G-TWIN

125, 250AF

Breaker type: BW125, EW125, BW250, EW250

Accessory	Code	Part number		With terminal block type ^{*1}	Operating voltage
		Lead wire type			
		Left side	Right side		
Auxiliary switch	W	BW9W1SG0	BW9W1SG0-R	-	-
Auxiliary switch (low current)	1	BW9W1DG0	BW9W1DG0-R		
Alarm switch	K	BW9K1SG0	BW9K1SG0-R		
Alarm switch (low current)	8	BW9K1DG0	BW9K1DG0-R		
Auxiliary switch + Alarm switch	WK	BW9WKSG0	BW9WKSG0-R		
Auxiliary switch + Alarm switch (low current)	18	BW9WKDG0	BW9WKDG0-R		
Earth alarm switch ^{*2}	L	-	BW9L1SG0		
Shunt trip device	FR	BW9FRG0	BW9FRG0		
	FS	BW9FSG0	BW9FSG0	48V AC/DC	
	FA	BW9FAG0	BW9FAG0	100-120V AC/100-110V DC	
	F1	BW9F1G0	BW9F1G0	120-130V AC	
	FK	BW9FKG0	BW9FKG0	200-240V AC/200-220V DC	
	FB	BW9FBG0	BW9FBG0	277V AC	
	FP	BW9FPG0	BW9FPG0	380-440V AC	
	FH	BW9FHG0	BW9FHG0	440-480V AC	
	FJ	BW9FJG0	BW9FJG0	500-550V AC	
	Undervoltage trip device	RR	BW9RGAR	-	24V DC
RS		BW9RGAS	-	48V DC	
RL		BW9RGAL	-	100-110V DC	
R5		BW9RGA5	-	125V DC	
RA		BW9RGAA	-	100-110V AC	
RT		BW9RGAT	-	110-130V AC	
RK		BW9RGAK	-	200-240V AC	
RB		BW9RGAB	-	277V AC	
RP		BW9RGAP	-	380-415V AC	
RH		BW9RGAH	-	440-480V AC	

*1 factory installed accessories

*2 for ELCB only

400, 630, 800AF

Breaker type: BW400, EW400, BW630, BW800

Accessory	Code	Part number		With terminal block type ^{*1}	Operating voltage
		Lead wire type			
		Left side	Right side		
Auxiliary switch x 1	W	BW9W1SHA		-	-
Auxiliary switch x 2	V	BW9W2SHA			
Auxiliary switch (low current) x 1	1	BW9W1DHA			
Auxiliary switch (low current) x 2	2	BW9W2DHA			
Alarm switch x 1	K	BW9K1SHA			
Alarm switch x 2	J	BW9K2SHA			
Alarm switch (low current) x 1	8	BW9K1DHA			
Alarm switch (low current) x 2	9	BW9K2DHA			
Shunt trip device	FR	BW9FHA-R			
	FA	BW9FHA-A		100-240V AC/100-220V DC	
	FB	BW9FHA-B		277V AC	
	FP	BW9FHA-P		380-550V AC	
Undervoltage trip device	RR	BW9RHA-R		24V AC/DC	
	RS	BW9RHA-S		48V AC/DC	
	RA	BW9RHA-A		100-110 AC/DC	
	R1	BW9RHA-1		120-130V AC/125V DC	
	RK	BW9RHA-K		200-240V AC/200-220V DC	
	RB	BW9RHA-B		277V AC	
	RP	BW9RHA-P		380-480V AC	

*1 factory installed accessories

Internal Accessories for G-TWIN

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

Accessory	Handle position		
	ON	OFF	Trip
Auxiliary switch			
Alarm switch			

Note: Wire ring mark indication
 () Code of low current type

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

Breaker type	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, BW250 BW400 BW630 BW800 EW125, EW250 EW400	5	24	5	5	24	4	3	5V DC 160mA
		48	5	5	48	2.5	1	
		125	5	3	125	0.4	0.4	30V DC 30mA
		250	3	2	250	0.2	0.2	

Low current type

Breaker type	Rated thermal current (A)	Make/break current (A)				Minimum load current
		AC		DC		
		Voltage (V)	Res. load	Voltage (V)	Res. load	
BW125, BW250 BW400 BW630 BW800 EW125, EW250 EW400	0.1	30	0.1	30	0.1	5V DC 1mA

Internal Accessories for G-TWIN

Rating of shunt trip (F)

Breaker type	AC		DC		Time rating of coil	Opening time (ms)
	V	VA	V	W		
BW125, BW250 EW125, EW250	24	50	24	50	Continuous (With 1NO contact to prevent coil burn-out)	13-21
	48	50	48	50		
	100-120	50	100-110	50		
	120-130	50	–	–		
	200-240	50	200-220	50		
	277	50	–	–		
	380-440	50	–	–		
	440-480	50	–	–		
BW400, BW630, BW800 EW400	24-48	2	24-48	2	Continuous	8-20
	100-240	3	100-220	3		
	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)

Breaker type	AC		DC		Code
	V	VA	V	W	
BW125 *1	–	–	24	5	RR
BW250 *1	–	–	48	5	RS
EW125 *1	–	–	100-110	5	RL
EW250 *1	–	–	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
EW400 *2	48	2	48	2	RS
BW630 *2	100-110	3	100-110	3	RA
BW800 *2	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.

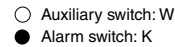
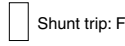
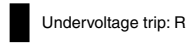
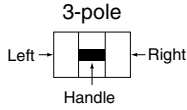
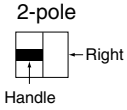
Lead wire specification

Wire size: AWG20 (0.5mm²)

Wire length: 19.69 inch (500mm)

Internal Accessory Combinations for G-TWIN MCCB

Available configurations

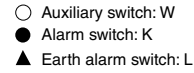
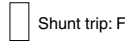
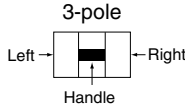
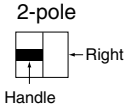



































MCCB	BW125JAGU-2P	BW125 BW250 (Except for BW125JAGU-2P)	BW400 BW630 BW800
Pole	2	2, 3	2, 3
Auxiliary switch SPDT: W (1)			
Alarm switch SPDT: K (8)			
Shunt trip: F			
Undervoltage trip: R			
W+K (1+8)			
Auxiliary switch 2PDT: V (2)			
Alarm switch 2PDT: J (9)			
V+K (2+8)			
W+J (1+9)			
V+J (2+9)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

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

Internal Accessory Combinations for G-TWIN ELCB

Available configurations



ELCB	EW125 EW250	EW400
Pole	3	3
Auxiliary switch SPDT: W (1)		
Alarm switch SPDT: K (8)		
Shunt trip: F		
Undervoltage trip: R		
W+K (1+8)		
Auxiliary switch 2PDT: V (2)		
Alarm switch 2PDT: J (9)		
V+K (2+8)		
W+J (1+9)		
V+J (2+9)		
W+F (1+F)		
W+R (1+R)		
K+F (8+F)		
K+R (8+R)		
W+K+F (1+8+F)		
W+K+R (1+8+R)		
V+F (2+F)		
V+R (2+R)		
J+F (9+F)		
J+R (9+R)		
V+K+F (2+8+F)		
V+K+R (2+8+R)		
W+J+F (1+9+F)		
W+J+R (1+9+R)		
V+J+F (2+9+F)		
V+J+R (2+9+R)		
Earth alarm switch SPDT: L *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

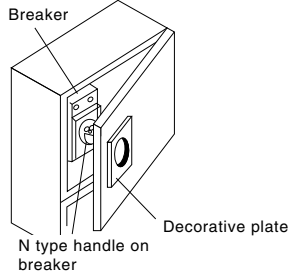
*1 Earth alarm switch can be mounted regardless of the combination of other accessories.

External Accessories

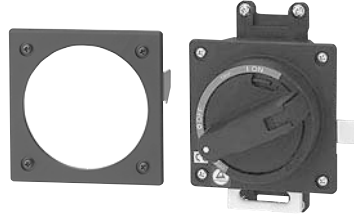
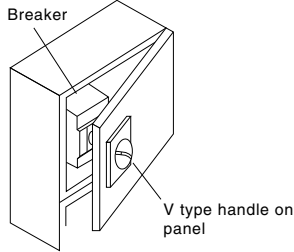
Operating handles

Conforms to EN60947-1 isolation function.
 Available for EN60204-1 power breaking device.
 Conforms to UL489(File No. E93289)

N type handles



V type handles



BW9N0CA
N type handle



BW9V0CA
V type handle

Part number		Applicable Breakers
V type (Door mount)	N type (Breaker mount)	
BZ6V10C	BZ6N10CP	SA52RCUL, SA53RCUL, EA102CUL, EA103CUL, SG53RCUL, EG102CUL, EG103CUL
BW9V0CA	BW9N0CA	BW125*, EW125
BW9V0GA	BW9N0GA	BW250, EW250
BW9V0HA	BW9N0HA	BW400, EW400
BW9V0JA	BW9N0JA	BW630, BW800

* Note that the external operating handle cannot be mounted to the BW125JAGU-2P. Use the BW125RAGU-2P.

Terminal covers

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.



Short type



Long type

Short type

Black	Transparent	Gray-White	Packing QTY	Applicable Breakers
BZ6TS10C2U	-	-	2	SA52RCUL, EA102CUL
BZ6TS10C3U	-	-	2	SA53RCUL, EA103CUL, SG53RCUL, EG10*CUL,
-	BW9BTCA-S2	BW9BTCA-S2W	2	BW125JAGU-2P
-	BW9BTCA-S3	BW9BTCA-S3W	2	BW125JAGU-3P, BW125RAGU-2P/3P, EW125*U-3P
-	BW9BTGA-S3	BW9BTGA-S3W	2	BW250*U-2P, BW250*U-3P, EW250*U3P
-	BW9BTHA-S3*1	BW9BTHA-S3W*1	2	BW400*U-2P, BW400*U-3P, EW400*U-3P

Notes: • Gray-white short type terminal covers are provided with breaker as standard for 125AF and 250AF G-TWIN breakers.

*1 Not available with Flat terminal.

Long type

Black	Transparent	Gray-White	Packing QTY	Applicable Breakers
BZ6TB10C2U	-	-	2	SA52RCUL, EA102CUL
BZ6TB10C3U	-	-	2	SA53RCUL, EA103CUL, SG53RCUL, EG10*CUL,
-	BW9BTCA-L2	BW9BTCA-L2W	2	BW125JAGU-2P
-	BW9BTCA-L3	BW9BTCA-L3W	2	BW125JAGU-3P, BW125RAGU-2P/3P, EW125*U-3P
-	BW9BTGA-L3	BW9BTGA-L3W	2	BW250*U-2P, BW250*U-3P, EW250*U-3P
-	BW9BTHA-L3	BW9BTHA-L3W	2	BW400*U-2P, BW400*U-3P, EW400*U-3P
-	BW9BTJA-L3	BW9BTJA-L3W	2	BW630*U-3P, BW800*U-3P

External Accessories

Insulation barriers

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.



Insulation barriers		Applicable Breakers
Type	Packing quantity	
BZ6B10C	4	SA5*RCUL, EA10*CUL, SG53RUCL, EG10*CUL*1
BW9BPCA	4	BW125, EW125*2
BW9BPGA	4	BW250, EW250*2
B-43A	4	BW400, EW400, BW630, BW800*2

Note:*1 Insulation Barriers are required only for flat terminal type.

*2 Insulation Barriers for line side and load side are provided with the Breaker.

Terminal kits (Field installable)

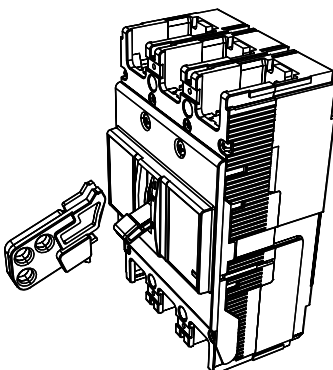
Flat Terminal Kits		Lug Terminal Kits		Applicable Breakers
Type	Packing quantity	Type	Packing quantity	
BZ-SU20B	3	-	-	SA52RCUL, SA53RCUL, SG53RCUL
BZ-SU25B	3	-	-	EA102CUL, EA103CUL, EG102CUL, EG103CUL
BW9SS0CA-3 GLOBAL	3	BW9SL0CA-3 GLOBAL	3	BW125, EW125
BZ-S50B-2253 GLOBAL	3	BW9SL0GA-3 GLOBAL	3	BW250, EW250 (125A-175A)
		BW9SL1GA-3 GLOBAL	3	BW250, EW250 (200A-250A)

Padlocking device and Handle locking cover

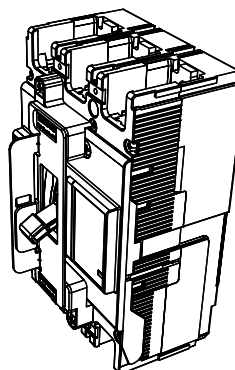
Applicable Breakers	Padlocking device		Handle locking cover (Q1: Cap type)
	Q1: Cap type	Q2: Plate type	
SA5*RCUL, EA10*CUL, SG53RCUL, EG10*CUL	Not available	Not available	BZ6L10C
BW125, EW125	BW9Q1CA	BW9Q2CA	Not available
BW250, EW250	BW9Q1CA	BW9Q2GA	Not available
BW400, EW400	BW9QNHA	BW9Q2HA	Not available
BW630, BW800	BW9QNHA	BW9Q2JA	Not available

Padlocking device for BW and EW

• Cap type Q1, QN

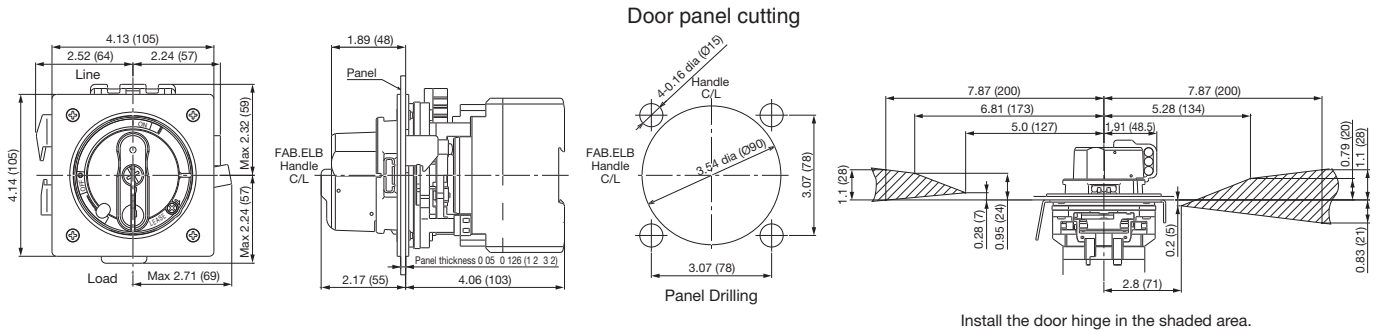


• Plate type Q2



Operating Handles Dimensions: inch (mm)

50A,100A Frame N type handle (BZ-NP-1C: dust proof packing, optional)

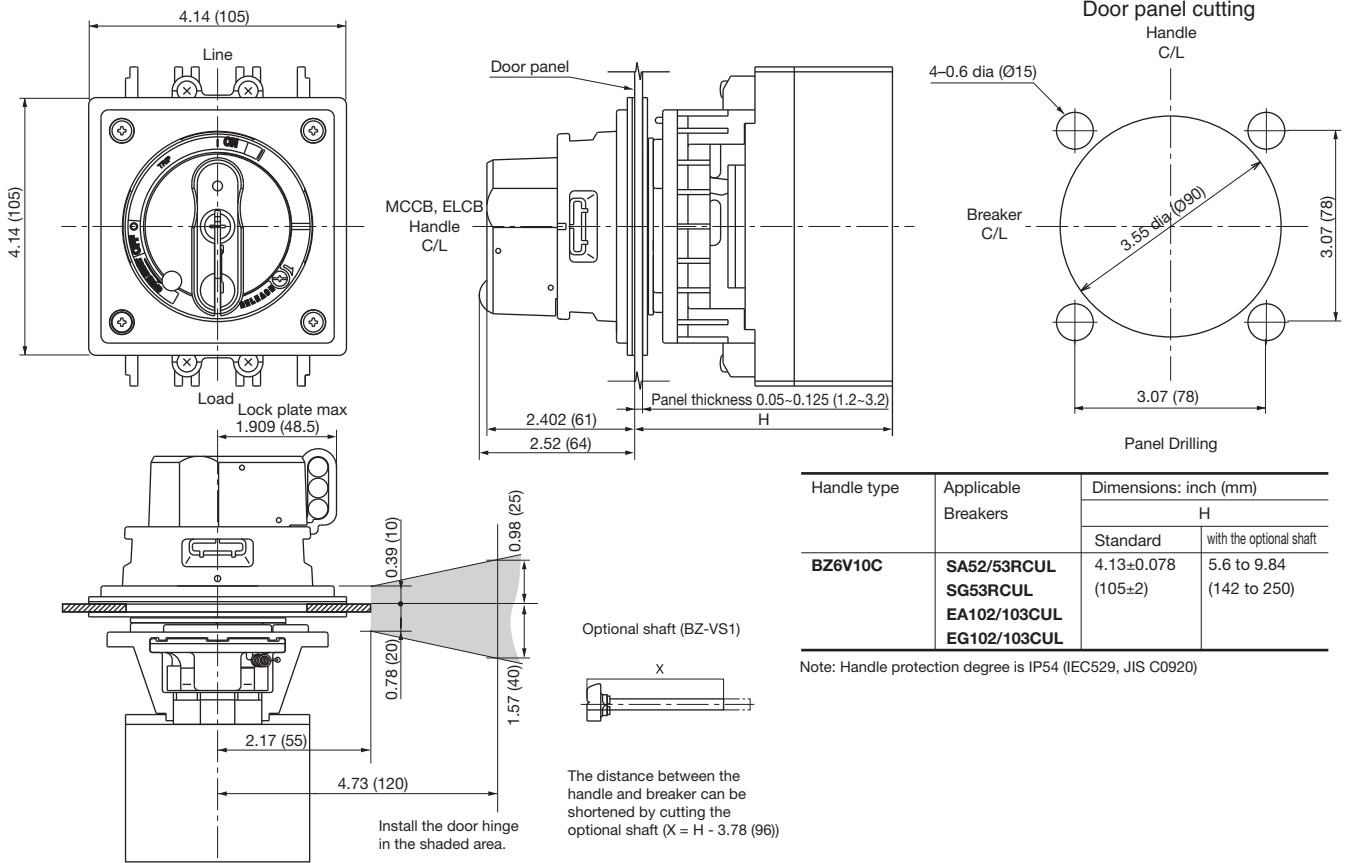


Install the door hinge in the shaded area.

Handle type	Applicable Breakers	Mounting screw
BZ6N10CP	SA52RCUL	#8-32X3 1/2 (M4X85)
	EA102CUL	
	SA53RCUL	
	EG102CUL	
	EG103CUL	

Note: When using a Dust-proof packing, handle protection structure is IP 50 (IEC 529, JIS C0920)

50A,100A Frame V type handle (BZ-VS1: optional shaft)



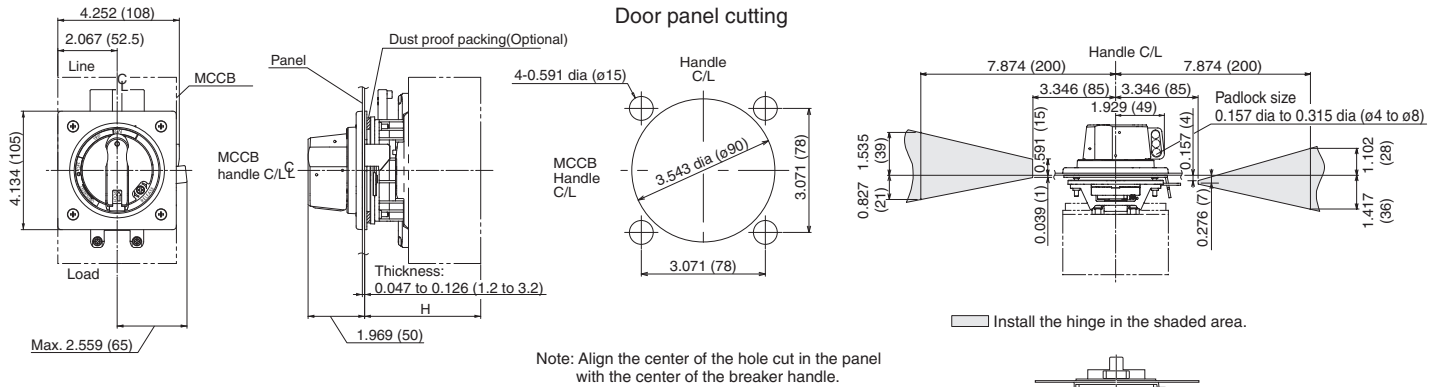
Handle type	Applicable Breakers	Dimensions: inch (mm)	
		H	
BZ6V10C	SA52/53RCUL SG53RCUL EA102/103CUL EG102/103CUL	Standard	with the optional shaft
		4.13±0.078 (105±2)	5.6 to 9.84 (142 to 250)

Note: Handle protection degree is IP54 (IEC529, JIS C0920)

Operating Handles Dimensions: inch (mm)

125A, 250A Frame N type handle

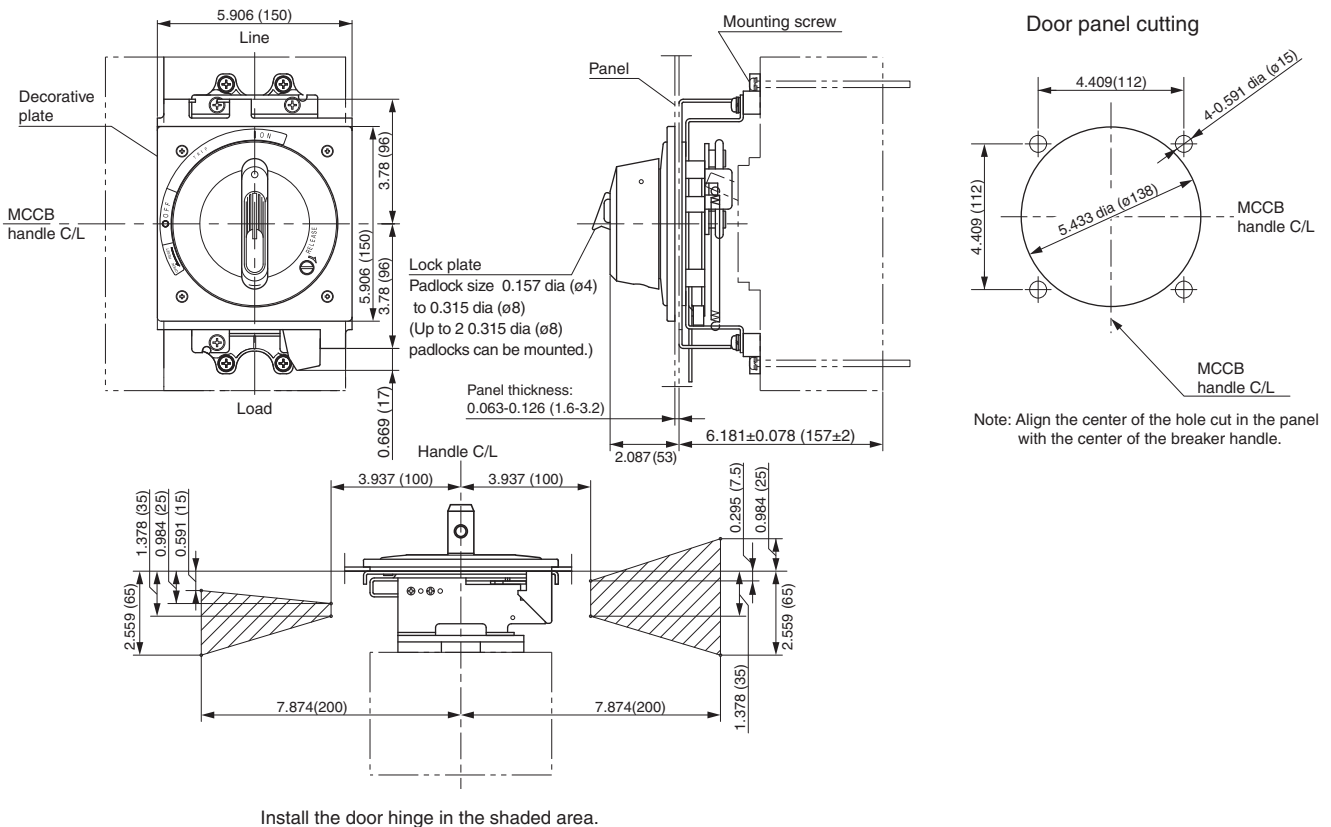
- BW9N0CA, BW9N0GA (BZ-NP-1C: dust proof packing, optional)



Breaker type	Handle type	Mounting screw	H: inch(mm)	Mass lb. (kg)
BW125	BW9N0CA	M4 x 3.35(85)	4.055±0.078 (103±2)	1.23 (0.56)
EW125				
BW250	BW9N0GA	M4 x 3.35(85)	4.055±0.078 (103±2)	1.23 (0.56)
EW250				

400A, 630A, 800A Frame N type handle

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

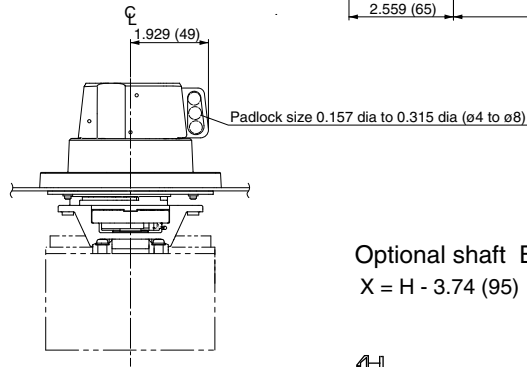
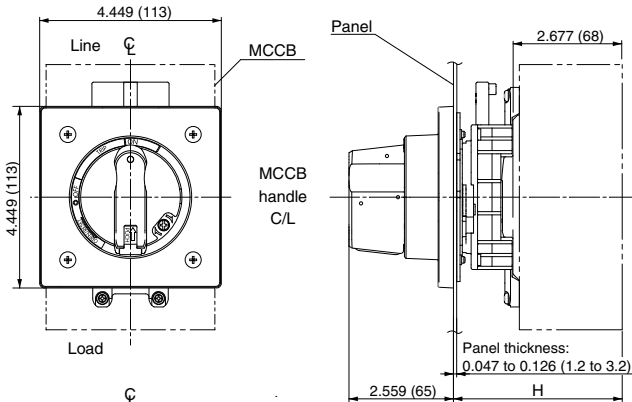


Breaker type	Handle type	Mounting screw	Mass lb. (kg)
BW400, EW400	BW9N0HA	M6 x 4.33 (110)	4.19 (1.9)
BW630, BW800	BW9N0JA	M6 x 4.33 (110)	4.19 (1.9)

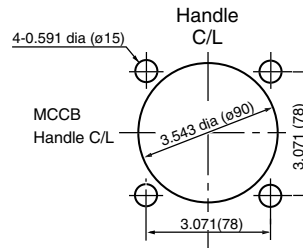
Operating Handles Dimensions: inch (mm)

125A, 250A Frame V type handle

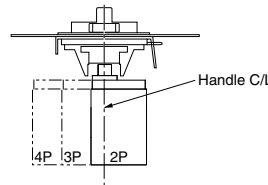
- BW9V0CA, BW9V0GA (BW9VSG0: optional shaft)



Door panel cutting

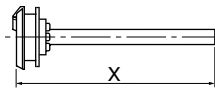


Note: Align the center of the hole cut in the panel with the center of the breaker handle.

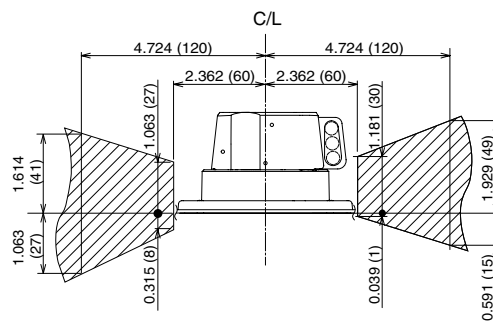


Optional shaft BW9VSG0

$$X = H - 3.74 (95)$$



Door hinge installation area

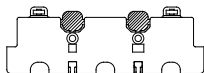


Install the door hinge in the shaded area.

Breaker type	Handle type	Standard type H: inch(mm)	With the optional shaft (X=6.063(154))		Mounting screw	Mass lb. (kg)
			H: inch(mm)	Area in which the hinge with H can be installed		
BW125, EW125*1	BW9V0CA	4.134±0.078 (105±2)	9.843±0.078 (250±2)	5.512 to 9.843 (140 to 250)	M4 x 3.35(85)	1.48 (0.67)
BW250, BW250*1	BW9V0GA	4.134±0.078 (105±2)	9.843±0.078 (250±2)	5.512 to 9.843 (140 to 250)	M4 x 3.35(85)	1.48 (0.67)

Notes:

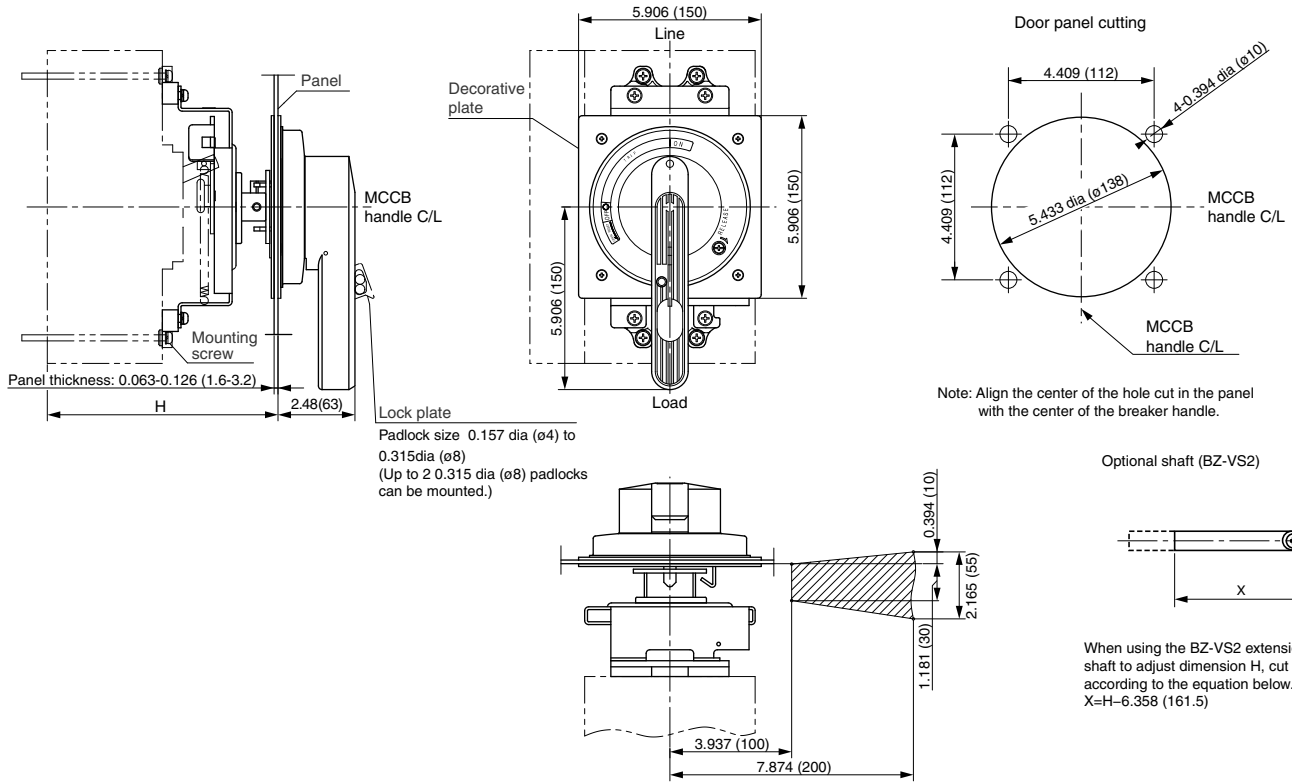
- The handle does not have any means to hold the door. Provide it separately.
- Not available for side mounting.
- *1 Note that the external operating handle cannot be mounted to the BW125JAGU-2P. Use the BW125RAGU-2P.
- *2 When mounting a terminal cover, cut away part of it because it hides the mounting screws for the breaker.
Remove the shaded parts in the figure below.



Operating Handles Dimensions: inch (mm)

400A, 630A, 800A Frame V type handle

- BW9V0HA, BW9V0JA (BZ-VS2: optional shaft)



Install the door hinge in the shaded area.

Breaker type	Handle type	Standard type H: inch(mm)	With the optional shaft (X=6.063 (154))		Mass lb. (kg)
			H: inch(mm)	Area in which the hinge with H can be installed	
BW400, EW400	BW9V0HA	7.48±0.078 (190±2)	9.843±0.078 (250±2)	7.953 to 9.843 (202 to 250)	4.85 (2.2)
BW630, BW800	BW9V0JA				

- Note:
- The handle cannot hold the door
 - Not available for side mounting

Wiring

1. Connecting Precautions

- When connecting the wires, follow the instruction of NEC (National Electric Code, USA) or CEC (Canadian Electrical code Part 1, Canada).
- For connecting, use copper wire rated for 75°C. It is recommended to use UL or CSA approved wires.
- Keep the connection of the wire sufficiently tight, because a very large electromagnetic force will be generated, when the short circuit current is applied.
- Perform additional tightening of the terminal screws periodically.

2. Terminal Construction

	Screw Terminals	Flat Terminals	Lug Terminals
50A, 100A Frame	○	○	—
125A, 250A Frame	○	○	○
400A, 630A, 800A Frame	—	○	○

○ : Available — : Not available

3. Allowable wire spec for Lug Terminals

Number of strands connecting wires

Wire size AWG or MCM (mm ²)	Number of wires strands
14 – 2 (2.1 – 33.6)	7
1 – 4/0 (42.4 – 107.2)	19
250 – 500 (127 – 250)	37

(mm²) Values are those converted from AWG or MCM size

⚠ Caution

- Two wires can not be connected to the lug terminal at once.
- Follow the number of strands of wire indicated in the table.
- Multiconductor wire can not be connected.
- Do not solder the end of the wire.

Max Wire Sizes and Tightening Torque

Type	Rated current (A)	Wire size AWG or MCM (mm ²)	Tightening torque			Applicable ring (crimp) terminal*1					
			Screw terminal	Flat terminal	Lug terminal	JST (UL file No.E42024)	NICHIFU (UL file No.E44245)	DST (UL file No.E74917)			
SA53RCUL SG53RCUL	3	14 AWG (2.1mm ²)	20-25 lb.-In (2.3-2.8 N-m)	31-40 lb.-in. (3.5-4.5 N-m)	-	R2-5	-	-			
	5	14 AWG (2.1mm ²)									
	10	14 AWG (2.1mm ²)									
	15	14 AWG (2.1mm ²)							R5.5-5		
	20	12 AWG (3.3mm ²)									
	30	10 AWG (5.3mm ²)									
	40	8 AWG (8.4mm ²)							R8-5		
50	6 AWG (13.3mm ²)										
EA10°CUL EG10°CUL	60	6 AWG (13.3mm ²)	49-66 lb.-In (5.5-7.5 N-m)	71-89 lb.-In (8-10 N-m)		R14-8					
	75	4 AWG (21.1mm ²)				22-S8					
	100	3 AWG (26.7mm ²)				38-S8					
BW125 EW125	15	14 AWG (2.1mm ²)	51 lb. - In. (5.8 N-m)	80 lb. - In. (9 N-m)	51 lb. - In. (5.8 N-m)	R2-8	R2-8	2-8, 2-B8			
	20	12 AWG (3.3mm ²)				5.5-S8, R5.5-8	R3.5-8, R5.5-8	3.5-8, 5.5-8			
	30	10 AWG (5.3mm ²)					R5.5-8	5.5-8			
	40	8 AWG (8.4mm ²)					8-8NS, R8-8	R8-8	8-8		
	50	8 AWG (8.4mm ²)									
	60	8 AWG (8.4mm ²)					14-8NS, 14-S8, R14-8	R14-8S, R14-8	14-S8, 14-8		
	70	4 AWG (21.1mm ²)					22-S8, R22-8, CB22-S8	R22-8S, R22-8, CB22-8S	22-S8, 22-8, CB22-8		
	75	4 AWG (21.1mm ²)									
	80	4 AWG (21.1mm ²)									
	90	3 AWG (26.7mm ²)									
	100	3 AWG (26.7mm ²)						38-S8	R38-8S	38-S8	
	125	1 AWG (42.4mm ²)									
BW250 EW250	125	1 AWG (42.4mm ²)	93 lb. - In. (10.5 N-m)	80 lb. - In. (9 N-m)	204 lb. - In. (23 N-m)	38-S8, R38-8	R38-S, R38-8	38-S8, 38-8			
	150	1/0 AWG (53.5mm ²)				60-S8, R60-8	R60-8, CB60-8, CB60-8S	60-8, CB60-8			
	175	2/0 AWG (67.4mm ²)				70-8	R70-8	70-8			
	200	3/0 AWG (85.0mm ²)				CB80-S8	-	CB80-8			
	225	4/0 AWG (107.2mm ²)				CB100-S8	-	CB100-8			
250	250 MCM (127mm ²)	CB150-S8	CB150-B	CB150-8							
BW400 EW400	250	250 MCM (127mm ²)	-	398 lb. - In. (45 N-m)	385 lb. - In. (43.5 N-m)	150-12	R150-12	-			
	300	350 MCM (177mm ²)				180-12	R180-12	-			
	350	500 MCM (253mm ²)				325-12	R325-12S	-			
	400	3/0 AWGx2 (85.0mm ² x2)				282 lb. - In. (31.9 N-m)	R80-12	R80-2	-		
BW630	500	250-500MCM x2	-	416 lb. - In. (47.04 N-m)	275 lb. - In. (31.07 N-m)	R150-12	-	R150-12			
	600	250-500MCM x2				180-12	-	R180-12			
	630	500MCM x2				325-12	R325-12N	R325-12*			
BW800	700	250-500MCM x2	-	416 lb. - In. (47.04 N-m)	275 lb. - In. (31.07 N-m)	325-12	-	R325-12*			
	800	3/0 AWG-300MCMx2				-	-	-			

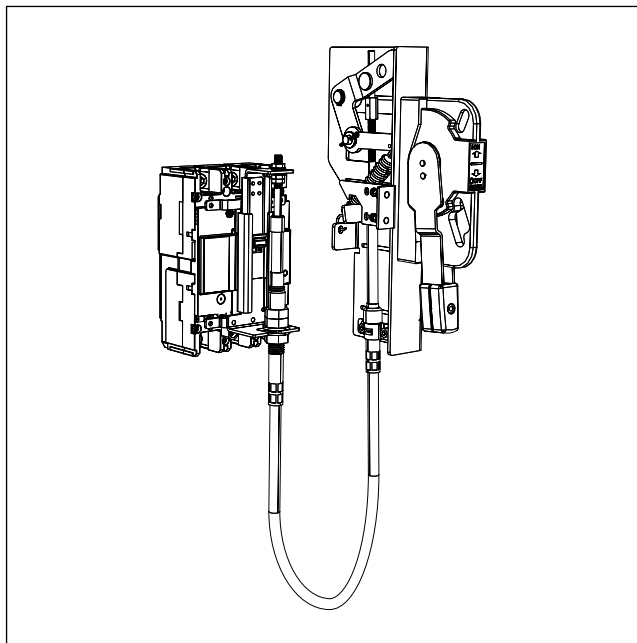
Notes: *1 Ring (Crimp) Terminal Manufacturer : JST=Japan Solderless Terminal MFG Co., Ltd. (<http://www.jst.com>)
 NICHIFU=Nichifu Terminal Co., Ltd. (america@nichifu.com)
 DST=Daido Solderless Terminal MFG Co., Ltd. (info@daido-tanshi.jp)

*2 167°F (75°C) Copper wire

Flange Disconnect Handle <F Type Handle>

Features

Flexible cable operation.
 Covering up to 400-amp frame size.
 Easy installation on circuit breakers.
 Complies with NEMA type 12, IP 54 protection degree.
 Accepts ANSI standard American padlock devices.
 Off lockable: 0.394 dia (ϕ 10) padlock device, Max 3 pieces.
 UL listed product. [UL489, File No. E93289]



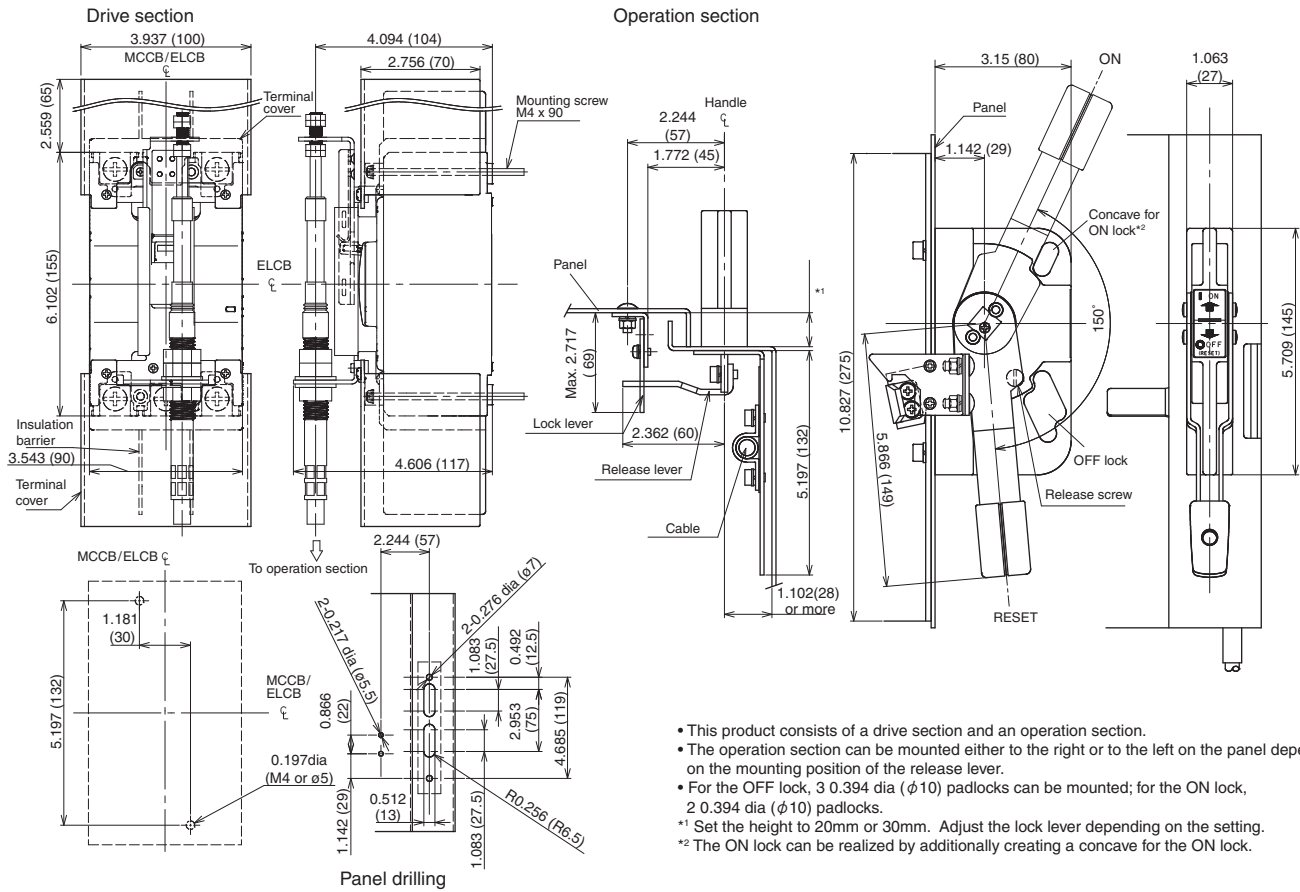
Specifications

Applicable breaker frame size		125 amp frame	250 amp frame	400 amp frame
Part numbers	Main unit	BW9F0CA	BW9F0GA	BW9F0HA
	Terminal cover	BW9FBTCA-L3	BW9FBTGA-L3	BW9FBTHA-L3
	Cable 59.06 inch (1.5m)	BW9FWCA-15A	BW9FWGA-15A	BW9FWHA-15A
	Cable 78.74 inch (2.0m)	BW9FWCA-20A	BW9FWGA-20A	BW9FWHA-20A
	Cable 118.11 inch (3.0m)	BW9FWCA-30A	BW9FWGA-30A	BW9FWHA-30A
Applicable breakers	MCCB	BW125JAGU BW125RAGU	BW250EAGU BW250JAGU BW250RAGU	BW400EAGU BW400SAGU BW400RAGU BW400HAGU
	ELCB	EW125JAGU EW125RAGU	EW250JAGU EW250RAGU	EW400SAGU EW400RAGU
Operating instructions		- Operating handle facing up, Breaker is in ON position. - Operating handle facing down, Breaker is in OFF position or is reset. - Panel door cannot be opened when in ON, OFF or Trip position. In order to open the door, the handle must be turned toward reset position. - Release screw is standard. If you want to open a panel door in ON position, please turn on the release screw using flat head screwdriver.		
Mechanical endurance (cycles)		10,000	8,000	6,000
Ambient temperature		14 to 140F (- 10 to 40°C)		
Relative humidity		less than 95% RH		
Protection		NEMA Type12 IP54 (IEC60529)		
Conforming standards		NFPA 79(2007), ANSI(Lockout), OSHA(1910.147, Lockout/tagout), UL489(cUL)		
Atmosphere		No excessive dust, smoke, corrosive gases, flammable gases, steam or salt.		

Flange Disconnect Handle <F Type Handle>

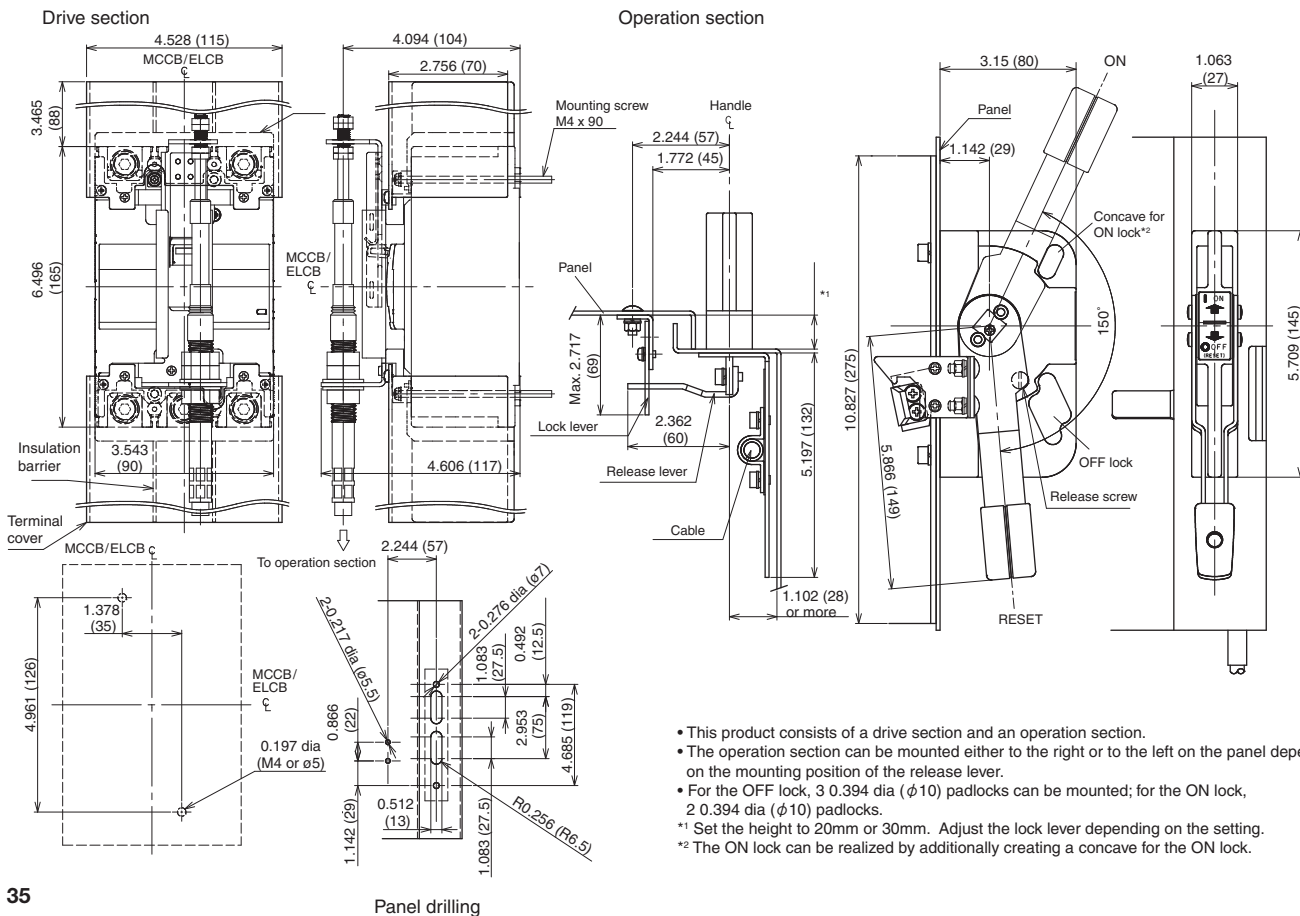
Dimensions: inch (mm)

• BW9F0CA



- 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 0.394 dia (φ10) padlocks can be mounted; for the ON lock, 2 0.394 dia (φ10) padlocks.
- *1 Set the height to 20mm or 30mm. 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



- 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 0.394 dia (φ10) padlocks can be mounted; for the ON lock, 2 0.394 dia (φ10) padlocks.
- *1 Set the height to 20mm or 30mm. Adjust the lock lever depending on the setting.
- *2 The ON lock can be realized by additionally creating a concave for the ON lock.

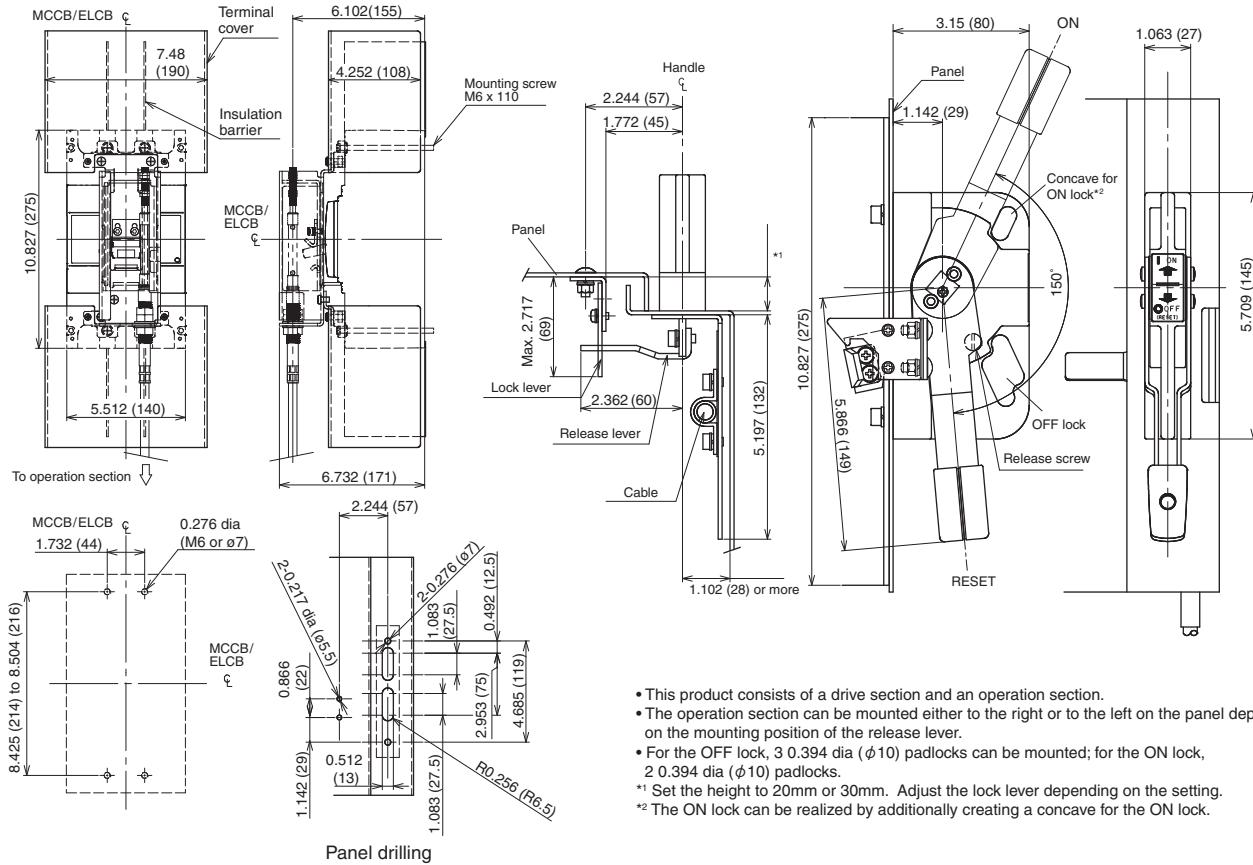
Flange Disconnect Handle <F Type Handle>

Dimensions: inch (mm)

• BW9F0HA

Drive section

Operation section



- This product consists of a drive section and an operation section.
- The operation section can be mounted either to the right or to the left on the panel depending on the mounting position of the release lever.
- For the OFF lock, 3 0.394 dia (ϕ 10) padlocks can be mounted; for the ON lock, 2 0.394 dia (ϕ 10) padlocks.
- *1 Set the height to 20mm or 30mm. 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*/ELCB	Handle (Main unit)	Cable		Terminal cover
		Type	Length: inch (m)	
BW125 EW125	BW9F0CA	BW9FWCA-15A	59.06 (1.5)	BW9FBTCA-L3
		BW9FWCA-20A	78.74 (2.0)	
		BW9FWCA-30A	118.11 (3.0)	
BW250 EW250	BW9F0GA	BW9FWGA-15A	59.06 (1.5)	BW9FBTGA-L3
		BW9FWGA-20A	78.74 (2.0)	
		BW9FWGA-30A	118.11 (3.0)	
BW400 EW400	BW9F0HA	BW9FWHA-15A	59.06 (1.5)	BW9FBTHA-L3
		BW9FWHA-20A	78.74 (2.0)	
		BW9FWHA-30A	118.11 (3.0)	

Note: *Not available for BW125JAGU-2P.

Discontinued Products Cross Charts

Discontinued Date: March / Sep, 2006

Series	Frame size		Molded Case Circuit Breakers		Earth Leakage Circuit Breakers		
			Discontinued Models	Replacement (UL489)	Discontinued Models	Replacement (UL489)	
E series	30AF	2 poles	EA32	SA52RCUL	EG32F	-	
		3 poles	EA33	SA53RCUL	EG33F	SG53RCUL	
	50AF	2 poles	EA52A	SA52RCUL	EG52F	-	
			EA52B	SA52RCUL	EGa52A	-	
		3 poles	EA53A	SA53RCUL	EG53F	SG53RCUL	
			EA53B	SA53RCUL	EG53B	SG53RCUL	
	60AF	2 poles	EA62B	EA102CUL	-	-	
		3 poles	EA63B	EA103CUL	EG63B	EG103CUL	
	100AF	2 poles	EA102B	EA102CUL	EG102B	EG102CUL	
			EA103F	EA103CUL	EG103F	EG103CUL	
3 poles		EA103B	EA103CUL	EG103B(D)	EG103CUL		
			EA103K	EA103CUL	EG103K	EG103CUL	
S series	30AF	2 poles	SA32B	SA52RCUL	-	-	
		3 poles	SA33B	SA53RCUL	SG33B	SG53RCUL	
	50AF	2 poles	SA52B	SA52RCUL	-	-	
			SA52R	SA52RCUL	-	-	
		3 poles	SA53B	SA53RCUL	SG53B	SG53RCUL	
			SA53R	SA53RCUL	SG53R	SG53RCUL	
	60AF	2 poles	SA62B	EA102CUL	-	-	
			SA62R	EA103CUL	-	-	
		3 poles	SA63B	EA103CUL	SG63B	EG103CUL	
				SA63R	EA103CUL	SG63R	EG103CUL
	100AF	2 poles	SA102B	BW125JAGU-2P	-	-	
			SA102R	BW125RAGU-2P	-	-	
		3 poles	SA103B(N)	BW125JAGU-3P	SG103B(D)	EW125JAGU-3P	
			SA103R(N)	BW125RAGU-3P	SG103R(D)	EW125RAGU-3P	
	225AF	2 poles	SA202B	BW250JAGU-2P	-	-	
			SA202R	BW250RAGU-2P	-	-	
3 poles		SA203B(N)	BW250JAGU-3P	SG203B(D)	EW250JAGU-3P		
		SA203R(N)	BW250RAGU-3P	SG203R(D)	EW250RAGU-3P		
For distribution board	30AF	2 poles	EA32	SA52RCUL	EG32F	-	
		3 poles	EA33	SA53RCUL	EG33F	SG53RCUL	
	50AF	2 poles	EA52A	SA52RCUL	EG52F	-	
		3 poles	EA53A	SA53RCUL	EG53F	SA53RUCL	
	100AF	3 poles	EA103F	EA103CUL	EG103F	EG103CUL	
	UL508 EA/SA-UL series	50AF	2 poles	EA52BUL	SA52RCUL	-	-
3 poles			EA53BUL	SA53RCUL	-	-	
100AF		3 poles	EA103BUL	EA103CUL	-	-	
30AF		2 poles	SA32BUL	SA52RCUL	-	-	
		3 poles	SA33BUL	SA53RCUL	-	-	
50AF		2 poles	SA52BUL	SA52RCUL	-	-	
		3 poles	SA53BUL	SA53RCUL	-	-	
		2 poles	SA52RUL	SA52RCUL	-	-	
		3 poles	SA53RUL	SA53RCUL	-	-	
60AF		2 poles	SA62BUL	EA102CUL	-	-	
		3 poles	SA63BUL	EA103CUL	-	-	
		2 poles	SA62RUL	EA102CUL	-	-	
	3 poles	SA63RUL	EA103CUL	-	-		

Discontinued Products Cross Charts

Discontinued Date: June 30th, 2008

Series	Frame size		Molded Case Circuit Breakers		Earth Leakage Circuit Breakers	
			Discontinued Models	Replacement (UL489)	Discontinued Models	Replacement (UL489)
E series	225AF	2 poles	EA202B	BW250EAGU-2P	-	-
		3 poles	EA203B	BW250EAGU-3P	EG203B(D)	EW250JAGU-3P
	400AF	2 poles	EA402B	BW400EAGU-2P	-	-
		3 poles	EA403B	BW400EAGU-3P	EG403B(D)	EW400SAGU-3P
	600AF	3 poles	EA603B	BW630RAGU-3P	EG603B(D)	-
800AF	3 poles	EA803B	BW800RAGU-3P	EG803B(D)	-	
S series	100AF	2 poles	SA102BA	BW125JAGU-2P	-	-
		3 poles	SA103BA(N)	BW125JAGU-3P	SG103BA(D)	EW125JAGU-3P
		2 poles	SA102RA	BW125RAGU-2P	-	-
		3 poles	SA103RA(N)	BW125RAGU-3P	SG103RA(D)	EW125RAGU-3P
	225AF	2 poles	SA202BA	BW250JAGU-2P	-	-
		3 poles	SA203BA(N)	BW250JAGU-3P	SG203BA(D)	EW250JAGU-3P
		2 poles	SA202RA	BW250RAGU-2P	-	-
		3 poles	SA203RA(N)	BW250RAGU-3P	SG203RA(D)	EW250RAGU-3P
	400AF	2 poles	SA402B(N)	BW400SAGU-2P	-	-
		3 poles	SA403B(N)	BW400SAGU-3P	SG403B(D)	EW400SAGU-3P
		2 poles	SA402R(N)	BW400RAGU-2P	-	-
		3 poles	SA403R(N)	BW400RAGU-3P	SG403R(D)	EW400RAGU-3P
	600AF	3 poles	SA603R(N)	BW630RAGU-3P	SG603R(D)	-
	800AF	3 poles	SA803R(N)	BW800RAGU-3P	SG803R(D)	-
H series	50AF	2 poles	H52BA	-	-	-
		3 poles	H52BA(N)	-	-	-
	100AF	2 poles	H102BA	-	-	-
		3 poles	H103BA(N)	-	-	-
	225AF	2 poles	H202BA	-	-	-
		3 poles	H203BA(N)	-	-	-
	400AF	2 poles	H402B(N)	BW400HAGU-2P	-	-
		3 poles	H403B(N)	BW400HAGU-3P	HG403B(D)	EW400HAGU-3P
	600AF	3 poles	H603B(N)	BW630HAGU-3P	HG603B(D)	-
	800AF	3 poles	H803B(N)	BW800HAGU-3P	HG803B(D)	-
UL489 SA/UL series	100AF	2 poles	SA102BAUL	BW125JAGU-2P	-	-
		3 poles	SA103BAUL	BW125JAGU-3P	SG103BAUL	EW125JAGU-3P
		2 poles	SA102RAUL	BW125RAGU-2P	-	-
		3 poles	SA103RAUL	BW125RAGU-3P	-	-
	225AF	2 poles	SA202BAUL	BW250JAGU-2P	-	-
		3 poles	SA203BAUL	BW250JAGU-3P	SG203BAUL	EW250JAGU-3P
		2 poles	SA202RAUL	BW250RAGU-2P	-	-
		3 poles	SA203RAUL	BW250RAGU-3P	-	-
	400AF	2 poles	SA402BUL	BW400SAGU-2P	-	-
		3 poles	SA403BUL	BW400SAGU-3P	-	-
		2 poles	SA402RUL	BW400RAGU-2P	-	-
		3 poles	SA403RUL	BW400RAGU-3P	-	-
600AF	3 poles	SA603RUL	BW630RAGU-3P	-	-	
800AF	3 poles	SA803RUL	BW800RAGU-3P	-	-	

--: No replacement

Discontinued Accessories for above circuit breakers.

	Discontinued models	Replacement		Discontinued models	Replacement
Operating Handles (V type)	BZ-V30C	-	Handle Lock Covers	BZ-L30C	-
	BZ-V40C	-		BZ-L40C	-
	BZ-V30C-E	-	Mechanical Interlock	BZ-M130C-2	-
	BZ-V40C-E	-		BZ-S60B-225*	-
	BZ-V30C-S	-		BZ-E30C-100*	-
	BZ-V40C-S	-		BZ-E40B-225*	-
	BZ-V30C-ES	-			
	BZ-V40C-ES	-			
	BZ-V30C-EUL	-			
BZ-V40C-EUL	-				

--: No replacement

Replacement for BU series (ESB/FSB/FHB)

Discontinued Date: June 30, 2002

480VAC application

Frame size (A)	Poles	BU series (Discontinued product)						G-TWIN series						BU-C series					
		Type	Rated I.C (kA)	Rated Current (A)	Dimensions (mm)			Type	Rated I.C (kA)	Rated Current (A)	Dimensions (mm)			Type	Rated I.C (kA)	Rated Current (A)	Dimensions (mm)		
			480V		W	H	D		480V		W	H	D		480V		W	H	D
100	2	BU-ESB2	14	15 - 100	105	168	86	BW125RAGU-2P	50	15 - 125	90	171	68	BU2EHC	14	15 - 100	70	160	86
	3	BU-ESB3	14	15 - 100	105	168	86	BW125RAGU-3P	50	15 - 125	90	171	68	BU3EHC	14	15 - 100	105	160	86
150	2	BU-FSB2	22	15 - 100	105	168	86	BW125RAGU-2P	50	15 - 125	90	171	68	BU2FHC	25	15 - 100	105	160	86
				125				BW250RAGU-2P	50	125 - 250	105	181	68						
				150				BW125RAGU-3P	50	15 - 125	105	171	68						
	3	BU-FSB3	22	15 - 125	105	168	86	BW125RAGU-3P	50	15 - 125	105	171	68	BU3FHC	25	15 - 150	105	160	86
150	2	BU-FHB2	25	15 - 100	105	168	86	BW125RAGU-2P	50	15 - 125	105	181	68	BU2FHC	25	15 - 100	105	160	86
				125				BW250RAGU-2P	50	125 - 250	105	181	68						
				150				BW125RAGU-3P	50	15 - 125	105	171	68						
	3	BU-FHB3	25	15 - 125	105	168	86	BW125RAGU-3P	50	15 - 125	105	171	68	BU3FHC	25	15 - 150	105	160	86
				150				BW250RAGU-3P	50	125 - 250	105	181	68						

600VAC application

Frame size (A)	Poles	BU series (Discontinued product)						G-TWIN series						BU-C series											
		Type	Rated I.C (kA)	Rated Current (A)	Dimensions (mm)			Type	Rated I.C (kA)	Rated Current (A)	Dimensions (mm)			Type	Rated I.C (kA)	Rated Current (A)	Dimensions (mm)								
			480V		W	H	D		480V		W	H	D		480V		W	H	D						
100	2	BU-ESB2	14	15 - 100	105	168	86	Available in the future																	
	3	BU-ESB3	14	15 - 100	105	168	86													BU2EHC	14	15 - 100	70	160	86
150	2	BU-FSB2	14	15 - 100	105	168	86													BU2FHC	18	15 - 100	105	160	86
				125, 150																BU-JSB2	22	125 - 250	140	257	103
	3	BU-FSB3	14	15 - 150	105	168	86													BU3FHC	18	15 - 150	105	160	86
	2	BU-FHB2	18	15 - 100	105	168	86													BU2FHC	18	15 - 100	105	160	86
125, 150				BU-JSB2																22	125 - 250	140	257	103	
3	BU-FHB3	18	15 - 150	105	168	86	BU3FHC													18	15 - 150	105	160	86	

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