

DISTRIBUTION

Molded Case Circuit Breakers / Earth Leakage Circuit Breakers

G-TWIN / (Lambda) Series



Evolutionary form of small breaker for machine equipment and control panels!

Molded Case Circuit Breakers / Earth Leakage Circuit Breakers

G-TWIN / (Lambda) Series

New lines of small and high-performance 32 to 63AF molded case circuit breakers and earth leakage circuit breakers enables downsizing and globalization of machine equipment and control panels!



Along with functional enhancement of machine equipment, the number of electrical circuits in control panels is increasing and downsizing of control panel devices is a common challenge. In addition, globalization of the control panel market is progressing rapidly.

As new products of MCCB/ELCB, Fuji Electric released the α -TWIN Series in 2001, and the G-TWIN Series which are downsized, modular and multi-standard products conforming to Japanese and overseas standards in 2007, and they have stayed ahead of changes in the market.

Inheriting the philosophy of the G-TWIN Series, we have now released the G-TWIN Λ Series as a series of small breakers of 32 to 63 AF that meet the needs of the machine equipment and control panel markets.



Molded Case Circuit Breakers / Earth Leakage Circuit Breakers G-TWIN / Series







EW32SBG

Ampere frame	32AF	50AF	63AF	100AF to 800AF
For machine equipments and control panels Compact and high-performance Compliant with international standards Both AC and DC supported	G-TW	IN A series		
For power receiving and distribution boards • Wide variety of types and product categories • Various mounting methods supported • Mounting compatibility (for renewal)	G-T ¹	WIN series		

Downsizing

Small-width structure of 36 mm for 2-pole and 54 mm for 3-pole (28% smaller than our existing products) and 36 mm for 2-pole ELCB is realized.

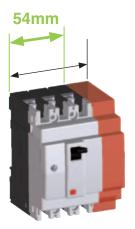
High breaking capacity

The arc commutation breaking technology has achieved a cut-above breaking performance to meet the needs of the control panel branch market.

Breaker types		G-TWIN / series
Global products		18kA
Ot a seed and seed a set a	Low breaking capacity type	7.5kA
Standard products	High breaking capacity type	15kA

^{*} Standard products are compared by breaking capacity at IEC 230 VAC and global products at III 489 240 VAC





Arc commutation breaking technology realizing high breaking performance

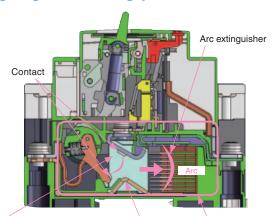
Fuji Electric's proprietary breaking mechanism has been used for high-speed driving of the arc generated during breaking to achieve high breaking performance.

The magnetic driving force by optimization of the magnetic yoke, isolation of the breaking section and arc driving force by resin ablation gas flow control technology allow high-speed commutation of an arc between contacts to the arc runner for immediately driving the arc extinguisher.



The let-through energy (I²t) during breaking has been reduced to less than half of the conventional products.

Breaking performance improved by 1.5 times



Magnetic yoke

Arc runner

Structure with isolated



New release

International standard

• Compliant with standards of various countries including UL/CSA, IEC/EN (CE marking), GB (CCC) and JIS.

Series of product	Туре	Compatibi	lity-obtained	d standard	Certificat	ion-obtained	EC Directive	Certification authority		
			IEC	EN	JIS	UL	CSA	GB	CE marking	TÜV
	4		International	Europe	Japan	U.S.A.	Canada	China	Europe	Germany
G-TWIN Series		IEC.	EN	JIS	C UL US		((S)	((TÜV Rheinland	
Olahal assiss	MCCB	BW50RBGU		•						
Global series	ELCB	EW50RBGU		•	•	•	•	•	•	•
	мссв	BW EBG		•					•	
Standard series	IVICCB	BW□SBG								
	FLOR	EW_EBG		•						
	ELCB	EW□SBG								

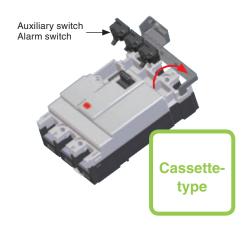
Standardization

- Standard installation on IEC 35 mm rails and screw mounting supported.
 Note: Mounting screws are not included.
- The cassette-type internal accessories allow easy mounting and come in a variety of models.
 - Both MCCB and ELCB allow combined mounting of an auxiliary switch, alarm switch and shunt trip device.
 - 2-pole ELCB allows mounting of an auxiliary switch and alarm switch.
- Both MCCB and ELCB allow dense side-by-side mounting to main units even with accessories included.
- Both AC and DC supported.
 - Thermal-electromagnetic overcurrent tripping system is adopted to allow support for both AC and DC also with 32 to 63 AF MCCB.
 - DC circuits are supported with standard products.

List of option accessory combination

A		МС	СВ		ELCB				
: Auxiliary switch (\	(V)	Δοσος	sory mo	untina la	ncation	Accessory mounting location			
Alarm switch (K)			-		_				_
: Shunt trip (F)		E							
: Undervoltage trip		190		3		90 .	109090	<u> </u>	
Number of poles		2-p	ole	3-p	oole	2-p	oole	3-p	oole
Option accessory conmethod	Option accessory connecting method			Lead wire	Terminal block	Lead wire	Terminal block	Lead wire	Terminal block
Auxiliary switch $\frac{1}{2}$	W								
Auxiliary Switch 2	V	_	_			_	_		
Alarm switch	K								
Auxiliary/alarm switch	WK								
Shunt trip device	F					_	_		
Undervoltage trip device	R	_	_	_		_	_	-	•
External operating	N type								
handle	V type								
Terminal cover	Short								
	Long			•					





Safety

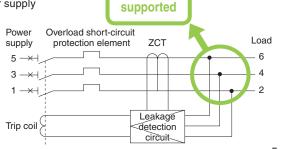
- Safety is ensured with IP20 degree of protection from the front face of the terminal section, and different types of terminal covers are available.
- External operating handle can be mounted to meet the control panel needs. Degree of protection: N type: IP54, V type: IP65
- The earth leakage circuit breaker has an IEC standard-compliant three-phase power supply structure, and earth leakage protection is provided even with one phase open.



With the step for putting the finger on, the terminal cover can be removed without holding the sides with no need for any tool.

Types with a different lock shape that can be removed with a tool are also available in view of safety.





Three-phase

power

supply

Catalog Disclaimer

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Since the user's product information, specific use application, and conditions of use are all outside of Fuji Electric FA Components & Systems'control, it shall be the responsibility of the user to determine the suitability of any of the products mentioned for the user's application.

One Year Limited Warranty

The products identified in this catalog shall be sold pursuant to the terms and conditions identified in the "Conditions of Sale" issued by Fuji Electric FA with each order confirmation.

Except to the extent otherwise provided for in the Conditions of Sale issued by Fuji Electric FA, Fuji Electric FA warrants that the Fuji Electric FA products identified in this catalog shall be free from significant defects in materials and workmanship provided the product has not been: 1) repaired or altered by others than Fuji Electric FA; 2) subjected to negligence, accident, misuse, or damage by circumstances beyond Fuji Electric FA's control; 3) improperly operated, maintained or stored; or 4) used in other than normal use or service. This warranty shall apply only to defects appearing within one (1) year from the date of shipment by Fuji Electric FA, and in such case, only if such defects are reported to Fuji Electric FA within thirty (30) days of discovery by purchaser. Such notice should be submitted in writing to Fuji Electric FA at 5-7, Nihonbashi Odemma-cho, Chuo-ku, Tokyo, Japan. The sole and exclusive remedy with respected to the above warranty whether such claim is based on warranty, contract, negligence, strict liability or any other theory, is limited to the repair or replacement of such product or, at Fuji Electric FA's option reimbursement by Fuji Electric FA of the purchase price paid to Fuji Electric FA for the particular product. Fuji Electric FA does not make any other representations or warranties, whether oral or in writing, expressed or implied, including but not limited to any warranty regarding merchantability or fitness for a particular purpose. Except as provided in the Conditions of Sale, no agent or representative of Fuji Electric FA is authorized to modify the terms of this warranty in writing or orally.

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⚠ Safety Considerations

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- For safe operation, before using the product read the instruction manual or user manual that comes with the product carefully or consult the Fuji sales representative from which you purchased 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 atomicenergy control, aerospace use, medical use, passenger vehicle, and traffic control, are requested to consult with Fuji Electric FA.
- 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.
- Follow the regulations of industrial wastes when the product is to be discarded.
- For further questions, please contact your Fuji sales representative or Fuji Electric FA.

Molded Case Circuit Breakers / Earth Leakage Circuit Breakers

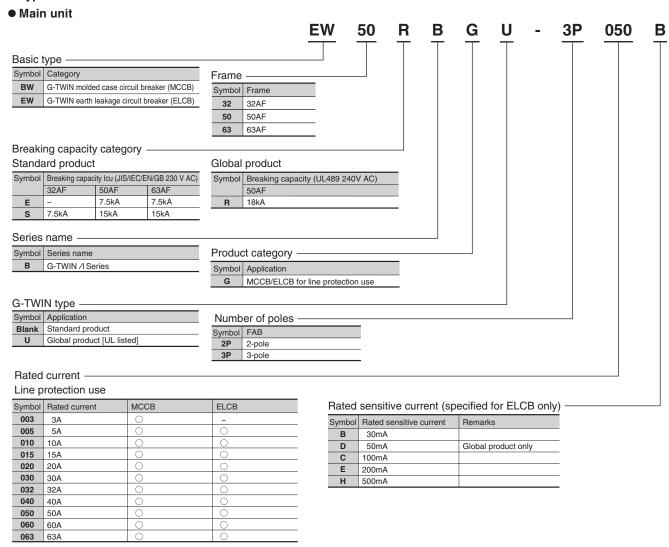
	i age
Type number nomenclature	
Specifications	
MCCB for line protection use	
Standard product: BW32, 50, 63 BG	
Global product: BW50RBGU	10
ELCB for line protection use	
Standard product: EW32, 50, 63 BG	
Global product: EW50RBGU	13
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MCCB for line protection use	
BW32, 50, 63 BG (Standard product)	
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ELCB for line protection use	
EW32, 50, 63 🗌 BG (Standard product)	
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Molded Case Circuit Breakers / Earth Leakage Circuit Breakers

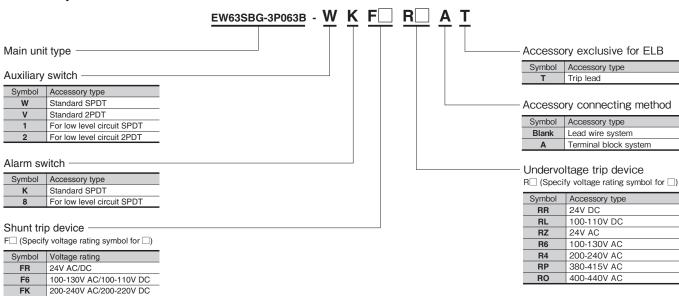
G-TWIN / Series

Type number nomenclature

■ Type Number Nomenclature



Accessory



FP

380-440V AC

■ Molded Case Circuit Breakers for Line Protection Use (Standard Products)

Ampere fram	e				32		50				63			
Туре					BW32	SBG	BW50	EBG	BW50	SBG	BW63	EBG	BW63	SBG
Appearance														
Numbers of I	ooles and element	s			2P2E	3P3E	2P2E	3P3E	2P2E	3P3E	2P2E	3P3E	2P2E	3P3E
	tion voltage Ui[V]			AC	440	10. 02	440	10. 02	440	0. 02	440	0.02	440	10. 02
				DC	125		_		125		-		125	
Rated impuls	se withstand voltag	e Uimp[kV]			6		6		6		6		6	
	t Reference temp		A]		3,5,10,1	5,20,30,32	3,5,10	,15,20,30	32,40,5	50	60,63		•	
Rated freque	ency [Hz]				50-60		50-60		50-60		50-60		50-60	
Rated	IEC60947-2		AC	440V	2.5/2.5	5	2.5/2.	5	7.5/4		2.5/2.	5	7.5/4	
breaking	EN60947-2			415V	5/5		5/5		10/5		5/5		10/5	
capacity	JISC8201-2-1			400V	5/5		5/5		10/5		5/5		10/5	
Icu/Ics [kA]				380V	5/5		5/5		10/5		5/5		10/5	
				240V	7.5/7.5		7.5/7.5		15/15		7.5/7.5		15/15	
				230V	7.5/7.5		7.5/7.5	5	15/15		7.5/7.5		15/15	
			DC	125V	10/10		-/-		10/10		-/-		10/10	
	GB14048.2		AC	400V	5/5		5/5		10/5		5/5		10/5	
				230V 125V	7.5/7.5		7.5/7.5	j	15/15		7.5/7.5) 	15/15	
1 1 1					10/10		-/-		10/10		-/-		10/10	
Isolation con					Compl Possib		Comp		Compl		Comp		Comp	
	Reverse connection					ie	Possik	oie	Possib	ole	Possik	oie	Possible	
Utilization ca					A	- doaroo 0	A	n daaraa 0	A	n doaroo 0	A	n doaroo 0	A	
	ment condition				36	n degree 3	36	n degree 3	36	n degree 3	36	54	36	n degree 3 54
Outline dime	nsions [mm] —a	→ d-		a b	100	54	100	54	100	54	100	54	100	54
				С	68		68		68		68		68	
]]		d	90		90		90		90		90	
Front mounti	ng type product ma	ass [kn]		Page	0.4	0.5	0.4	0.5	0.4	0.5	0.4	0.5	0.4	0.5
Mounting and	Front mounting type	acc [ng]		14, 16		0.0	0	0.0	0.1	0.0	0	0.0	0	
connection	(screw mounting, IEC	35 mm rail mounting)	14, 10										
	Auxiliary switch			27	0		0		0		0		0	
	Alarm switch		K	27	0		0		0		0		0	
	Shunt trip device		F 🗌	27	0		0		0		0		0	
	Undervoltage trip	device	R 🗌	27	_	0	_		-	0	<u> </u>	0	-	0
	Lead wire termina	l block	Α	32	0		0		0		0		0	
Separately	Auxiliary switch			20	0		\circ		0		0		0	
sold parts	Alarm switch			20	0		0		0		0		0	
	Shunt trip device		F 🗌	20	0		0		0		0		0	
	External	Panel mounting		29	0		0		0		0		0	
		Main unit mounting		29	0		0		0		0		0	
	Terminal cover	Short type	TS		0		0		0		0		0	
		Long type		29	0		0		0		0		0	
	Insulation barrier			29	0		0		0		0		0	
	Handle locking co	ver		29	0		0		0		0		0	
0	Handle key lock Q2		29	0		0				0		0		
	Confor- manage to													
standards	tandards EN60947-2 (CE marking)				(€									
	GB14048.2 (CCC	certificate)			(C)									
	JISC8201-2-1				Self-de	eclaration	of con	formitv						
	Electrical Applian	ces and Material	s Safe	ty Act	Self-declaration of conformity Specified Electrical Appliances and Materials									
Trippina devi	ripping device						Thermal-electromagnetic method							
Trip button							Provided Provided							
	cs curves and dim	ensions on page	S		31, 32									
		- 19-			, , ,									

Molded Case Circuit Breakers / Earth Leakage Circuit Breakers G-TWIN / Series Specifications

■ Molded Case Circuit Breakers for Line Protection Use (Global Products)

Ampere fram	ne				50				
Туре					BW50RBGU				
Appearance									
Numbers of	poles and element	s			2P2E 3P3E				
Rated insula	tion voltage Ui[V]			AC	440				
				DC	125				
	se withstand voltag				6				
	nt Reference temp	erature 40°C In[A]		3,5,10,15,20,30,40,50				
Rated freque		00 0 No 5/alll)	40	0401/	50-60				
Rated breaking	UL489, CAN/CSA IEC60947-2		AC AC	240V 440V	18 7.5/4				
capacity	EN60947-2		AC	440V 415V	10/5				
lcu/lcs [kA]	JISC8201-2-1				10/5				
					10/5				
				240V	15/15				
				230V	15/15				
			DC	125V	10/10				
	GB14048.2		AC		10/5				
	0.2		,	230V	15/15				
			DC		10/10				
Isolation con	npliance				Compliant				
Reverse con	nection				Possible				
Utilization ca	ategory				A				
Use environi	ment condition				Pollution degree 3				
Outline dime	ensions [mm] ⊢a	ı→ı ⊬-d→ı		а	36 54				
		→ + C+		b	120 (including the terminal cover)				
]		С	68				
				d	90				
Front mounti	ing type product m	ass [kg]		Page	0.5				
Mounting and connection	Front mounting type (screw mounting, IEC	35 mm rail mounting)	14, 16	0				
	Auxiliary switch	9,	W	27	0				
	Alarm switch			27	0				
	Shunt trip device		F 🗆	27	0				
	Undervoltage trip	device	R		- 0				
	Lead wire termina		A	35	0				
Separately	Auxiliary switch			20	0				
sold parts	Alarm switch			20	0				
	Shunt trip device		F 🗆	20	0				
	External	Panel mounting	V	29	0				
	operating handle	Main unit mounting		29	0				
	Terminal cover	Short type		29	(Included)				
		Long type		. 29	0				
	Insulation barrier			29	0				
	Handle locking co	over		29	0				
	Handle key lock		Q2	29	0				
Confor-	UL489/CSA22.2N	10.5(cUL)			(File No.E90584)				
mance to standards	IEC60947-2 (TÜV	certificate)			LISTED LISTED				
EN60947-2 (CE marking)					(€				
	GB14048.2 (CCC	certificate)							
	JISC8201-2-1				Self-declaration of conformity				
	Electrical Applian	ces and Material	s Safe	ety Act	Specified Electrical Appliances and Materials				
					Thermal-electromagnetic method				
	ice								
Tripping devi	ics curves and dim				Provided 34, 35				

■ Earth Leakage Circuit Breakers for Line Protection Use (Standard Products)

Numbers of poles and elements	Ampere fram Type					32 EW32SBG		50 EW50EBG		EW50SBG		
Applied circuit 1e2W 1e2W, 1s9W,3s9W 1e2W 1e2W,1s9W,3sW 1e2W 1e2W 1e2W,1s9W,3sW 1e2W 1e	Appearance											
Rated operational voltage Ue V 100-240 V AC	Numbers of p	ooles and elements	3			2P2E	3P3E	2P2E	3P3E	2P2E	3P3E	
Rated impulse withstand voltage Limpkly	Applied circu	it				1ø2W	1ø2W,1ø3W,3ø3W	1ø2W	1ø2W,1ø3W,3ø3V	1ø2W	1ø2W,1ø3W,3ø3V	
Rated current Reference temperature 40°C n A S1,01,52,03,032 S1,01,52,03,03,24,0.50	Rated operat	ional voltage Ue[\	/]			100-240V AC	100-440V AC	100-240V AC	100-440V AC	100-240V AC	100-440V AC	
Rated sensitive current Inma									-	4	6	
Sate desnstitive current Inn[mA]	Rated curren	t Reference tempe	erature 40°C In[
Inn 0.1 0.1 0.1 0.1 0.1 0.1 0.1 0.1 0.1 0.1 0.04 0.004 0.004 0.004 0.004 0.004 0.004 0.004 0.004 0.004 0.004 0.004 0.004 0.004 0.004 0.004 0.004 0.004 0.004 0.004 0.004 0.004 0.004 0.004 0.004 0.004 0.004 0.004 0.004 0.004 0.004 0.004 0.004 0.004 0.004 0.004 0.004 0.004 0.004 0.004 0.004 0.004 0.004 0.004 0.004 0.004 0.004 0.004 0.004 0.004 0.004 0.004 0.004 0.004 0.004 0.004 0.004 0.004 0.004 0.004 0.004 0.004 0.004 0.004 0.004 0.004 0.004 0.004 0.004 0.004 0.004 0.004 0.004 0.004 0.004 0.004 0.004 0.004 0.004 0.004 0.004 0.004 0.004 0.004 0.004 0.004 0.004 0.004 0.004 0.004 0.004 0.004 0.004 0.004 0.004 0.004 0.004 0.004 0.004 0.004 0.004 0.004 0.004 0.004 0.004 0.004 0.004 0.004 0.004 0.004 0.004 0.004 0.004 0.004 0.004 0.004 0.004 0.004 0.004 0.004 0.004 0.004 0.004 0.004 0.004 0.004 0.004 0.004 0.004 0.004 0.004 0.004 0.004 0.004 0.004 0.004 0.004 0.004 0.004 0.004 0.004 0.004 0.004 0.004 0.004 0.004 0.004 0.004 0.004 0.004 0.004 0.004 0.004 0.004 0.004 0.004 0.004 0.004 0.004 0.004 0.004 0.004 0.004 0.004 0.004 0.004 0.004 0.004 0.004 0.004 0.004 0.004 0.004 0.004 0.004 0.004 0.004 0.004 0.004 0.004 0.004 0.004 0.004 0.004 0.004 0.004 0.004 0.004 0.004 0.004 0.004 0.004 0.004 0.004 0.004 0.004 0.004 0.004 0.004 0.004 0.004 0.004 0.004 0.004 0.004 0.004 0.004 0.004 0.004 0.004 0.004 0.004 0.004 0.004 0.004 0.004 0.004 0.004 0.004 0.004 0.004 0.004 0.004 0.004 0.004 0.004 0.004 0.004 0.004 0.004 0.004 0.004 0.004 0.004 0.004 0.004 0.004 0.004 0.004 0.004 0.004 0.004 0.004 0.004 0.004 0.004 0.004 0.0							laa (aa aaa aa		I		Tan	
Rated breaking EC60947-2 Part			N]		I		30,100,200,500		30,100,200,500		30,100,200,500	
Rated	Maximum op	erating time [sec]										
Dreaking capacity cut/los [kA]	Rated	IEC60947-2		۸۲			25/25		25/25		7.5/4	
Appairing IsCa201-2-2				70	_			-		-	10/5	
Clau						-		<u> </u>			10/5	
240V 75/75 75/75 75/75 75/75 75/75 75/75 75/75 75/75 75/75 75/75 75/75 75/75 75/75 75/75 75/75 75/75 75/75 75/75 75/75 75/75 75/75 75/75 75/75 75/75 75/75 75/75 75/75 75/75 75/75 75/75 75/75 75/75 75/75 75/75 75/75 75/75 75/75 75/75 75/75 75/75 75/75 75/75 75/75 75/75 75/75 75/75 75/75 75/75 75/75 75/75 75/75 75/75 75/75 75/75 75/75 75/75 75/75 75/75 75/75 75/75 75/75 75/75 75/75 75/75 75/75 75/75 75/75 75/75 75/75 75/75 75/75 75/75 75/75 75/75 75/75 75/75 75/75 75/75 75/75 75/75 75/75 75/75 75/75 75/75 75/75 75/75 75/75 75/75 75/75 75/75 75/75 75/75 75/75 75/75 75/75 75/75 75/75 75/75 75/75 75/75 75/75 75/75 75/75 75/75 75/75 75/75 75/75 75/75 75/75 75/75 75/75 75/75 75/75 75/75 75/75 75/75 75/75 75/75 75/75 75/75 75/75 75/75 75/75 75/75 75/75 75/75 75/75 75/75 75/75 75/75 75/75 75/75 75/75 75/75 75/75 75/75 75/75 75/75 75/75 75/75 75/75 75/75 75/75 75/75 75/75 75/75 75/75 75/75 75/75 75/75 75/75 75/75 75/75 75/75 75/75 75/75 75/75 75/75 75/75 75/75 75/75 75/75 75/75 75/75 75/75 75/75 75/75 75/75 75/75 75/75 75/75 75/75 75/75 75/75 75/75 75/75 75/75 75/75 75/75 75/75 75/75 75/75 75/75 75/75 75/75 75/75 75/75 75/75 75/75 75/75 75/75 75/75 75/75 75/75 75/75 75/75 75/75 75/75 75/75 75/75 75/75 75/75 75/75 75/75 75/75 75/75 75/75 75/75 75/75 75/75 75/75 75/75 75/75 75/75 75/75 75/75 75/75 75/75 75/75 75/75 75/75 75/75 75/75 75/75 75/75 75/75 75/75 75/75 75/75 75/75 75/75 75/75 75/75 75/75 75/75 75/75 75/75 75/75 75/75 75/75 75/75 75/75 75/75 75/75 75/75 75/75 75/75 75/75 75/75 75/75 75/75 75/75 75/75 75/75 75/75		0.00020. 2 2						-			10/5	
230V 7,57/5 7,57/5 7,57/5 7,57/5 15/15 15/15 15/15 16/15 15/15 15/15 15/15 15/15 15/15 15/15 15/15 15/15 15/15 15/15 15/15 15/15 15/15 15/15 15/15 15/15 15/15 15/15 15/15 15/15 15/15 15/15 15/15 15/15 15/15 15/15 15/15 15/15 15/15 15/15 15/15 15/15 15/15 15/15 15/15 15/15 15/15 15/15 15/15 15/15 15/15 15/15 15/15 15/15 15/15 15/15 15/15 15/15 15/15 15/15 15/15 15/15 15/15 15/15 15/15 15/15 15/15 15/15 15/15 15/15 15/15 15/15 15/15 15/15 15/15 15/15 15/15 15/15 15/15 15/15 15/15 15/15 15/15 15/15 15/15 15/15 15/15 15/15 15/15 15/15 15/15 15/15 15/15 15/15 15/15 15/15 15/15 15/15 15/15 15/15 15/15 15/15 15/15 15/15 15/15 15/15 15/15 15/15 15/15 15/15 15/15 15/15 15/15 15/15 15/15 15/15 15/15 15/15 15/15 15/15 15/15 15/15 15/15 15/15 15/15 15/15 15/15 15/15 15/15 15/15 15/15 15/15 15/15 15/15 15/15 15/15 15/15 15/15 15/15 15/15 15/15 15/15 15/15 15/15 15/15 15/15 15/15 15/15 15/15 15/15 15/15 15/15 15/15 15/15 15/15 15/15 15/15 15/15 15/15 15/15 15/15 15/15 15/15 15/15 15/15 15/15 15/15 15/15 15/15 15/15 15/15 15/15 15/15 15/15 15/15 15/15 15/15 15/15 15/15 15/15 15/15 15/15 15/15 15/15 15/15 15/15 15/15 15/15 15/15 15/15 15/15 15/15 15/15 15/15 15/15 15/15 15/15 15/15 15/15 15/15 15/15 15/15 15/15 15/15 15/15 15/15 15/15 15/15 15/15 15/15 15/15 15/15 15/15 15/15 15/15 15/15 15/15 15/15 15/15 15/15 15/15 15/15 15/15 15/15 15/15 15/15 15/15 15/15 15/15 15/15 15/15 15/15 15/15 15/15 15/15 15/15 15/15 15/15 15/15 15/15 15/15 15/15 15/15 15/15 15/15 15/15 15/15 15/15 15/15 15/15 15/15 15/15 15/15 15/15 15/15 15/15 15/								· '			15/15	
Separately Sep											15/15	
GB14048.2											15/15	
		GB14048.2		AC	400V	-/-		-/-			10/5	
Not possible					230V	7.5/7.5	7.5/7.5	7.5/7.5		15/15	15/15	
Use environment condition	Isolation com	pliance								Compliant		
Pollution degree 3												
Outline dimensions [mm] a 36 54 36 54 36 54 36 54 36 54 36 54 36 54 36 54 36 54 36 54 36 54 36 54 36 54 36 54 36 54 36 54 36 54 36 54 36 54 36 54 36 54 36 54 36 54 36 54 36 54 36 54 36 54 36 54 36 54 36 54 36 54 36 54 36 54 36 54 36 54 36 54 36 54 36 54 36 54 36 54 36 54 36 54 36 54 36 54 36 54 36 54 36 54 36 54 36 54 36 54 36 54 36 54 36 54 36 54 36 54 36 54 36 54 36 54 36 54 36 54 36 54 36 54 36 54 36 54 36 54 36 54 36 54 36 54 36 54 36 54 36 54 36 54 36 54 36 54 36 54 36 54 36 54 36 54 36 54 36 54 36 54 36 54 36 54 36 54 36 54 36 54 36 54 36 54 36 54 36 54 36 54 36 54 36 54 36 54 36 54 36 54 36 54 36 54 36 54 36 54 36 54 36 54 36 54 36 54 36 54 36 54 36 54 36 54 36 54 36 54 36 54 36 54 36 54 36 54 36 54 36 54 36 54 36 54 36 54 36 54 36 54 36 54 36 54 36 54 36 54 36 54 36 54 36 54 36 54 36 54 36 54 36 54 36 54 36 54 36 54 36 54 36 54 36 54 36 54 36 54 36 54 36 54 36 54 36 54 36 54 36 54 36 54 36 54 36 54 36 54 36 54 36 54 36 54 36 54 36 54 36 54 36 54 36 54 36 54 36 54 36 54 36 54 36 54 36 54 36 54 36 54 36 54 36 54 36 54 36 54 36 54 36 54 36 54 36 54 36 54 36 54 36 54 36 54 36 54 36 54 36 54 36 54 36 54 36 54 36 54 36 54 36 54 36 54 36 54 36 54 36 54 36 54 36 54 36 54 36 54 36 54 36 54 36 54 36 54 36 54 36 54 36 54 36 54 36 54 36 54 36 54 36 54 36 54 36 54 36 54 36 54 36 54 36 54 36 54 36 54 36 54 36 54 36 54 36 54 36 54 36 54 36 54 36 54 36 54 36 54 36 54 36 54 36 54 36 54 36 54 36 54 36 54 36 54 36 54 36 54 36 54 36 54 36 54 36 54 36 54 36 54 36 54 36 54 36 54 36 54 36 54 36 54 36 54 36 54 36 54 36 54 36 54 36 54 36 54 36 54 36 54 36 54 36 54 36 54 36 54 36 54 36 54 36 54 36 54 36 54 36 54 36 54 36 54 36 54 36 54 36 54 36 54 36 54 36 54 36 54 36 54 36 54 36 54 36 54 36 54 36 54 36 54 36 54 36 54 36 54 36 54 36 54 36 54 36 54 36 54 36 54 36 54 36 54 36 54 36 54 36 54 36 54 36 54 36 54 36 54 36 54 36 54 36 54 36 54 36 54 36 54 36 54 36 54 36 54 36 54 36 54 36 54 36 54 36 54 36 54 36 54 36 54 36 54 36 54 36 54 36 54 36 54 36 54 36 54 36 54 36 54 36 54 36 54 36 54 36 54												
D												
D	Outline dime	nsions [mm] 📙 a	→ -d-				54		54		54	
Front mounting type product mass [kg]		F	T									
Front mounting type product mass [kg]]									
Mounting and connection Front mounting type (screw mounting, IEC 35 mm rail mounting) 14, 16			[]				0.0		0.0		0.6	
Accessories Auxiliary switch W 27			ass [kg]				0.6		0.6	_	0.6	
Accessories			25 mm rail mounting	١	14, 16							
Alarm switch	Accessories	Auxiliary switch	33 min ran mounting		27							
Shunt trip device						Ŭ				<u> </u>		
Undervoltage trip device						<u> </u>		<u> </u>		_	0	
Trip lead			device			_	Ŏ	_	Ŏ	_	Ö	
Lead wire terminal block		<u> </u>		Т	19		1 -	l I J				
Separately sold parts Alarm switch K 20		Lead wire termina	l block							Ŏ		
Shunt trip device F 20	Separately					0		0		0		
External operating handle Main unit mounting N 29 Operating handle Main unit mounting handle Main unit mou	sold parts					0		0		0		
operating handle Main unit mounting N 29				_F	20	_	0	-	0	_	0	
Terminal cover Short type TS 29						0		0		10		
Long type TL 29 C C C						_		-		10		
Insulation barrier Interphase barrier B 29		! -		<u> 18</u>	29			-				
Handle locking cover L1 29										-		
Handle key lock Q2 29								-				
Conformance to standards EN60947-2 (CE marking) GB14048.2 (CCC certificate) JISC8201-2-1 Electrical Appliances and Materials Safety Act Tripping device Tripping device Thermal-electromagnetic method Trip button Earth leakage indication Characteristics curves and dimensions on pages DEN60947-2 (TÜV certificate) Self-declaration of conformity Specified Electrical Appliances and Materials Foreign Electrical Appliances and Materials Appliances and			vei									
mance to standards EN60947-2 (CE marking) GB14048.2 (CCC certificate) JISC8201-2-1 Electrical Appliances and Materials Safety Act Self-declaration of conformity Electrical Appliances and Materials Safety Act Tripping device Thermal-electromagnetic method Trip button Earth leakage indication Characteristics curves and dimensions on pages 37, 38			certificate)	<u> </u>	120							
Standards EN60947-2 (CE marking) GB14048.2 (CCC certificate) JISC8201-2-1 Electrical Appliances and Materials Safety Act Tripping device Thermal-electromagnetic method Trip button Earth leakage indication Characteristics curves and dimensions on pages FN60947-2 (CE marking) Self-declaration of conformity Specified Electrical Appliances and Materials Provided Frovided Mechanical button Characteristics curves and dimensions on pages 37, 38		12000017 2 (101	oor inicato)									
JISC8201-2-1 Electrical Appliances and Materials Safety Act Tripping device Trip button Earth leakage indication Characteristics curves and dimensions on pages Self-declaration of conformity Specified Electrical Appliances and Materials Frovided Provided Mechanical button Trip button Self-declaration of conformity Specified Electrical Appliances and Materials Frovided Trip button Provided Self-declaration of conformity Specified Electrical Appliances and Materials Frovided Trip button Self-declaration of conformity Specified Electrical Appliances and Materials Frovided Trip button Self-declaration of conformity Specified Electrical Appliances and Materials Frovided Trip button Self-declaration of conformity Specified Electrical Appliances and Materials Frovided Trip button Self-declaration of conformity Specified Electrical Appliances and Materials Frovided Trip button Self-declaration of conformity Specified Electrical Appliances and Materials Frovided Trip button Self-declaration of conformity Specified Electrical Appliances and Materials Frovided Trip button Self-declaration of conformity Specified Electrical Appliances and Materials Frovided Trip button Self-declaration of conformity Specified Electrical Appliances and Materials Frovided Trip button Self-declaration of conformity Specified Electrical Appliances and Materials Frovided Trip button Self-declaration of conformity Specified Electrical Appliances and Materials Frovided Trip button Self-declaration of conformity Specified Electrical Appliances and Materials Frovided Trip button Self-declaration of conformity Specified Electrical Appliances and Materials Frovided Trip button Self-declaration of conformity Specified Electrical Appliances and Materials Frovided Trip button Self-declaration of conformity Self-declaration of conformity Specified Electrical Appliances and Materials Frovided Trip button Self-declaration of conformity Self-declaration of conformity Self-declaration of conformity Self-declaration of conformity Self-declaration of conformi	standards	,				((
Tripping device Tripping device Thermal-electromagnetic method Trip button Earth leakage indication Characteristics curves and dimensions on pages Specified Electrical Appliances and Materials Provided Mechanical button 37, 38		,	certificate)		©							
Tripping device Thermal-electromagnetic method Trip button Provided Earth leakage indication Mechanical button Characteristics curves and dimensions on pages 37, 38					Self-declaration of conformity							
Trip button Provided Earth leakage indication Mechanical button Characteristics curves and dimensions on pages 37, 38			ty Act				erials PS					
Earth leakage indication Mechanical button Characteristics curves and dimensions on pages 37, 38		ce					ctromagnetic n	nethod				
Characteristics curves and dimensions on pages 37, 38		a ta atta a et		Provided								
							outton					
Rated voltage (V) Operational voltage	Cnaracteristi	cs curves and dime	ensions on page	S		37, 38		<u> </u>				
											age range (V)	
100-240V AC 80 to 264V AC 100-440V AC 80 to 484V AC												

100-440V AC

80 to 484V AC

Molded Case Circuit Breakers / Earth Leakage Circuit Breakers G-TWIN / Series Specifications

Ampere fram	ne				63		EWCCODC			
Type					EW63EBG		EW63SBG			
Appearance					A A A A A A A A A A A A A A A A A A A					
Numbers of p	ooles and element	S			2P2E	3P3E	2P2E	3P3E		
Applied circu					1ø2W	1ø2W,1ø3W,3ø		1ø2W,1ø3W,3ø3W		
	tional voltage Ue[V]			100-240V AC	100-440V AC	100-240V AC	100-440V AC		
Rated impuls	se withstand voltag	ge Uimp[kV]			4	6	4	6		
	t Reference temp	erature 40°C In[A]		60,63					
Rated freque					50-60					
	ive current I∆n[m/	A]		1.	30	30,100,200,500		30,100,200,500		
Maximum op	erating time [sec]			l∆n	0.1		0.1			
Datad	IECC0047.0		100		0.04	0.5/0.5	0.04	7.5./4		
Rated breaking	IEC60947-2 EN60947-2		AC	440V 415V	-/- -/-	2.5/2.5 5/5	_/_ _/_	7.5/4 10/5		
capacity	JISC8201-2-2			400V	-/- -/-	5/5		10/5		
Icu/Ics [kA]	01300201-2-2			380V	-/- -/-	5/5		10/5		
100/100 [RA]					7.5/7.5	7.5/7.5	15/15	15/15		
					7.5/7.5	7.5/7.5	15/15	15/15		
					7.5/7.5	7.5/7.5	15/15	15/15		
	GB14048.2		AC		-/-	5/5	-/-	10/5		
	0.21.010.2				7.5/7.5	7.5/7.5	15/15	15/15		
Isolation con	npliance			1=001	Compliant	(110)110	Compliant	1,10,10		
Reverse con					Not possible		Not possible			
Utilization ca	itegory				Α		Α	A		
Use environment condition					Pollution degree 3		Pollution degr			
Outline dime	nsions [mm] 👝 👝 a	1-d-+		а	36	54	36	54		
		†		b	100		100			
]		С	68		68			
		<u> </u>		d	90		90			
Front mounti	ng type product m	ass [kg]		Page	0.4	0.6	0.4	0.6		
Mounting and	Front mounting type			14, 16	0		0			
connection	(screw mounting, IEC	35 mm rail mounting)							
Accessories	Auxiliary switch			27	0		0			
	Alarm switch			27	0	10	0			
	Shunt trip device	de de			_	0	-	0		
	Undervoltage trip	device	_R	27	_	<u> </u>	<u> </u>	0		
	Lead wire termina	al blook		19	0		0			
Separately	Auxiliary switch	II DIOCK		20	0					
sold parts	Alarm switch			20						
ooia parto	Shunt trip device		F 🗌		_					
	External	Panel mounting		29						
	operating handle			29	0		ĬŎ			
	Terminal cover	Short type	TS	29	Ö		Ö			
		Long type	TL	29	0		Ö			
	Insulation barrier	Interphase barrier		29	0		0			
	Handle locking co	over		29	0		0	<u> </u>		
	Handle key lock		Q2	29	0		<u> </u> 0			
Confor-	IEC60947-2 (TÜV	certificate)			\triangle					
mance to standards	EN60947-2 (CE n	narking)			((
	GB14048.2 (CCC	certificate)			©					
JISC8201-2-1 Electrical Appliances and Materials Safety Act					Self-declaration of conformity Specified Electrical Appliances and Materials					
Tripping do	ico						E			
Tripping devi	ce				1	magnetic method				
Trip button Earth leakag	e indication				Provided Mechanical butte	on				
	cs curves and dim	ensions on page	<u> </u>		37, 38	UII				
Characteristi	os cui ves anu um	ensions on page	<u> </u>		101, 00					
						100	-240V AC 80 t	erational voltage range (V to 264V AC		
						<u>100</u>	-440V AC 80 t	to 484V AC		

■ Earth Leakage Circuit Breakers for Line Protection Use (Global Products)

Ampere fram	akage Circuit Bi				50					
Туре					EW50RBGU					
Appearance										
	ooles and element	S			2P2E	3P3E				
Applied circu				1.=0	1ø2W	1ø2W,3ø3W				
Rated operat	ional voltage Ue[V]		IEC UL	100-240V AC 240V AC	100-440V AC 240V AC				
Rated impuls	se withstand voltag	e Uimp[kV]		IOL	4	6				
	t Reference temp		A]		5,10,15,20,30,40,50	19				
Rated freque					50-60					
	ve current I∆n [m/	A]		lt.e	30	30,50,100,200,500				
Maximum op	erating time [sec]				0.1 0.04					
Rated	UL489, CAN/CSA	22.2 No.5(cUL)	AC	240V	18	18				
	IEC60947-2		AC	440V	-/-	7.5/4				
	EN60947-2			415V	-/-	10/5				
Icu/Ics [kA]	JISC8201-2-2			400V	-/-	10/5				
				380V	_/_	10/5				
					15/15	15/15				
					15/15 15/15	15/15 15/15				
	GB14048.2		AC	400V	_/_	10/5				
	GB14040.2		/10		15/15	15/15				
Isolation com	pliance			,	Compliant	, , , , , , , , , , , , , , , , , , , ,				
Reverse con					Not possible					
Utilization ca	tegory				A					
Use environn	nent condition			I -	Pollution degree 3	le 4				
Outline dime	nsions [mm]a	- d → +c+		a b	36 120 (including the terminal cover)	54				
		11.4		С	68					
				d	90					
Front mountii	ng type product ma	ass [kg]		Page	0.5	0.6				
	Front mounting type			14, 16	0	,				
	(screw mounting, IEC	35 mm rail mounting)							
	Auxiliary switch Alarm switch			27 27	0					
	Shunt trip device		F \square		<u> </u>	IO				
	Undervoltage trip	device	R \square		<u> </u>					
	Lead wire termina			41	0					
Separately	Auxiliary switch		W	20	Ö					
sold parts	Alarm switch		K	20	0					
	Shunt trip device		F 🗌		<u> </u>	0				
	External	Panel mounting Main unit mounting		29	<u>O</u>					
	operating handle Terminal cover	Short type		29 29	(Included)					
	Torrinia Cover	Long type		29						
	Handle locking co		L1	29	0					
	Handle key lock			29	O					
Confor-	UL489/CSA22.2N	lo.5(cUL)			(File No.E90584)					
mance to standards	IEC60947-2 (TÜV	certificate)			LISTED					
	EN60947-2 (CE m	narking)			<u> </u>					
	GB14048.2 (CCC	certificate)			(((c)					
	JISC8201-2-1				Self-declaration of conformity					
	Electrical Applian	ces and Material	s Safe	ty Act	Specified Electrical Appliances and Materials					
Tripping devi	ce				Thermal-electromagnetic method					
Trip button					Provided					
Earth leakage	e indication cs curves and dim	····			Mechanical button 40, 41					

Standards	Rated voltage (V)	Operational voltage range (V)
UL	240V AC	80 to 264V AC
IEC	100-240V AC	80 to 264V AC
	100-440V AC	80 to 484V AC

Molded Case Circuit Breakers / Earth Leakage Circuit Breakers

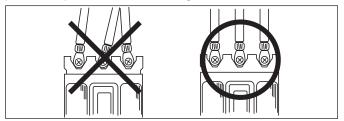
G-TWIN /1 Series

Mounting and connection

■ Front Mounting Type

Appearance	Appearance				MCCB main unit applicable	
		Shape	Screw size	[N•m]	type (basic designation)	type (basic designation)
For crimp/stick terminals (front connection)	CEA®		M5 x 14		BW32 BW50	EW32 EW50
		Cross-recessed pan-head screw with washer	M6 x 14	4.0 to 5.0	BW63	EW63

Mount the crimp terminals to ensure that the wires for the respective poles are in parallel as shown in the figure below.



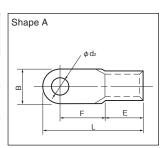
(1) List of applicable crimp terminals

	Cross section area of electric wire	e used [mm²]	2	5.5	8	14	22
	Allowable current [A] (600V IV electric wire 30°C Insula	27	49	61	88	115	
	Range of electric wire used [mm ²	1.04	2.63	6.64	10.52	16.78	
	MCCB main unit applicable type	LEOD main and applicable type (to	to	to	to	to
Frame [A]	(basic designation)	(basic designation)	2.63	6.64	10.52	16.78	26.66
32	BW32	EW32	R2-5	R5.5-5	R8-5	R14-5	
50	BW50	EW50]				
63	BW63	EW63	R2-6	R5.5-6	R8-6	R14-6	JST 22-S6

(Explanation) R: JIS C2805, $\,$ JST: provided by JST Mfg. Co., Ltd.

Crimp terminal size

Model number	Shape	Diameter of	Outline	dimens	ions [m	m]			Applicable electric wire	
		screw used	ød ₂	В	L	F	E	Plate thickness	[mm²]	
R2-5	Α	M5	5.3	9.5	16.8	7.3	4.8	0.8	1.04 to 2.63	
R2-6		M6	6.4	12.0	21.8	11.0				
R5.5-5]	M5	5.3	9.5	19.8	8.3	6.8	1.0	2.63 to 6.64	
R5.5-6	1	M6	6.4	12.0	25.8	13.0	1			
R8-5	1	M5	5.3]	29.8	9.3	8.5	1.2	6.64 to 10.52	
R8-6	1	M6	6.4	1						
R14-5]	M5	5.3]		13.3	10.5	1.5	10.52 to 16.78	
R14-6		M6	6.4							
22-S5]	M5	5.3]	30.0	12.0	12.0	1.8	16.78 to 26.66	
L330T459-23		M5	5.3]						
22-S6		M6	6.4							



Note: Excerpt from JST's catalog

Wire connecting method (global products)

- (1) Notes on wire (conductor) connection
- Connect wires to UL breakers according to the National Electrical Code (NEC) or Canadian Electrical Code (CEC) Part 1.
- For connection, use 75°C copper wires. Use of UL- or CSA-approved wires is recommended.
- · A large current flow including a short-circuit current flow may generate a very large electromagnetic force between wires. Ensure that wires are securely supported.
- Regularly retighten the tightening screws of the terminals.
- Do not cover the arc gas outlet.

Connectable wire and tightening torque

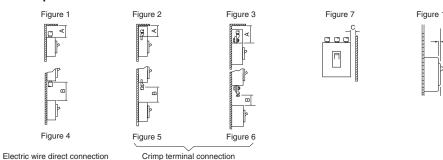
Crimp terminal connection

MCCB main	ELCB main	Rated	Applicable crimp term	inal		Connectable	Tightening	Screw
unit type	[A]	current [A]	(Provided by JST Mfg.)	Provided by Nichifu	Provided by Daido Solderless Terminal Mfg.	wire size 75°C wire	torque [N•m]	head type and size [mm]
BW50RBGU	EW50RBGU	3 5 10 15	2-M5, R2-5	R2-5, R2-5M	R2-5, R2-S5	14AWG	2.0 to 3.0	Cross- recessed pan-head screw with washer
		20	3.5-5, 3.5-R5, 5-S5, 5.5-5NS, R5.5-5	R3.5-5S, R3.5-5L, R5.5-5, R5.5-5N, R5.5-5S	R3.5-5, R5.5-5, R5.5-L5, R5.5-S5	12AWG		Washer
		30	5-S5, 5.5-5NS, R5.5-5	R5.5-5, R5.5-5N, R5.5-5	R5.5-5, R5.5-L5, R5.5-S5	10AWG		
		40 50	8-5NS,8-NK5, 8-5L5NS	R8-5, R8-5S	R8-5, R8-S5	8AWG		

Note 1: AWG/MCM is a system to indicate UL wire sizes.

Note 2: Use 75°C wires for connection. (UL- or CSA-approved wires)
Note 3: For the crimping tool, be sure to use UL- or CSA-approved products from manufacturers.

■ Arc Space



Ensure the values in the table below for the insulation space according to the conditions given in the respective drawings. For wiring, take into consideration various situations that may arise in actual use conditions and provide bare conductors with taping or insulation barriers for the ranges of dimensions shown in the table below.

Insulation outside the arc space may need reinforcement depending on the use conditions.

[Unit: mm]

Basic designation		Ceiling distance	Vertical distance	Side plate distance	Front plate distance
MCCB	ELCB	Α	В	С	F
BW32	EW32	10	20	10	0
BW50	EW50				
BW63 EW63					
		Figure 1, 2, 3	Figure 4, 5, 6	Figure 7	Figure 8

Molded Case Circuit Breakers / Earth Leakage Circuit Breakers

G-TWIN /1 Series

Mounting and connection

■ IEC 35 mm Rail Mounting

Mounting on IEC 35 mm rails is possible as standard.

Main unit applicable type (basic designation)								
MCCB ELCB								
BW32	EW32							
BW50	EW50							
BW63	EW63							

Note 1: Mounting pitch for rail fixing screws of within 250 mm is recommended.

Note 2: Applicable rails: TH35-7.5, TH35-7.5AL and TH35-15AL. (Types of Fuji Electric FA Components & Systems products)

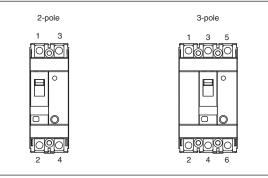
* Main unit mounting screws are not included. When necessary, use commercially-available screws (recommended size: M4 x 60).



Note: For vertical mounting, use holding brackets (type LT9E-T1 provided by Fuji Electric Technica Co., Ltd.).

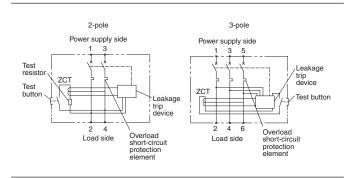
■ Terminal Number

ELCB terminal number



■ Internal Wiring Diagram

ELCB internal wiring diagram



■ Internal Resistance and Power Consumption

MCCB

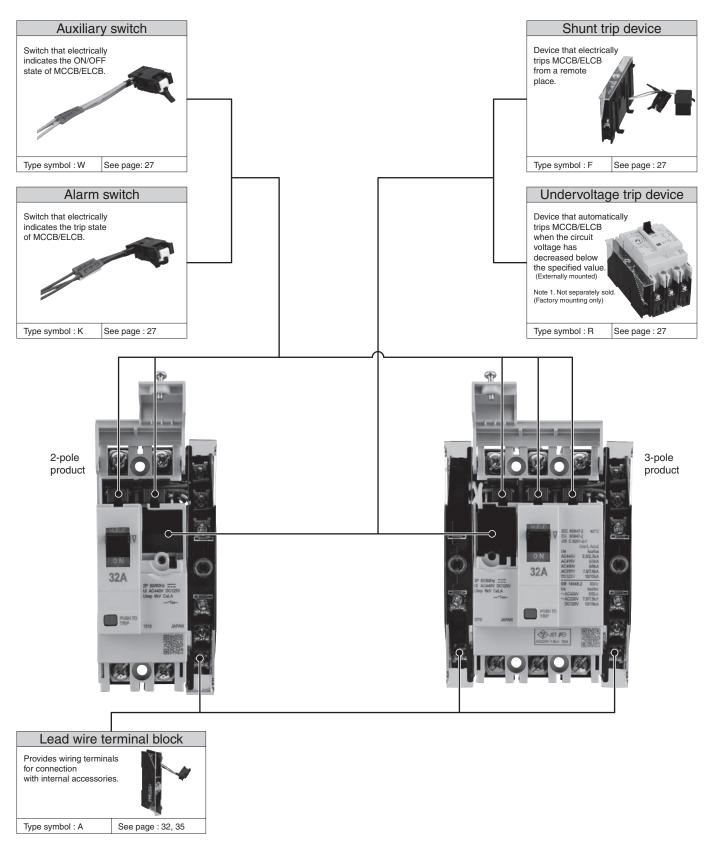
AF	Туре	Rated current [A]	Internal resistance (m Ω) (for one phase)	Power consumption (W) (for three phases)
32AF	BW32SBG	3	116.0	3.1
50AF	BW50EBG	5	50.5	3.8
	BW50SBG BW50RBGU		13.8	4.1
	BWSURBGU	15	6.5	4.4
		20	4.1	5.2
		30	2.8	7.6
		32	2.8	8.6
50AF	BW50EBG	40	1.7	8.2
	BW50SBG BW50RBGU	50	1.5	11.3
63AF	BW63EBG	60	1.1	11.9
	BW63SBG	63	1.1	13.1

ELCB

AF	Туре	Rated current [A]	Internal resistance (m Ω) (for one phase)	Power consumption (W) (for three phases)
32AF	EW32SBG	5	50.5	3.8
50AF	EW50EBG	10	13.8	4.1
	EW50SBG EW50RBGU	15	6.5	4.4
	EWSUNDGO	20	4.1	5.2
		30	2.8	7.6
		32	2.8	8.6
50AF	EW50EBG	40	1.9	9.1
	EW50SBG EW50RBGU	50	1.7	12.8
63AF	EW63EBG	60	1.3	14.0
	EW63SBG	63	1.3	15.5

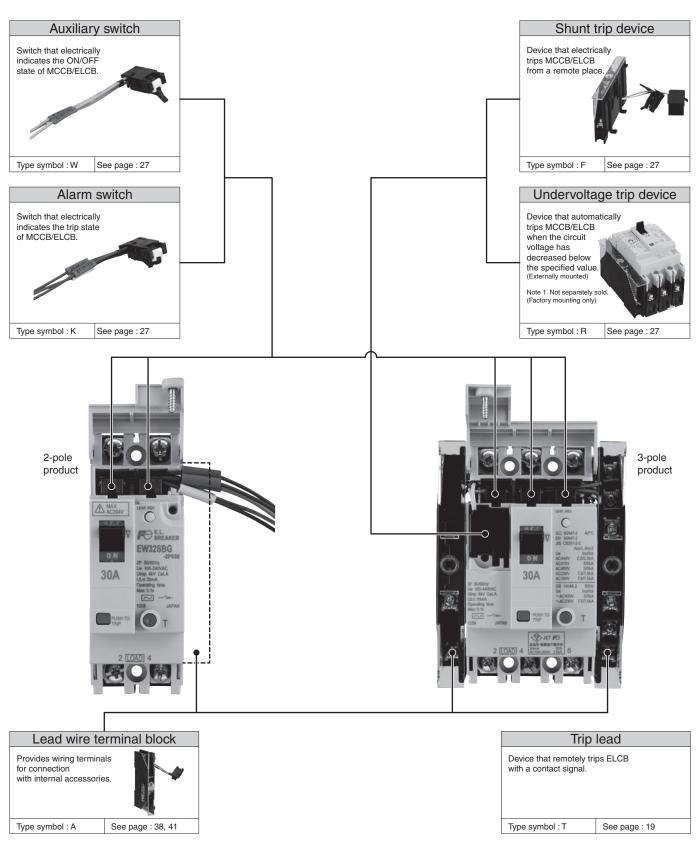
■ Internal Accessories

(1)-1 Variation of internal accessories (MCCB)



Accessories

(1)-2 Variation of internal accessories (ELCB)



(2) Types and terminal numbers of internal accessories

The following describes the types and terminal numbers of internal accessories.

Туре			Terminal number		Remarks
			Left side mounting	Right side mounting	
Auxiliary switch Standard: W, V Low level circuit: 1, 2	For one switch	(W) (1)	11 12 14 AXCL AXbL AXaL	21 22 24 AXCR AXbR AXaR	For the rated operational voltage and current, see page 27. For details of mounting positions, see the List of internal accessory combinations on pages 21 to 26.
	For two switche	s (V) (2)	11 12 14 AXCL AXbL AXaL	21 22 24 AXCR AXbR AXaR	
Alarm switch Standard: K Low level circuit: 8	For one switch	(K) (8)	91 92 94 ALCL ALbL ALaL	01 02 04 ALCR ALDR ALAR	
Shunt trip device: F	With burn-out preventive conta (standard)	act	C2 S2	C1 S1	For the operating voltage, see page 27.
Undervoltage trip devid	ce		D2 P2	D1 P1	For the operating voltage, see page 27.
Trip lead: T (For ELB only) Note: Cannot be specified	l for global product:	S.	TL2	TL1	Do not apply voltage on the terminal block because the main circuit voltage is output. Select a switch to be connected that is capable of switching the main circuit voltage of the ELB without any problem and withstands a current of up to 1 A. Do not share the switch of the trip lead with other ELB. It may cause a fire due to a short circuit. When extending the trip lead, ensure that the length is within 3 m. Failure to observe this instruction may lead to unwanted operation.

(3) Combinations of internal accessories

• List of internal accessory combinations

Туре			МССВ				ELCB							
		BW508 BW508 BW638 BW638	BW50EBG				EW32SBG EW50EBG EW50SBG EW63EBG EW63SBG				EW50RBGU			
		2P		3P		2P		3P		2P		3P		
Terminal co	Terminal connection		Lead wire	Terminal block	Lead wire	Terminal block	Lead wire	Terminal block	Lead wire	Terminal block	Lead wire	Terminal block	Lead wire	Terminal block
Accessory	Auxiliary switch x1	W (1)		0	0	0	0	0	0	0	0	0	0	
type	Auxiliary switches x2	V (2)	_	_	0	0	_	_	0	0	_	_	0	0
	Alarm switch x1	K (8)		0	0	0	0	0	0	0	0	0	0	0
	Shunt trip device	F	O *1	O *1	0	0	_	-	0	0	_	_	0	0
	Undervoltage trip device	R	-	_	-	O *1	_	-	_	O *1	_	_	-	O *1
	Trip lead	Т	_	_	_	_	_	O *1	_	O *1	_	_	_	_
	Combination	W+K	0	0	0	0	0	0	0	0	0	0	0	0
		W+F	_	_	0	0	_	_	0	0	_	_	0	0
		W+R		_	○ *2	O *1	_	-	○ *2	O *1			○ *2	O *1
		W+T		_		_		-	○ *2	O *1		-		
		V+K		_	0	0		-	0	0		-	0	0
		K+F		-	0	0		-	0	0		-	0	
		K+R		_	○ *2	O *1		-	○ *2	O *1		<u> </u>	O *2	O *1
		K+T		_				-	○ *2	O *1		<u> </u>		<u> </u>
		W+K+F		-	0	0		-	0	0		<u> </u>	0	
		W+K+R		-	O *2	<u> </u>		-	<u></u> *2	<u> </u>		<u> </u>	<u> </u>	<u></u> 1
		W+K+T		_		_		_	○ *2	│		_		

Note *1: Factory mounting only (to be specified in the order).

Note *2: Factory mounting only; W/K for lead wire connection and R/T for terminal block connection (to be specified in the order).

Molded Case Circuit Breakers / Earth Leakage Circuit Breakers G-TWIN / Series Accessories

• One-touch mounting internal accessories (separately sold)

Туре	Terminal	Lead wire	Туре	Voltage rating	Mount	ability		
	connection	pull-out			MCCE	3	ELCB	
		direction			2P	3P	2P	3P
Auxiliary switch	Lead wire type	Left side	BW9W1SB1	/	1-	0		0
(standard type)		Right side	BW9W1SB1-R] /	0	0	0	0
Auxiliary switch		Left side	BW9W1DB1] /	_	0	-	0
(low level circuit)		Right side	BW9W1DB1-R] /	0	0	0	0
Alarm switch		Left side	BW9K1SB1		_	0	_	0
(standard type)		Right side	BW9K1SB1-R		\circ	0	0	0
Alarm switch		Left side	BW9K1DB1		_	0	_	0
(low level circuit)		Right side	BW9K1DB1-R		0	0	0	0
Auxiliary/alarm switch		Left side	BW9WKSB1		_	0	-	0
(standard type)		Right side	BW9WKSB1-R		0	0	0	0
Auxiliary/alarm switch		Left side	BW9WKDB1] /		0		0
(low level circuit)		Right side	BW9WKDB1-R		0	0	0	0
Shunt trip device		Left side	BW9FRB1	AC/DC24V]-		-	0
			BW9F6B1	AC100-130V/DC100-110V				
			BW9FKB1	AC200-240V/DC200-220V				
			BW9FPB1	AC380-440V				
Auxiliary switch	Terminal block	Left side	BW9W1SB1-A	/		0	0	0
(standard type)	type	Right side	BW9W1SB1-RA		_	0		0
Auxiliary switch		Left side	BW9W1DB1-A		0	0	0	0
(low level circuit)		Right side	BW9W1DB1-RA		_	0		0
Alarm switch		Left side	BW9K1SB1-A		0	0	0	0
(standard type)		Right side	BW9K1SB1-RA		_	0		0
Alarm switch		Left side	BW9K1DB1-A			0	0	0
(low level circuit)		Right side	BW9K1DB1-RA			0		0
Auxiliary/alarm switch		Left side	BW9WKSB1-A		0	0	0	0
(standard type)		Right side	BW9WKSB1-RA			0	-	0
Auxiliary/alarm switch		Left side	BW9WKDB1-A] /	0	0	0	0
(low level circuit)		Right side	BW9WKDB1-RA	/	-	0	_	0
Shunt trip device		Left side	BW9FRB1-A	AC/DC24V	_	0	-	0
			BW9F6B1-A	AC100-130V/DC100-110V	1			
			BW9FKB1-A	AC200-240V/DC200-220V				
			BW9FPB1-A	AC380-440V				

• Details of combinations of internal accessories

(a) Lead wire type (MCCB)

Lead wire type	MCCB (2P)			MCCB (3F	P)					
		1			① — I	<u> </u>	- 0			
		-2			2 —		- 8			
		-3			③ ─		- 9			
		-4			4 -		- 10			
		- (5)			<u> </u>		— (i)			
		6			6 –		L (12)			
_				BW32SBG, BW50 BG, BW63 BG						
Туре	BW32SBG, BW50 BG, BW6	3			, – ,	63 🗌 BG				
A	BW50RBGU	District state		BW50RB	GU	Right side				
Accessory type	Left side	Right side	Din a manule	Left side Position	Din a monde					
A ! ! ! = ! & = !=	Position Ring mark	Position	Ring mark 21/AXc : Yellow		Ring mark	Position	Ring mark			
Auxiliary switch	Cannot be pulled out to the left	1		1	11/AXc : White		nounted on the right rell by purchasing a			
	side.	2	24/AXa : Red	2	14/AXa : Brown		ly sold product (for			
		3	22/AXb : Blue	3	12/AXb : Green		e mounting).			
		_	_		_	Tigrit-side	mounting).			
			_	_	-					
W(1)*		_	_	_	_					
Auxiliary switch x 2	Cannot be mounted.			1	11/AXc : White	7	21/AXc : Yellow			
				2	14/AXa : Brown	8	24/AXa : Red			
				3	12/AXb : Green	9	22/AXb : Blue			
				_	_	_	_			
				_	_	_	_			
V(2)*				_	_	_	_			
Alarm switch	Cannot be pulled out to the left	1	01/ALc : Yellow	1	91/ALc : White	Can be n	nounted on the right			
	side.	2	04/ALa : Red	2	94/ALa : Brown	side as w	ell by purchasing a			
		3	02/ALb : Blue	3	92/ALb : Green		ly sold product (for			
			_	-	_	right-side	mounting).			
		_	_	1_	_	- 1				
K(8)*	1		_	_	_	_				
Auxiliary switch	Cannot be pulled out to the left	1	01/ALc : Yellow	1	91/ALc : White	Can be n	nounted on the right			
+	side.	2	04/ALa : Red	2	94/ALa : Brown		ell by purchasing a			
alarm switch	Side.	3	02/ALb : Blue	3	92/ALb : Green		ly sold product (for			
dami ownon		4	21/AXc : Yellow	4	11/AXc : White		mounting).			
		_	24/AXa : Red	5	14/AXa : Brown		,g,.			
\M/4* IZ/O*	-	(5)				_				
W(1)* K(8)*	0	6	22/AXb : Blue	6	12/AXb : Green		04/47/ 7/-11			
Auxiliary switch x 2	Cannot be mounted.			1	91/ALc : White	7	21/AXc : Yellow			
+ alarm switch				2	94/ALa : Brown	8	24/AXa : Red			
alailli Swilcii				3	92/ALb : Green	9	22/AXb : Blue			
				4	11/AXc : White	_	_			
				5	14/AXa : Brown		_			
V(2)* K(8)*				6	12/AXb : Green	_	_			
Shunt trip device	Cannot be pulled out to the left		C1/S1 : White	1	C1/S1 : White	_	_			
	side.	2	C2/S2 : White	2	C2/S2 : White	_	_			
		_	_	_		_	_			
		_	_	_	_	_	_			
		_	_	_	_	_	_			
F 🗌	1	_	_	_	_	_	_			
Auxiliary switch	Cannot be mounted.			1	C1/S1 : White	7	21/AXc : Yellow			
+				2	C2/S2 : White	(8)	24/AXa : Red			
hunt trip device				_	_	9	22/AXb : Blue			
				_	_					
				_	<u> </u>	+_				
W(1)* F □	1			_		+_				
Alarm switch	Cannot be mounted.			1)	C1/S1 : White	7)	01/ALc : Yellow			
namı switch	Cannot be mounted.									
+ hunt trip device				2	C2/S2 : White	8	04/ALa : Red			
mant trip device				_	 -	9	02/ALb : Blue			
					_					
	1				_		-			
K(8)* F 🗌				-	-	_	-			
Auxiliary switch	Cannot be mounted.			1	C1/S1 : White	7	01/ALc : Yellow			
				2	C2/S2 : White	8	04/ALa : Red			
+				_		(9)	02/ALb : Blue			
+						0	OZ/ALD . DIGE			
+ alarm switch +				_	_	10	21/AXc : Yellow			
+				_ _ _						

Note: * () code of Low level circuit

Molded Case Circuit Breakers / Earth Leakage Circuit Breakers G-TWIN / Series

Accessories

(b) Lead wire type (ELCB)

Lead wire type	ELCB (2P)			ELCB (3	P)		
		1					7
Туре	EW32SBG, EW50 BG, EW6	3 □ BG		EW32SE	IG BG, EW50 □ BG, EW	<u>Po</u>	
.,,,,,	EW50RBGU			EW50RE			
Accessory type	Left side	Right side		Left side		Right sic	
	Position Ring mark	Position	Ring mark	Position	Ring mark	Position	
Auxiliary switch	Cannot be pulled out to the left	1	21/AXc : Yellow	1	11/AXc : White		mounted on the right
	side.	3	24/AXa : Red 22/AXb : Blue	3	14/AXa : Brown 12/AXb : Green		well by purchasing a ely sold product (for
		_	_		–		e mounting).
		_	 	1_			3,
W(1)*	П	_	-	_			
Auxiliary switch x 2	Cannot be mounted.			1	11/AXc : White	7	21/AXc : Yellow
				2	14/AXa : Brown	8	24/AXa : Red
				3	12/AXb : Green	9	22/AXb : Blue
				_			
\/(O*	-			_			
V(2)* Alarm switch	Cannot be pulled out to the left		01/ALc : Yellow	1	91/ALc : White	Con hou	
Alarm Switch	side.	2	04/ALC : Yellow	2	94/ALa : Brown		nounted on the right well by purchasing a
	Side.	3	02/ALb : Blue	3	92/ALb : Green		ely sold product (for
		_		_			e mounting).
		_	_	<u> </u>	_		
K(8)*		_	_	<u> </u>	_		
Auxiliary switch	Cannot be pulled out to the left	1	01/ALc : Yellow	1	91/ALc : White		nounted on the right
+	side.	2	04/ALa : Red	2	94/ALa : Brown		well by purchasing a
alarm switch		3	02/ALb : Blue	3	92/ALb : Green		ely sold product (for
		4	21/AXc : Yellow	4	11/AXc : White	Ingni-side	e mounting).
W(1)* K(8)*	-	(5) (6)	24/AXa : Red 22/AXb : Blue	(5) (6)	14/AXa : Brown 12/AXb : Green	_	
Auxiliary switch x 2	Cannot be mounted.	10	ZZ/AXD . Dide	1	91/ALc : White	(7)	21/AXc : Yellow
+				2	94/ALa : Brown	(8)	24/AXa : Red
alarm switch				3	92/ALb : Green	9	22/AXb : Blue
				4	11/AXc : White	-	_
				(5)	14/AXa : Brown	_	_
V(2)* K(8)*				6	12/AXb : Green		
Shunt trip device	Cannot be mounted.			1	C1/S1 : White	-	
				2	C2/S2 : White	 -	
						 -	
				_			
F 🗌				_	_	_	_
Auxiliary switch	Cannot be mounted.			1	C1/S1 : White	7	21/AXc : Yellow
+				2	C2/S2 : White	8	24/AXa : Red
shunt trip device				_	-	9	22/AXb : Blue
				_			-
NA//4) # = □	-			_	<u> -</u>	 -	
110//11* E	Cannot be mounted.			1)	C1/S1 : White	7	01/ALc : Yellow
W(1)* F	annot be mounted.			2	C2/S2 : White	8	04/ALa : Red
Alarm switch						9	02/ALb : Blue
Alarm switch +				1—			
Alarm switch +				=	_	<u> </u>	_
Alarm switch + shunt trip device				_ 		- -	
Alarm switch + shunt trip device K(8)* F □				_ _ _ _		_ 	_ _ _
Alarm switch + shunt trip device K(8)* F □	Cannot be mounted.			_ _ _ _ _ _		_ _ _ _	- - 01/ALc : Yellow
Alarm switch + shunt trip device K(8)* F Auxiliary switch +	Cannot be mounted.			- - - - 1 2	 C1/S1 : White C2/S2 : White	- - 7 8	 01/ALc : Yellow 04/ALa : Red
Alarm switch + shunt trip device K(8)* F Auxiliary switch +	Cannot be mounted.				 C1/S1 : White C2/S2 : White	- - 7 8 9	 01/ALc : Yellow 04/ALa : Red 02/ALb : Blue
Alarm switch + shunt trip device	Cannot be mounted.				 C1/S1 : White C2/S2 : White	- - 7 8	 01/ALc : Yellow 04/ALa : Red

Note: * () code of Low level circuit

(c) Terminal block type (MCCB)

Lead wire type	MCCB (2P)			MCCB ((3P)			
	(20)				① ②			
Туре	BW32SBG, BW50 ☐ BG, BW50RBGU			BW32SI BW50R	BG, BW50 🗌 BG,			
Accessory type	Left side	Right si	ide	Left side		Right si	 de	
recodery type	Position Ring mark	Position		Position		Position		
Auxiliary switch	Cannot be mounted.	1	—	1	–		mounted on the right	
taxinary ownor	Carmet be meanted.	2		2	_	side as	well by purchasing a	
		3		3	_		ely sold product (for	
		4	21/AXcR	4	11/AXcL		le mounting).	
		5	22/AXbR	5	12/AXbL		0,	
W(1)* A		6	24/AXaR	6	14/AXaL			
Auxiliary switch x 2	Cannot be mounted.	j w	∠¬/A∧ai t	1	- IT/A/AL	7	_	
Auxilial y Switch X Z	Cariffor be infounted.			2	_	8		
				3		9		
				4	11/AXcL	10	21/AXcR	
				(5)	12/AXbL	11)	22/AXbR	
V(2)* A	_			6	14/AXaL	(12)	24/AXaR	
(v(∠)_A Alarm switch	Cannot be mounted.		04/ALaR	1	94/ALaL		mounted on the right	
Marin Switch	Cannot be mounted.	<u>(1)</u> (2)	02/ALah	2	92/ALbL		well by purchasing a	
		3		2	92/ALDL 91/ALCL		ely sold product (for	
			01/ALcR	3			le mounting).	
		4		4	_	——Ingili-sic	ie mounting).	
14(0)+ 4		5	_	5	_			
K(8)* A		6		6	_			
Auxiliary switch	Cannot be mounted.	1	04/ALaR	1	94/ALaL		mounted on the right	
+		2	02/ALbR	2	92/ALbL		well by purchasing a	
alarm switch		3	01/ALcR	3	91/ALcL		ely sold product (for le mounting).	
		4	21/AXcR	4)	11/AXcL	night-sic	ie mounting).	
		(5)	22/AXbR	5	12/AXbL			
W(1)* K(8)* A		6	24/AXaR	6	14/AXaL			
Auxiliary switch x 2	Cannot be mounted.			1	94/ALaL	7	_	
+				2	92/ALbL	8	_	
alarm switch				3	91/ALcL	9		
				4)	11/AXcL	10	21/AXcR	
				5	12/AXbL	11)	22/AXbR	
V(2)* K(8)* A				6	14/AXaL	12	24/AXaR	
Shunt trip device	Cannot be mounted.	1		1		Cannot	be mounted.	
		2		2				
		3		3	<u> </u>			
		4	C2/S2	4	C2/S2			
		(5)	_	(5)	_			
F \square A		6	C1/S1	6	C1/S1			
Auxiliary switch	Cannot be mounted.			1)	_	7	_	
+				② ③	_	8	_	
shunt trip device				3	_	9	_	
				4	C2/S2	10	21/AXcR	
				(5)	_	11)	22/AXbR	
W(1)* F □ A				6	C1/S1	12	24/AXaR	
Alarm switch	Cannot be mounted.			1	_	7	04/ALaR	
+				2	_	8	02/ALbR	
shunt trip device				3	_	9	01/ALcR	
				4	C2/S2	10	_	
				(5)	_	11)	_	
K(8)* F □ A				6	C1/S1	12		

Molded Case Circuit Breakers / Earth Leakage Circuit Breakers G-TWIN /1 Series

Accessories

Lead wire type	MCCB (2P)			MCCB (3F	P)			
Туре	BW32SBG, BW50 BG, BW BW50RBGU	63 🗌 BG		BW32SB0 BW50RB0	G, BW50 🗌 BG, E GU	BW63 □ BG		
Accessory type	Left side	Right side	ı	Left side		Right sid	le	
	Position Ring mark	Position	Ring mark	Position	Ring mark	Position	Ring mark	
Auxiliary switch	Cannot be mounted.		. <u>-</u>	1	-	7	04/ALaR	
+				2	_	8	02/ALbR	
alarm switch				3	_	9	01/ALcR	
+				4	C2/S2	10	21/AXcR	
shunt trip device				5	_	11)	22/AXbR	
W(1)* K (8)* F □ A				6	C1/S1	(12)	24/AXaR	
Undervoltage trip	Cannot be mounted.			1	_		pe mounted.	
device	Carmet be meanted.			2	_	— Garmot k	o mountou.	
401.00				3	_			
				4	D2/P2			
				5				
R□	-			6	D1/P1			
Auxiliary switch	Cannot be mounted.			1	DI/FI			
	Cannot be mounted.					(7) (8)	- -	
+ Undervoltage trip device				2	- -			
orider voitage trip device				3		9		
				4	D2/P2	10	21/AXcR	
[14/(A)+ D = 4				(5)	-	(1)	22/AXbR	
W(1)* R □ A				6	D1/P1	12	24/AXaR	
Alarm switch	Cannot be mounted.			1	-	7	04/ALaR	
+				2	_	8	02/ALbR	
Undervoltage trip				3	_	9	01/ALcR	
device				4	D2/P2	10	_	
				(5)	-	(1)	-	
K(8)* R □ A				6	D1/P1	12	_	
Auxiliary switch	Cannot be mounted.			1	_	7	04/ALaR	
+				2	-	8	02/ALbR	
alarm switch				3	_	9	01/ALcR	
+				4	D2/P2	(10)	21/AXcR	
Undervoltage trip device				5		10	22/AXbR	
W(1)* K(8)* R □ A	1			6	D1/P1	(12)	24/AXaR	
W(I) K(O) II A				<u> </u>	D 1/1 1	169	Δ-τ/ΑΛαι ι	

Note: * () code of Low level circuit Remarks

¹⁾ The undervoltage trip device is factory-mounted when the product is shipped. Specify in the order for the main unit.

(d) Terminal block type (ELCB)

Lead wire type	ELCB (2P)			ELCB (3P)				
Туре	EW32SBG, EW50 BG, I			EW32SB0	G, EW50 🗌 BG, E	EW63 🗌 BG			
Accessory type	Left side	Right side	e	Left side	<u> </u>	Right si	de		
, .,,,,	Position Ring mark	Position	Ring mark	Position	Ring mark	Position			
Auxiliary switch	Cannot be mounted.	1	_	1	_	Can be	mounted on the right		
		2	_	2	_		well by purchasing a		
		3	_	3	_		ely sold product (for		
		4	21/AXcR	4	11/AXcL	right-sic	e mounting).		
		(5)	22/AXbR	(5)	12/AXbL				
W(1)* A		6	24/AXaR	6	14/AXaL				
Auxiliary switch x 2	Cannot be mounted.			1	_	7	_		
				2	_	8	_		
				3		9			
				4	11/AXcL	10	21/AXcR		
\/(O)* A				5	12/AXbL	(1) (12)	22/AXbR		
V(2)* A	Cannot be mounted.	1	04/ALaR	<u>6</u>	14/AXaL 94/ALaL		24/AXaR mounted on the right		
Alarm Switch	Cannot be mounted.	2	04/ALAR 02/ALbR	2	94/ALaL 92/ALbL	Can be	mounted on the right well by purchasing a		
		3	01/ALCR	3	91/ALCL		ely sold product (for		
		4	UI/ALCH	4	91/ALCL		le mounting).		
		5		5	_		0,		
K(8)* A		6		6					
Auxiliary switch	Cannot be mounted.	1	04/ALaR	1	94/ALaL	Can be	mounted on the right		
+	Carriot be mounted.	2	02/ALbR	2	92/ALbL	side as	well by purchasing a		
alarm switch		3	01/ALcR	3	91/ALcL		ely sold product (for		
		4	21/AXcR	4	11/AXcL		e mounting).		
		5	22/AXbR	5	12/AXbL				
W(1)* K(8)* A		6	24/AXaR	6	14/AXaL				
Auxiliary switch x 2	Cannot be mounted.			1	94/ALaL	7	_		
+				2	92/ALbL	8	_		
alarm switch				3	91/ALcL	9	_		
				4	11/AXcL	10	21/AXcR		
				(5)	12/AXbL	(1)	22/AXbR		
V(2)* K(8)* A				6	14/AXaL	12	24/AXaR		
Shunt trip device	Cannot be mounted.			1	_	Cannot	be mounted.		
				2	-				
				3	-				
				4	C2/S2				
F \square A				(5) (6)	C1/S1				
F	Cannot be mounted.			1	C1/S1 —	7			
+	Carriot be mounted.			2		8			
hunt trip device				3	_	9	_		
				4	C2/S2	10	21/AXcR		
				5	_	11)	22/AXbR		
W(1)* F □ A				6	C1/S1	12	24/AXaR		
Auxiliary switch	Cannot be mounted.			1	_	7	04/ALaR		
•				2	_	8	02/ALbR		
hunt trip device				3	_	9	01/ALcR		
				4	C2/S2	10	_		
				(5)	_	(1)	_		
K(8)* F □ A				6	C1/S1	12	_		
Auxiliary switch	Cannot be mounted.			1		7	04/ALaR		
+				2	_	8	02/ALbR		
alarm switch				3	<u> </u>	9	01/ALcR		
+				4	C2/S2	10	21/AXcR		
shunt trip device				(5)	_	11)	22/AXbR		
W(1)* K(8)* F □ A				6	C1/S1	12	24/AXaR		

Molded Case Circuit Breakers / Earth Leakage Circuit Breakers

G-TWIN / Series

Accessories

Lead wire type	ELCB (2P)			ELCB (3P)				
		ਪਾਨ ਾ।		- (-					
	19				1				
		○ ②			2	8			
		3			3				
	<u> </u>	4			4				
		O 5			5				
	n ₁₋₁	6			6	12 12 12			
Туре	EW32SBG, EW50 BG, EW EW50RBGU	63 🗌 BG		EW32SBG, EW50 □ BG, EW63 □ BG EW50RBGU					
Accessory type	Left side	Right side		Left side		Right sid	e		
, ,,	Position Ring mark	Position	Ring mark	Position	Ring mark	Position	Ring mark		
Undervoltage trip device	Cannot be mounted.			1	-	Cannot b	e mounted.		
				2	-				
				3	_				
				4	D2/P2				
				(5)	-				
R□				6	D1/P1				
Auxiliary switch	Cannot be mounted.			1	_	7	_		
+				2	_	8	_		
Undervoltage trip device				3		9	-		
				4	D2/P2	10	21/AXcR		
				5	-	10	22/AXbR		
W(1)* R □ A				6	D1/P1	12	24/AXaR		
Alarm switch	Cannot be mounted.			1)	_	7	04/ALaR		
+				2	_	8	02/ALbR		
Undervoltage trip device				3		9	01/ALcR		
				4)	D2/P2	10	_		
				5	-	10			
K(8)* R □ A				6	D1/P1	12			
Auxiliary switch	Cannot be mounted.			1	_	7	04/ALaR		
+ alarm switch				2	_	8	02/ALbR		
+				3		9 (10)	01/ALcR		
Undervoltage trip device				4	D2/P2	(1)	21/AXcR 22/AXbR		
W(1)* K(8)* R □ A				<u>(5)</u>	D1/P1	12			
	Cannot be mounted.	1	TL1		mounted.	7	24/AXaR TL1		
Trip lead	Cannot be mounted.	2	ILI	Cannot be	e mountea.	8			
		3	TL2			9	TL2		
		4				10	_		
		5	_			(1)	_		
Т		6	-			12	_		
Auxiliary switch	Cannot be mounted.		1	1	_	7	TL1		
+				2	_	8	_		
trip lead				3	_	9	TL2		
				4	11/AXcL	10	_		
				5	12/AXbL	11)	_		
W(1)* T A				6	14/AXaL	12	_		
Alarm switch	Cannot be mounted.			1	94/ALaL	7	TL1		
+				2	92/ALbL	8	_		
trip lead				3	91/ALcL	9	TL2		
				4	_	10	_		
				(5)	-	11)	_		
K(8)* T A				6	_	12)	_		
Auxiliary switch	Cannot be mounted.			1)	94/ALaL	7	TL1		
+				2	92/ALbL	8	_		
alarm switch				3	91/ALcL	9	TL2		
+ trip load				4)	11/AXcL	10	_		
trip lead				(5)	12/AXbL	11)	_		
W(1)* K(8)* T A				6	14/AXaL	12	-		

Note: * () code of Low level circuit
Remarks

1) The undervoltage trip device is factory-mounted when the product is shipped. Specify in the order for the main unit.

2) The trip lead cannot be mounted on the global product (EW50RBGU).

3) The trip lead is factory-mounted when the product is shipped. Specify in the order for the main unit.

(4) Operations and ratings of auxiliary and alarm switches [IEC 60947-5-1, JIS C 8201-5-1]

(a) Operations of auxiliary and alarm switches

Type of switches		State of MCCB/ELCB		
		ON	OFF	Tripped
Auxiliary switch	For left side	11/AXcL 14/AXaL 12/AXbL	11/AXcL	14/AXaL 12/AXbL
	For right side	21/AXcR 24/AXaR 22/AXbR	21/AXcR	24/AXaR 22/AXbR
Alarm switch	For left side	91/ALcL	94/ALaL 92/ALbL	91/ALcL 94/ALaL 92/ALbL
	For right side	01/ALcR	04/ALaR 02/ALbR	01/ALcR

(b) Ratings of auxiliary and alarm switches

	IEC60947-5-1			Reference: NEO	CA C4505	Minimum load
	Voltage [V]	Switching	current [A]	Voltage [V]	Switching current [A]	
		AC15	DC13		Resistive load	
Standard type	125V AC	5	_	125V AC	5	5V DC 160mA
	250V AC	5	_	250V AC	3	30V DC 30mA
	_	_	_	30V DC	4	
	125V DC	-	0.6	125V DC	0.4	
	250V DC	_	0.3	250V DC	0.2	
Microload	_	_	_	30V DC	0.1	5V DC 1mA

(5) Shunt trip device

Ratings of shunt trip device

Main unit app (basic design		Mounting position	AC				Voltage rating	Product code	Time rating	Operating time
MCCB	ELCB		Voltage [V]	Input [VA]	Voltage [V]	Input [W]				[ms]
BW32	EW32	Built-in	24	40	24	40	24V AC/DC	FR	Continuous	6-13
BW50 EW50 EW63		100-130 (50/60Hz)	60	100-110	60	100-130V AC/ 100-110V DC	F6	(With burn-out		
			200-240 (50/60Hz)	70	200-220	70	200-240V AC/ 200-220V DC	FK	preventive contact)	
			380-440 (50/60Hz)	70	_	_	380-440V AC	FP		

Note 1: Specify the voltage rating in the order.

Note 2: The operating range of the trip voltage of the shunt trip device is 70 to 110% of the rated operating voltage.

(6) Undervoltage trip device

Ratings of undervoltage trip device

Main unit applicable type (basic designation)		Mounting position	AC		DC		Voltage rating	Product code
MCCB	ELCB		Voltage [V]	Input [VA]	Voltage [V]	Input [W]		
BW32	EW32	External	_	-	24	1	24V DC	RR
BW50	EW50				100-110	2	100-110V DC	RL
BW63	EW63		24	1	-	-	24V AC	RZ
			100-130	3	-	-	100-130V AC	R6
			200-240	5	-	-	200-240V AC	R4
			380-415	8	_	_	380-415V AC	RP
			400-440	9	_	_	400-440V AC	RO

Note 1: Specify the voltage rating in the order.

Note 2: The pick-up voltages of the undervoltage trip device are: Trip voltage: 70 to 35% of the rated voltage; voltage allowing closing operation: 85% to 110% of the rated voltage

(7) Accessory lead wire pull-out system

Specifications of lead wire

Type of lead wire	Size of lead wire	Length of lead wire	Indication on lead wire
32 to 63AF	0.4mm ² (AWG22)	About 500mm	Each lead wire has a ring mark indicating a terminal symbol.

Molded Case Circuit Breakers / Earth Leakage Circuit Breakers G-TWIN / Series

Accessories

■ External Accessories

(1) Variation of external accessories

The following shows various external accessories.





External operating handle (N type) Page 29





External operating handle (V type)
Page 29





Padlock-compatible type

Handle locking cover (cap type: L1) Page 29



Terminal cover (long type) Page 29



Interphase barrier Page 29



Terminal cover (short type) Page 29

■ List of Separately Sold Parts

Product name	Specification		Type	Quant
iliam ravvitala	Chandand	Lood wire type left side will out	(i.e., product code)	type
Auxiliary switch	Standard	Lead wire type left side pull-out Lead wire type right side pull-out	BW9W1SB1	1
		71 0 1	BW9W1SB1-R	
400		Terminal block type left side mounting	BW9W1SB1-A	1
		Terminal block type right side mounting	BW9W1SB1-RA	1
	Low level circuit	Lead wire type left side pull-out	BW9W1DB1	1
A STORY		Lead wire type right side pull-out	BW9W1DB1-R	1
//		Terminal block type left side mounting	BW9W1DB1-A	1
		Terminal block type right side mounting	BW9W1DB1-RA	1
arm switch	Standard	Lead wire type left side pull-out	BW9K1SB1	1
		Lead wire type right side pull-out	BW9K1SB1-R	1
		Terminal block type left side mounting	BW9K1SB1-A	1
400		Terminal block type right side mounting	BW9K1SB1-RA	1
	Low level circuit	Lead wire type left side pull-out	BW9K1DB1	1
A STATE OF THE PARTY OF THE PAR		Lead wire type right side pull-out	BW9K1DB1-R	1
H		Terminal block type left side mounting	BW9K1DB1-A	1
		Terminal block type right side mounting	BW9K1DB1-RA	1
xiliary/alarm switch	Standard	Lead wire type left side pull-out	BW9WKSB1	1
Amary/alarm Switch	Glaridard	Lead wire type right side pull-out	BW9WKSB1-R	1
		Terminal block type left side mounting		1
		71	BW9WKSB1-A	1
	Low lovel sinsuit	Terminal block type right side mounting	BW9WKSB1-RA	1
	Low level circuit	Lead wire type left side pull-out	BW9WKDB1	1
		Lead wire type right side pull-out	BW9WKDB1-R	1
•		Terminal block type left side mounting	BW9WKDB1-A	1
		Terminal block type right side mounting	BW9WKDB1-RA	1
unt trip device	24V AC/DC	Lead wire type left side pull-out	BW9FRB1	1
/172	100-130V AC/100-110V DC		BW9F6B1	1
	200-240V AC/200-220V DC		BW9FKB1	1
	380-440V AC		BW9FPB1	1
	24V AC/DC	Terminal block type left side mounting	BW9FRB1-A	1
	100-130V AC/100-110V DC	7.	BW9F6B1-A	1
Á	200-240V AC/200-220V DC		BW9FKB1-A	1
P4 -	380-440V AC		BW9FPB1-A	1
ternal operating handle		RESET-open	BW9V0BA	1
ternal operating narran	v type (panel mounting)	OFF-open	BW9V0BA-G	1
1		RESET-open for emergency stop	BW9V0BA-G	1
				1
	N. 4	OFF-open for emergency stop	BW9V0BA-EG	1
V (6)	N type (main unit mounting)	RESET-open	BW9N0BA	I
		OFF-open	BW9N0BA-G	1
		RESET-open for emergency stop	BW9N0BA-E	1
		OFF-open for emergency stop	BW9N0BA-EG	1
rminal cover	Short type	Manually-detachable, 2-pole, transparent	BW9BTBA-S2	2
		Manually-detachable, 2-pole, light gray	BW9BTBA-S2W	2
		Manually-detachable, 3-pole, transparent	BW9BTBA-S3	2
	4	Manually-detachable, 3-pole, light gray	BW9BTBA-S3W	2
		Tool-detachable, 2-pole, transparent	BW9BTBA-S2H	2
E D O		Tool-detachable, 2-pole, light gray	BW9BTBA-S2WH	2
		Tool-detachable, 3-pole, transparent	BW9BTBA-S3H	2
		Tool-detachable, 3-pole, light gray	BW9BTBA-S3WH	2
	Long type	Manually-detachable, 2-pole, transparent	BW9BTBA-L2	2
	Long type	Manually-detachable, 2-pole, transparent	BW9BTBA-L2W	2
51444 4441		Manually-detachable, 3-pole, transparent		_
चंदारा राग			BW9BTBA-L3	2
		Manually-detachable, 3-pole, light gray	BW9BTBA-L3W	2
- H D		Tool-detachable, 2-pole, transparent	BW9BTBA-L2H	2
		Tool-detachable, 2-pole, light gray	BW9BTBA-L2WH	2
		Tool-detachable, 3-pole, transparent	BW9BTBA-L3H	2
		Tool-detachable, 3-pole, light gray	BW9BTBA-L3WH	2
ulation barrier	Interphase barrier		BW9BPBA	4
andle locking cover	Cap type L1	-	BW9L1BA	1
DH		Padlock-compatible type	BW9L1BA-P	1

Note: See the internal accessory combinations (pages 19 to 26) to check mountability.

Molded Case Circuit Breakers / Earth Leakage Circuit Breakers

G-TWIN / Series

Data, Characteristics curves, Dimensions

■ BW32, 50, 63 ☐ BG (Standard Product)



Bas	ic ty	ре			BW32	SBG	BW50	EBG	BW50	SBG
Nur	nber	of poles			2	3	2	3	2	3
Rat	Rated insulation voltage A				440		440		440	
[V]	[V]		DC		125		125		125	
St	Re	IEC60947-2	AC	440V	2.5/2.5	5	2.5/2.5	5	7.5/4	
and	Rated	EN60947-2		415V	5/5		5/5		10/5	
larc	bre	JISC8201-2-1 lcu/lcs [kA]		400V	5/5		5/5		10/5	
Standard product	eak	ICU/ICS [KA]		380V	5/5		5/5		10/5	
odı	aking			240V	7.5/7.5		7.5/7.5		15/15	
ıct				230V	7.5/7.5		7.5/7.5		15/15	
	capacity		DC	125V	10/10		-/-		10/10	
			AC	400V	5/5		5/5		10/5	
		Icu/Ics [kA]		230V	7.5/7.5		7.5/7.5		15/15	
			DC	125V	10/10		-/-		10/10	

Bas	Basic type			BW63	EBG	BW63	SBG	
Nui	Number of poles				2	3	2	3
Rat	Rated insulation voltage		AC		440		440	
[V]	[V]				125		125	
St	Ra	IEC60947-2	AC	440V	2.5/2.5	5	7.5/4	
and	Rated	EN60947-2		415V	5/5		10/5	
larc		JISC8201-2-1 lcu/lcs [kA]		400V	5/5		10/5	
Standard product	breaking	ICU/ICS [KA]		380V	5/5		10/5	_
odı	ling			240V	7.5/7.5	7.5/7.5		
ct				230V	7.5/7.5		15/15	
	pa		DC	125V	-/-		10/10	
	GB14048.2		AC	400V	5/5		10/5	_
		Icu/Ics [kA]		230V	7.5/7.5		15/15	
			DC	125V	-/-		10/10	

Optional accessories

Pro	duct name	Type symbol	See		
				(i.e., symbol code)	page:
п	Auxiliary switch	Standard	1	W	27
ern	(lead wire type)	2		V	27
<u>a</u>		Low level circuit 1		1	27
internal accessories				2	27
ess	Alarm switch	Standard	1	K	27
őr.	(lead wire type)	Low level circuit	1	8	27
es	Shunt trip device	24V AC/DC		FR	27
	(lead wire type)	100-130V AC/100-110V DC	F6	27	
		200-240V AC/200-220V D	FK	27	
		380-440V AC		FP	27
	Lead wire termina	al block	1	A	32
			2	A	32
	Undervoltage	24V DC		RR	27
	trip device	100-110V DC		RL	27
	(terminal block type only)	24V AC		RZ	27
	type only)	100-130V AC		R6	27
	200-240V AC			R4	27
		380-415V AC		RP	27
				RO	27

List of product ratings

Specification for \square : rated current (code)

Product Line protection use	Basic type (i.e., product code)	Rated cu	rrent
Line protection use		F A 3	1
Line protection use		[A]	Code for
(standard products)	BW32SBG-2P□	3	003
(staridard products)		5	005
		10	010
		15	015
		20	020
		30	030
		32	032
	BW32SBG-3P□	3	003
		5	005
		10	010
		15	015
		20	020
		30	030
		32	032
	BW50EBG-2P	3	003
		5	005
		10	010
		15	015
		20	020
		30	030
		32	032
		40	040
		50	050
	BW50EBG-3P	3	003
	DW30LDG-3F	5	005
		10	
			010
		15	015
		20	020
		30	030
		32	032
		40	040
		50	050
	BW50SBG-2P□	3	003
		5	005
		10	010
		15	015
		20	020
		30	030
		32	032
		40	040
		50	050
	BW50SBG-3P□	3	003
		5	005
		10	010
		15	015
		20	020
		30	030
		32	032
		40	040
		50	050
	BW63EBG-2P	60	060
		63	063
	BW63EBG-3P	60	060
		63	063
	BW63SBG-2P□	60	060
		63	063
	BW63SBG-3P□	60	060
		63	063
		100	000

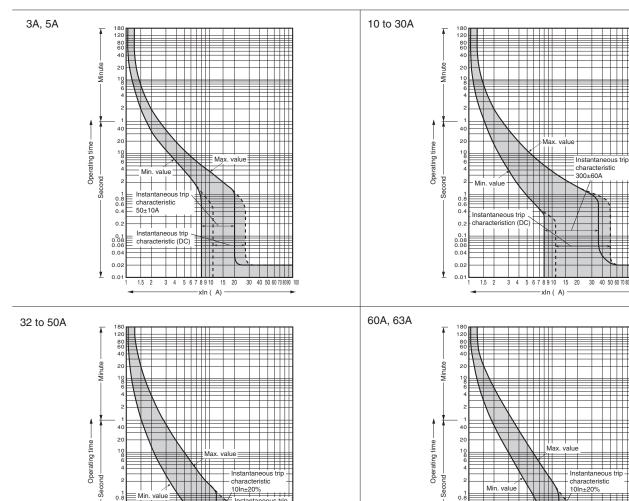
Attached components

- Terminal screw 2P: 4 screws, 3P: 6 screws

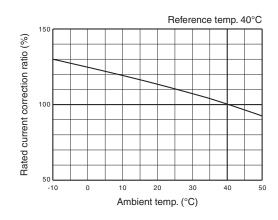
• Instruction Manual

Note 1: Mounting screws are not included. When necessary, use commercially-available screws (recommended size: M4 x 60).

Characteristic Curves



• Temperature correction curve



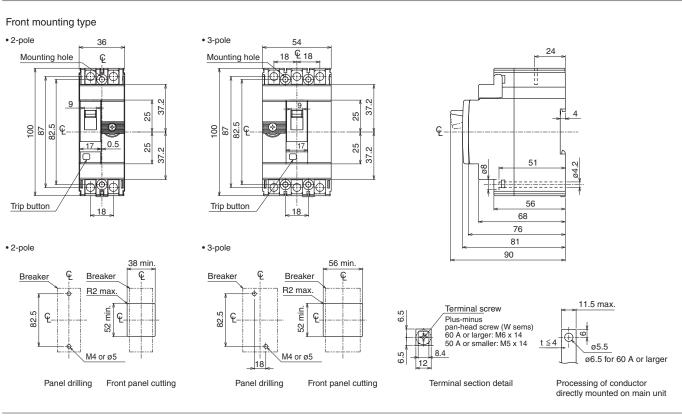
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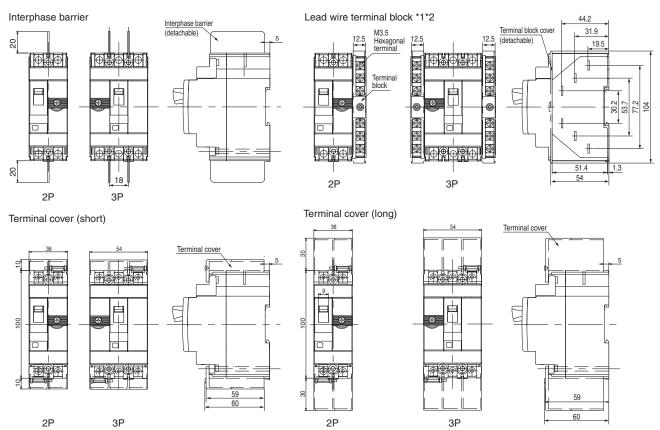
xIn (A)

G-TWIN /1 Series

Data, Characteristics curves, Dimensions

• Dimensions, mm





(Note *1) The terminal block is mounted on the accessory mounting side. For the accessory mounting positions, see the List of internal accessory combinations on pages 23 to 26. (Note *2) Connectable wire: single wire: 1 to 1.6 ø, stranded wire: 0.5 to 2 mm²

G-TWIN /1 Series

Data, Characteristics curves, Dimensions

■ BW50RBGU (Global Product)



Bas	Basic type					iU	
Nun	nber	of poles			2	3	
Rate	ed in	sulation voltage [V]	AC		440	·	
			DC		125		
Rated breaking co	Rated b	UL489 CAN/CSA C22.2 No.5 (kA)	AC	240V	18		
ā	rea	IEC60947-2 EN60947-2	AC	440V	7.5/4		
oroc	breaking			415V	10/5		
duc		JISC8201-2-1 lcu/lcs (kA)		400V	10/5		
_	capacity	icu/ics (kA)		380V	10/5		
	acit			240V	15/15		
	<			230V	15/15		
			DC	125V	10/10		
		GB14048.2	AC	400V	10/5		
		Icu/Ics (kA)		230V	15/15		
			DC	125V	10/10		

Attached components

• Terminal cover

• Terminal screw 2P: 4 screws, 3P: 6 screws

Instruction Manual
 Note 1: Mounting screws are not included. When necessary, use commercially-available screws (recommended size: M4 x 60).

Optional accessories

Pro	duct name	Type symbol (i.e., symbol code)	See page:		
Int	Auxiliary switch	Standard	1	W	27
Internal accessories	(lead wire type)		2	V	27
<u>a</u>		Low level circuit	1	1	27
300			2	2	27
ess	Alarm switch	Standard	1	K	27
ör.	(lead wire type)	Low level circuit	1	8	27
es	Shunt trip device	24V AC/DC	4V AC/DC		27
	(lead wire type)	100-130V AC/100-110	V DC	F6	27
		200-240V AC/200-22	OV DC	FK	27
	380-440V AC			FP	27
	Lead wire termina	al block	1	A	35
			2	A	35
	Undervoltage	24V DC		RR	27
	trip device	100-110V DC		RL	27
	(terminal block type only)	24V AC		RZ	27
	lype only)	100-130V AC		R6	27
		200-240V AC		R4	27
		380-415V AC		RP	27
		400-440V AC		RO	27

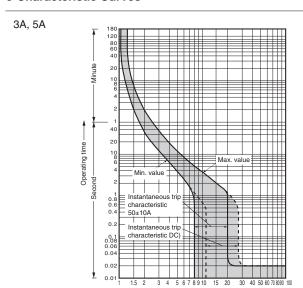
List of product ratings

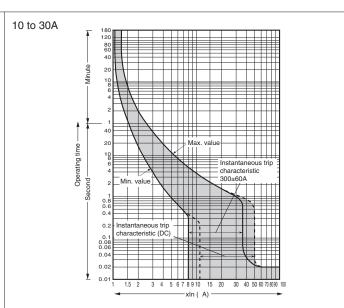
Specification for \square : Rated current (code)

Product	Basic type	Rated currer	nt
		[A]	Code for
Line protection use	BW50RBGU-2P	3	003
(global product)		5	005
		10	010
		15	015
		20	020
		30	030
		40	040
		50	050
	BW50RBGU-3P	3	003
		5	005
		10	010
		15	015
		20	020
		30	030
		40	040
		50	050

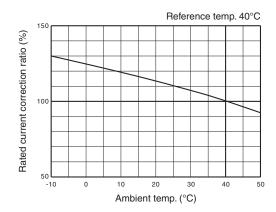
Data, Characteristics curves, Dimensions

Characteristic Curves



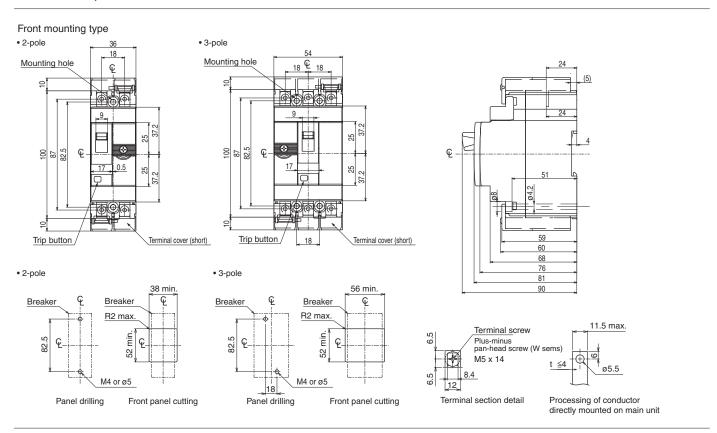


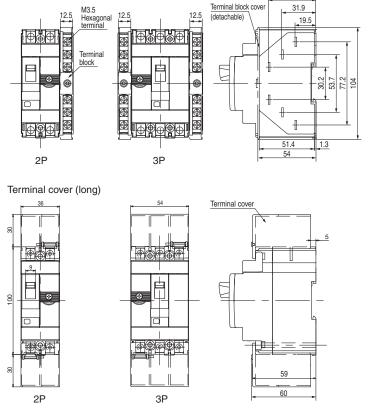
• Temperature correction curve



• Dimensions, mm

Lead wire terminal block *1*2





(Note *1) The terminal block is mounted on the accessory mounting side. For the accessory mounting positions, see the List of internal accessory combinations on pages 23 to 26. (Note *2) Connectable wire: single wire: 1 to 1.6 ø, stranded wire: 0.5 to 2 mm²

Molded Case Circuit Breakers / Earth Leakage Circuit Breakers

G-TWIN / Series

Data, Characteristics curves, Dimensions

■ EW32, 50, 63 ☐ BG (Standard Product)



Bas	sic ty	ype			EW32SI	3G	EW50EI	BG	EW50SI	BG .
Nu	Number of poles				2	3	2	3	2	3
Rat	ed o	perational voltag	е А	C [V]	100-240	100-440	100-240	100-440	100-240	100-440
Rat	ted s	sensitive current	[m/	4]	30	30,100,200,500	30	30,100,200,500	30	30,100,200,500
Ма	ximı	um operating tim	ne [s]	0.1		0.1		0.1	
Sta	Ra	IEC60947-2	AC	440V	-/-	2.5/2.5	-/-	2.5/2.5	-/-	7.5/4
and	Rated	EN60947-2		415V	-/-	5/5	-/-	5/5	-/-	10/5
larc		JISC8201-2-2 lcu/lcs [kA]		400V	-/-	5/5	-/-	5/5	-/-	10/5
pr	eak	ICU/ICS [KA]		380V	-/-	5/5	-/-	5/5	-/-	10/5
Standard product	breaking			240V	7.5/7.5	7.5/7.5	7.5/7.5	7.5/7.5	15/15	15/15
ıct	ca			230V	7.5/7.5	7.5/7.5	7.5/7.5	7.5/7.5	15/15	15/15
	capacity			100V	7.5/7.5	7.5/7.5	7.5/7.5	7.5/7.5	15/15	15/15
	city	GB14048.2	AC	400V	-/-	5/5	-/-	5/5	-/-	10/5
		Icu/Ics [kA]		230V	7.5/7.5	7.5/7.5	7.5/7.5	7.5/7.5	15/15	15/15
Basic type										
Bas	sic ty	ype			EW63EI	3G	EW63SI	BG		
		ype r of poles			EW63E 1	3 G	EW63SI	3		
Nu	mbe		e A	C [V]						
Nu	mbe ed o	r of poles			2	3	2	3		
Nui Rat Rat	mbe ed o	r of poles perational voltag	[m/	١,	2 100-240	3 100-440	2 100-240	3 100-440		
Rat Rat Ma	mbe ed o ted s ximu	r of poles perational voltag sensitive current um operating tim IEC60947-2	[m/ ne [s	١,	2 100-240 30	3 100-440	2 100-240 30	3 100-440		
Rat Rat Ma	mbe ed o ted s ximu	or of poles operational voltagesensitive current um operating tim IEC60947-2 EN60947-2	[m/ ne [s	A]	2 100-240 30 0.1	3 100-440 30,100,200,500	2 100-240 30 0.1	3 100-440 30,100,200,500		
Rat Rat Ma	ted s ximi	or of poles operational voltagesensitive current um operating tim IEC60947-2 EN60947-2 JISC8201-2-2	[m/ ne [s	A] 440V	2 100-240 30 0.1 -/-	3 100-440 30,100,200,500 2.5/2.5	2 100-240 30 0.1 -/-	3 100-440 30,100,200,500 7.5/4		
Rat Rat Ma	ted s ximi	or of poles operational voltagesensitive current um operating tim IEC60947-2 EN60947-2	[m/ ne [s	A] 	2 100-240 30 0.1 -/- -/-	3 100-440 30,100,200,500 2.5/2.5 5/5	2 100-240 30 0.1 -/- -/-	3 100-440 30,100,200,500 7.5/4 10/5		
Rat Rat Ma	ted s ximi	or of poles operational voltagesensitive current um operating tim IEC60947-2 EN60947-2 JISC8201-2-2	[m/ ne [s	440V 415V 400V	2 100-240 30 0.1 -/- -/-	3 100-440 30,100,200,500 2.5/2.5 5/5 5/5	2 100-240 30 0.1 -/- -/-	3 100-440 30,100,200,500 7.5/4 10/5 10/5		
Nui Rat Rat	ted s ximi	or of poles operational voltagesensitive current um operating tim IEC60947-2 EN60947-2 JISC8201-2-2	[m/ ne [s	440V 415V 400V 380V	2 100-240 30 0.1 -/- -/- -/-	3 100-440 30,100,200,500 2.5/2.5 5/5 5/5 5/5	2 100-240 30 0.1 -/- -/- -/- -/-	3 100-440 30,100,200,500 7.5/4 10/5 10/5 10/5		
Rat Rat Ma	ted s ximi	or of poles operational voltagesensitive current um operating tim IEC60947-2 EN60947-2 JISC8201-2-2	[m/ ne [s	440V 415V 400V 380V 240V	2 100-240 30 0.1 -/- -/- -/- 7.5/7.5	3 100-440 30,100,200,500 2.5/2.5 5/5 5/5 5/5 7.5/7.5	2 100-240 30 0.1 -/- -/- -/- -/- 15/15	3 100-440 30,100,200,500 7.5/4 10/5 10/5 10/5 15/15		
Rat Rat Ma	mbe ed o ted s ximu	or of poles operational voltagesensitive current um operating tim IEC60947-2 EN60947-2 JISC8201-2-2	[m/ ne [s	440V 415V 400V 380V 240V 230V	2 100-240 30 0.1 -/- -/- -/- 7.5/7.5 7.5/7.5	3 100-440 30;00,200,500 2.5/2.5 5/5 5/5 5/5 7.5/7.5	2 100-240 30 0.1 -/- -/- -/- 15/15 15/15	3 100-440 30,100,200,500 7.5/4 10/5 10/5 10/5 15/15 15/15		

Optional accessories

Prod	duct name	Type symbol (i.e., symbol code)	See page:		
Int.	Auxiliary switch	Standard	1	W	27
em	(lead wire type)		2	V	27
<u>a</u>		Low level circuit	1	1	27
200			2	2	27
ess	Alarm switch	Standard	1	K	27
Internal accessories	(lead wire type)	Low level circuit	1	8	27
es	Shunt trip device	24V AC/DC		FR	27
	(lead wire type)	100-130V AC/100-110	V DC	F6	27
		200-240V AC/200-22	OV DC	FK	27
		380-440V AC		FP	27
	Lead wire terminal block		1	A	38
			2	A	38
	Undervoltage	24V DC		RR	27
	trip device	100-110V DC		RL	27
	(terminal block type only)	24V AC		RZ	27
	lype offiy)	100-130V AC		R6	27
		200-240V AC		R4	27
		380-415V		RP	27
		AC400-440V		RO	27
	Trip lead (termina	l block type only)		Т	27

List of product ratings

Specification for ☐: Rated current (code)
Specification for ■: Rated sensitive current (code)

Product	Basic type	Rated	or : Rated securrent	Rated s	
	(i.e., product code)	ΓΛ1	Code for	[mA]	Code for
Lina	EW20CBC 0D	[A]	_	-	B
Line protection	EW32SBG-2P□■	5 10	005 010	30	В
use				-	
(standard		15	015	-	
products)		20	020	-	
		30	030	-	
		32	032		-
	EW32SBG-3P□■	5	005	30	В
		10	010	100	С
		15	015	200	E
		20	020	500	Н
		30	030	-	
		32	032		
	EW50EBG-2P□■	5	005	30	В
		10	010	-	
		15	015	_	
		20	020	-	
		30	030	-	
		32	032	-	
		40	040	-	
	EWEGEDO OD	50	050	00	D
	EW50EBG-3P□■	5	005	30	В
		10	010	100	С
		15	015	200	Ε
		20	020	500	Н
		30	030	-	
		32	032	-	
		40	040	-	
		50	050		_
	EW50SBG-2P□■	5	005	30	В
		10	010	-	
		15	015	-	
		20	020	_	
		30	030	-	
		32	032	-	
		40	040	-	
	EWEOCRC OR	50	050	20	D
	EW50SBG-3P□■	5	005	30	В
		10	010	100	С
		15	015	200	H
		30	020	500	П
		32	030	-	
			032	+	
		40 50	050	-	
	EW63EBG-2P□■	50		30	В
	LW03EDG-2P	60 63	060 063	30	D
	EW63EBG-3P□■	+		30	В
	EW03EBG-3P	60 63	060 063	100	С
			303	200	E
				500	Н
	EW63SBG-2P□■	60	060	30	В
		63	063	100	
	EW63SBG-3P□■	60	060	30	В
		63	063	100	С
				200	E
				500	Н
		1	1	1200	1

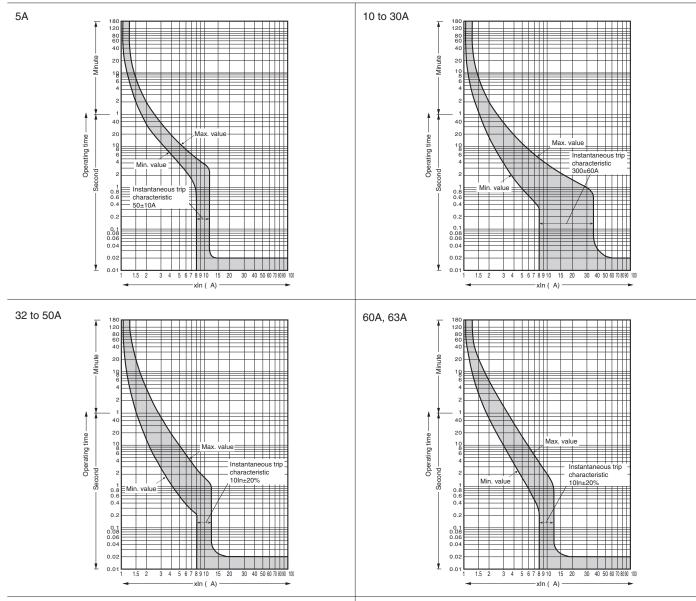
Attached components

- Terminal screw 2P: 2 screws, 3P: 4 screws
 Interphase barrier 2P: 2 barriers, 3P: 4 barriers (provided for EW63EBG and EW63SBG only)

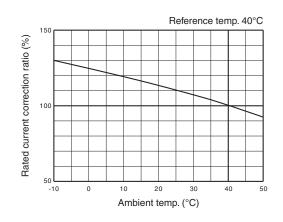
Instruction Manual

Note 1: Mounting screws are not included. When necessary, use commercially-available screws (recommended size: M4 x 60).

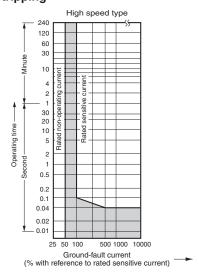
Characteristic Curves



• Temperature correction curve



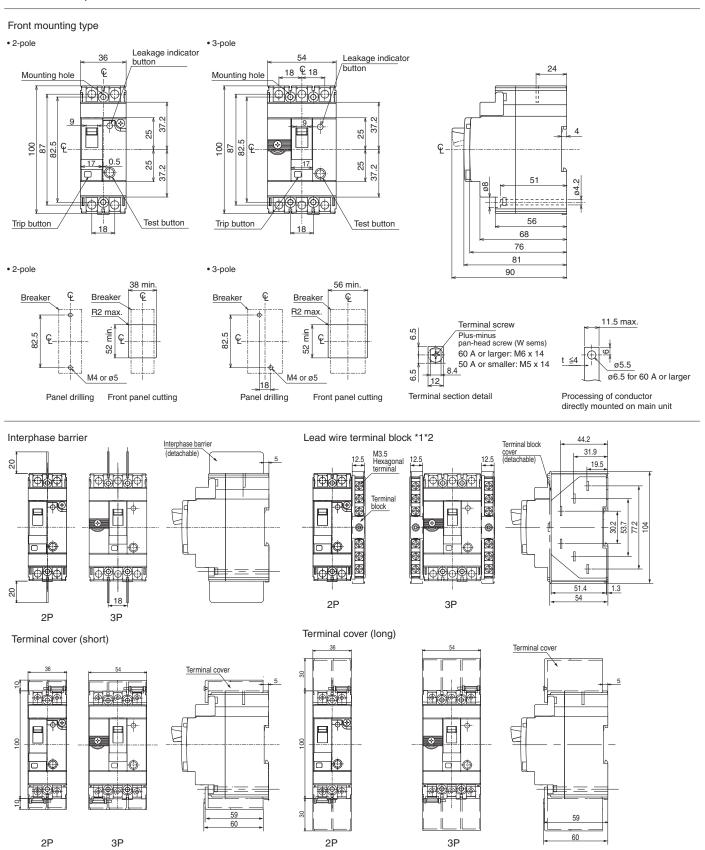
Earth leakage tripping



G-TWIN /1 Series

Data, Characteristics curves, Dimensions

• Dimensions, mm



(Note *1) The terminal block is mounted on the accessory mounting side. For the accessory mounting positions, see the List of internal accessory combinations on pages 23 to 26. (Note *2) Connectable wire: single wire: 1 to 1.6 ø, stranded wire: 0.5 to 2 mm²

G-TWIN / Series

Data, Characteristics curves, Dimensions

■ EW50RBGU (Global Product)



Bas	Basic type				EW50RBGU	
Nun	nber	of poles			2	3
Rate	ed op	perational voltage		IEC	100-240	100-440
AC [[V]			UL	240	240
Rate	ed se	ensitive current [mA]		30	30, 50, 100, 200, 500
Max	imu	m operating time [s]			0.1	
Global product	Rated breaking	UL489 CAN/CSA C22.2 No.5 [kA]	AC	240V	18	18
npc	A.		AC	440V	-/-	7.5/4
C				415V	-/-	10/5
	capacity			400V	-/-	10/5
	aci		380V	-/-	10/5	
	₹		240V	15/15	15/15	
				230V	15/15	15/15
				100V	15/15	15/15
		GB14048.2	AC	400V	-/-	10/5
		Icu/Ics [kA]		230V	15/15	15/15

Attached components

• Terminal cover 2

• Terminal screw 2P: 4 screws, 3P: 6 screws

• Instruction Manual

Optional accessories

Pro	duct name	Type symbol (i.e., symbol code)	See page:		
Int	Auxiliary switch	Standard	1	W	27
Internal accessories	(lead wire type)		2	V	27
<u>a</u>		Low level circuit	1	1	27
200			2	2	27
ess	Alarm switch	Standard	1	K	27
ör.	(lead wire type)	Low level circuit	1	8	27
es	Shunt trip device	24V AC/DC		FR	27
	(lead wire type)	100-130V AC/100-1	10V DC	F6	27
		200-240V AC/200-2	20V DC	FK	27
	380-440V AC			FP	27
	Lead wire termina	al block	1	A	41
			2	A	41
	Undervoltage	24V DC		RR	27
	trip device	100-110V DC		RL	27
	(terminal block type only)	24V AC		RZ	27
	lype only)	100-130V AC		R6	27
		200-240V AC		R4	27
		380-415V AC		RP	27
		400-440V AC		RO	27

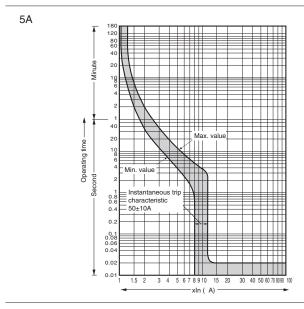
List of product ratings

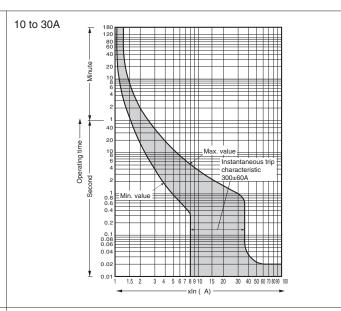
Specification for ☐: Rated current (code)

Specification for ■: Rated sensitive current (code)

Product	Basic type			Rated s	sensitive
		[A]	Code for	[mA]	Code for
Line	EW50SBGU-2P□■	5	005	30	В
protection		10	010		
use (global		15	015		
product)		20	020		
p		30	030		
		40	040		
		50	050		
	EW50SBGU-3P□■	5	005	30	В
		10	010	50	D
		15	015	100	С
		20	020	200	E
		30	030	500	Н
		40	040		
		50	050		

Characteristic Curves

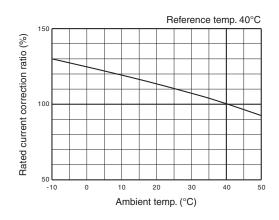




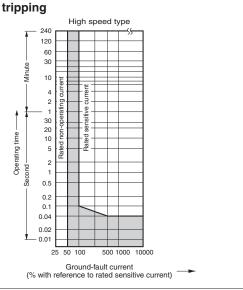
40A, 50A

| 180 | 120 | 180 | 120 | 180 | 180 | 180 | 180 | 180 | 180 | 180 | 180 | 180 | 180 | 180 | 180 | 180 | 180 | 180 | 180 | 180 | 180 | 180 | 180 | 180 | 180 | 180 | 180 | 180 | 180 | 180 | 180 | 180 | 180 | 180 | 180 | 180 | 180 | 180 | 180 | 180 | 180 | 180 | 180 | 180 | 180 | 180 | 180 | 180 | 180 | 180 | 180 | 180 | 180 | 180 | 180 | 180 | 180 | 180 | 180 | 180 | 180 | 180 | 180 | 180 | 180 | 180 | 180 | 180 | 180 | 180 | 180 | 180 | 180 | 180 | 180 | 180 | 180 | 180 | 180 | 180 | 180 | 180 | 180 | 180 | 180 | 180 | 180 | 180 | 180 | 180 | 180 | 180 | 180 | 180 | 180 | 180 | 180 | 180 | 180 | 180 | 180 | 180 | 180 | 180 | 180 | 180 | 180 | 180 | 180 | 180 | 180 | 180 | 180 | 180 | 180 | 180 | 180 | 180 | 180 | 180 | 180 | 180 | 180 | 180 | 180 | 180 | 180 | 180 | 180 | 180 | 180 | 180 | 180 | 180 | 180 | 180 | 180 | 180 | 180 | 180 | 180 | 180 | 180 | 180 | 180 | 180 | 180 | 180 | 180 | 180 | 180 | 180 | 180 | 180 | 180 | 180 | 180 | 180 | 180 | 180 | 180 | 180 | 180 | 180 | 180 | 180 | 180 | 180 | 180 | 180 | 180 | 180 | 180 | 180 | 180 | 180 | 180 | 180 | 180 | 180 | 180 | 180 | 180 | 180 | 180 | 180 | 180 | 180 | 180 | 180 | 180 | 180 | 180 | 180 | 180 | 180 | 180 | 180 | 180 | 180 | 180 | 180 | 180 | 180 | 180 | 180 | 180 | 180 | 180 | 180 | 180 | 180 | 180 | 180 | 180 | 180 | 180 | 180 | 180 | 180 | 180 | 180 | 180 | 180 | 180 | 180 | 180 | 180 | 180 | 180 | 180 | 180 | 180 | 180 | 180 | 180 | 180 | 180 | 180 | 180 | 180 | 180 | 180 | 180 | 180 | 180 | 180 | 180 | 180 | 180 | 180 | 180 | 180 | 180 | 180 | 180 | 180 | 180 | 180 | 180 | 180 | 180 | 180 | 180 | 180 | 180 | 180 | 180 | 180 | 180 | 180 | 180 | 180 | 180 | 180 | 180 | 180 | 180 | 180 | 180 | 180 | 180 | 180 | 180 | 180 | 180 | 180 | 180 | 180 | 180 | 180 | 180 | 180 | 180 | 180 | 180 | 180 | 180 | 180 | 180 | 180 | 180 | 180 | 180 | 180 | 180 | 180 | 180 | 180 | 180 | 180 | 180 | 180 | 180 | 180 | 180 | 180 | 180 | 180 | 180 | 180 | 180 | 180 | 180 | 180 | 180 | 180 | 180 | 180 | 180 | 180 | 180 | 180 | 180 | 180 | 180 | 180 | 180 |

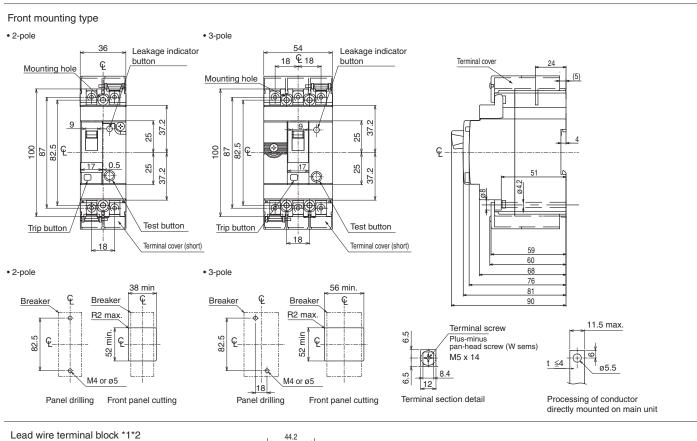
• Temperature correction curve

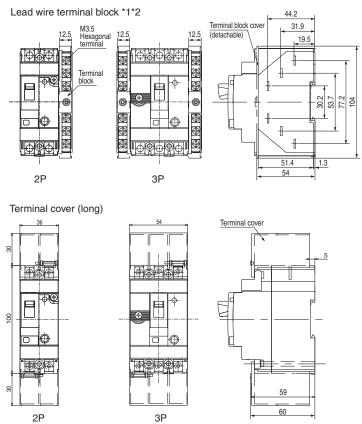


• Earth leakage tripping



• Dimensions, mm





(Note *1) The terminal block is mounted on the accessory mounting side. For the accessory mounting positions, see the List of internal accessory combinations on pages 23 to 26. (Note *2) Connectable wire: single wire: 1 to 1.6 ø, stranded wire: 0.5 to 2 mm²

Molded Case Circuit Breakers / Earth Leakage Circuit Breakers

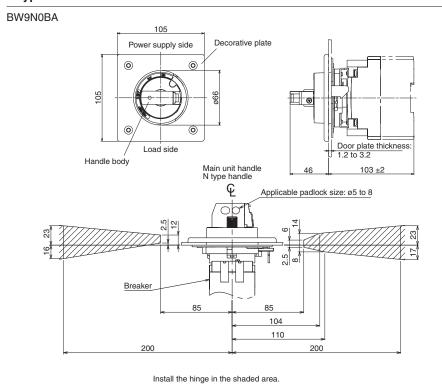
G-TWIN / Series

Data, Characteristics curves, Dimensions

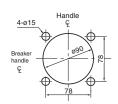
■ External operating handle

• Dimensions, mm

N type handle

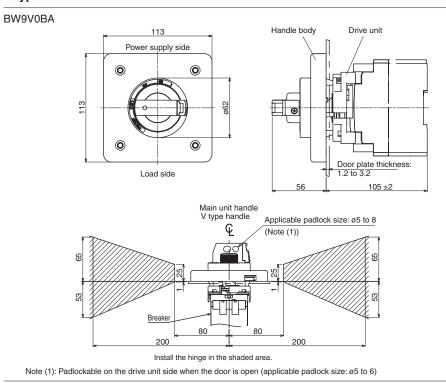


Door panel cutout

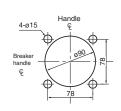


Note: Align the center of the panel cutout with the center of the handle of the breaker main unit.

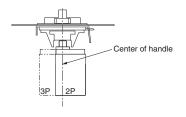
V type handle



Door panel cutout



Note: Align the center of the panel cutout with the center of the handle of the breaker main unit.



⚠ Safety Considerations

- Operate (keep) in the environment specified in the operating instructions and manual. High temperature, high humidity, condensation, dust, corrosive gases, oil, organic solvents, excessive vibration or shock might cause electric shock, fire, erratic operation or failure.
- For safe operation, before using the product read the instruction manual or user manual that comes with the product carefully or consult the Fuji sales representative from which you purchased 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 with Fuji Electric FA.
- 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.
- Follow the regulations of industrial wastes when the product is to be discarded.
- For further questions, please contact your Fuji sales representative or Fuji Electric FA.

For Fuji Electric FA Components & Systems Co., Ltd.

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URL http://www.fujielectric.co.jp/fcs/eng