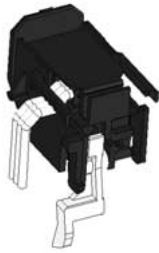


# Molded Case Circuit Breakers Accessories

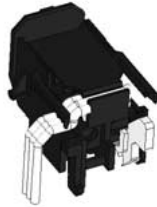
## Variation of internal accessory

**Auxiliary switch (Type W)**



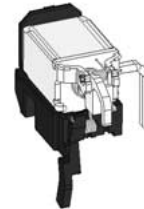
This switch is used for indicator lamp or control circuit.

**Alarm switch (Type K)**

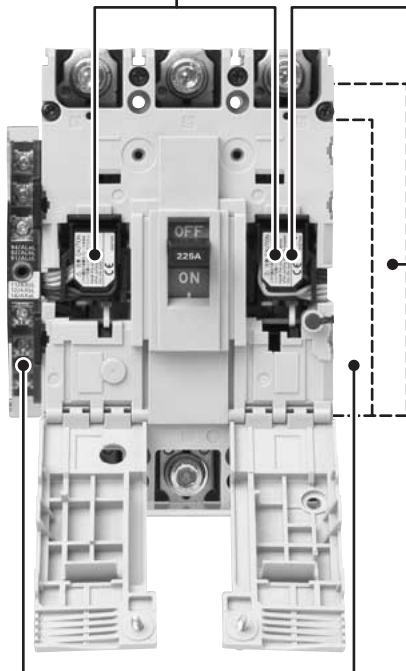


This switch can be connected to a warning lamp or buzzer to indicate when the breaker has been tripped.

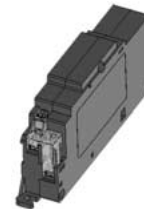
**Shunt trip device (Type F)**



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

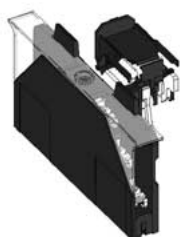


**Undervoltage trip device (Type R)**



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

**Terminal block (Type A)**



A wiring terminal for internal accessories (Order with W, K or F)

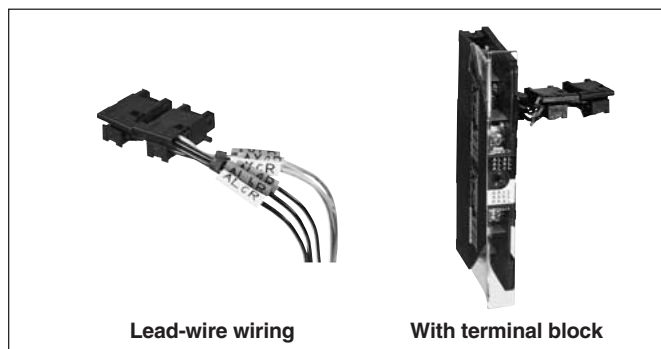
# Molded Case Circuit Breakers

## Internal accessories

### Terminal blocks

#### Terminal blocks for auxiliary circuit

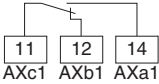

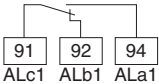

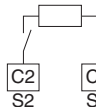
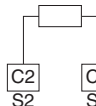
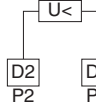
- It indicates the terminal No. of internal accessory. The connection method of internal accessory is lead-wire system and terminal block system.
- Specify the connection method when ordering. It is lead-wire system unless specified.
- The lead wires are pulled out and terminal blocks are attached on the same side of the internal accessory will be attached
- For the available configuration of internal accessory, see page 06/92 to 06/93.



#### • IEC and CE marking conformed types

Accessory		30 – 225AF		400 – 800AF
		Left side mounting	Right side mounting	Left side mounting
Auxiliary switch	SPDT: W			
	2PDT: W2			
Alarm switch	SPDT: K			
	2PDT: K2			
Shunt trip device : F	With 1NO contact to prevent coil burn-out			
	Continuous rating			
Undervoltage trip device : R				

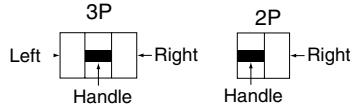
• L series, H series

Accessory		Terminal number LA50B, H100R, H225R, H400R, H600R, H800R H50BA, H100BA, H225BA, H400B, H600B, H800B
Auxiliary switch	SPDT: W	
	2PDT: W2	
Alarm switch	SPDT: K	
	2PDT: K2	
Shunt trip device : F	With 1NO contact to prevent coil burn-out	
	Continuous rating	
Undervoltage trip device : R		

# Molded Case Circuit Breakers

## Internal accessories

### Available configurations



Undervoltage trip: R  
 Shunt trip: F  
 Auxiliary switch: W  
 Alarm switch: K

MCCB	S series	SA32C SA52C SA52RC SA62C SA62RC	SA102C	SA33C SA53C SA53RC SA63C SA63RC	SA103C SA102RC SA103RC SA202C SA203C SA202RC SA203RC	—	SA402C SA403C SA402RC SA403RC SA603RC SA803RC	SA54B*1 SA104R SA204R	SA404HA	SA604H SA804H
	E series	EA32AC EA52AC EA52C EA62C EA102C	—	EA33AC EA53AC EA53C, 63C EA103AC EA103C	EA202C EA203C	—	EA402C EA403C EA603C EA803C	EA104B *1	—	—
	H • L series	—	—	—	—	LA53B H103R, 203R H52BA, 53BA H102BA, 103BA H202BA, 203BA	H402B, H403B H403R H603B, H603R H803B, H803R *3	—	—	—
Pole	2	2	3	2, 3	2, 3	2, 3	4	4	4	
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										
W2+F										
W+R										
W2+R										
K+F										
K+R										
W+K+F										
W+K+R										
K2+F										
K2+R										
W2+K+F										
W2+K+R										
W+K2+F										
W+K2+R										
W2+K2+F										
W2+K2+R										

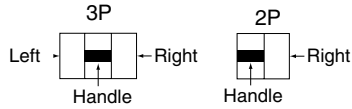
Notes: • The lead wires are pulled out and terminal blocks are attached on the same side of the accessory attached.

\*1 The "W" and "K" of EA104B and SA54B are mounted on the left pole only. They cannot be mounted on the right side pole.

\*2 The side on which the undervoltage trip device "R" is mounted has the terminal block.

\*3 H400R, H600R, H800R: Factory-mounted

■ Available configurations



Undervoltage trip: R  
 Shunt trip: F  
 Auxiliary switch: W  
 Alarm switch: K

MCCB	S series	SA52RCUL *	SA53RCUL *	SA102CUL SA103CUL SA102RCUL SA103RCUL SA202CUL SA203CUL SA202RCUL SA203RCUL	SA402CUL SA403CUL SA402RCUL SA403RCUL SA603RCUL SA803RCUL
	E series	EA102CUL *	EA103CUL *	-	-
Pole	2	3	2, 3	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					
W2+F					
W+R					
W2+R					
K+F					
K+R					
W+K+F					
W+K+R					
K2+F					
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W+K2+R					
W2+K2+F					
W2+K2+R					

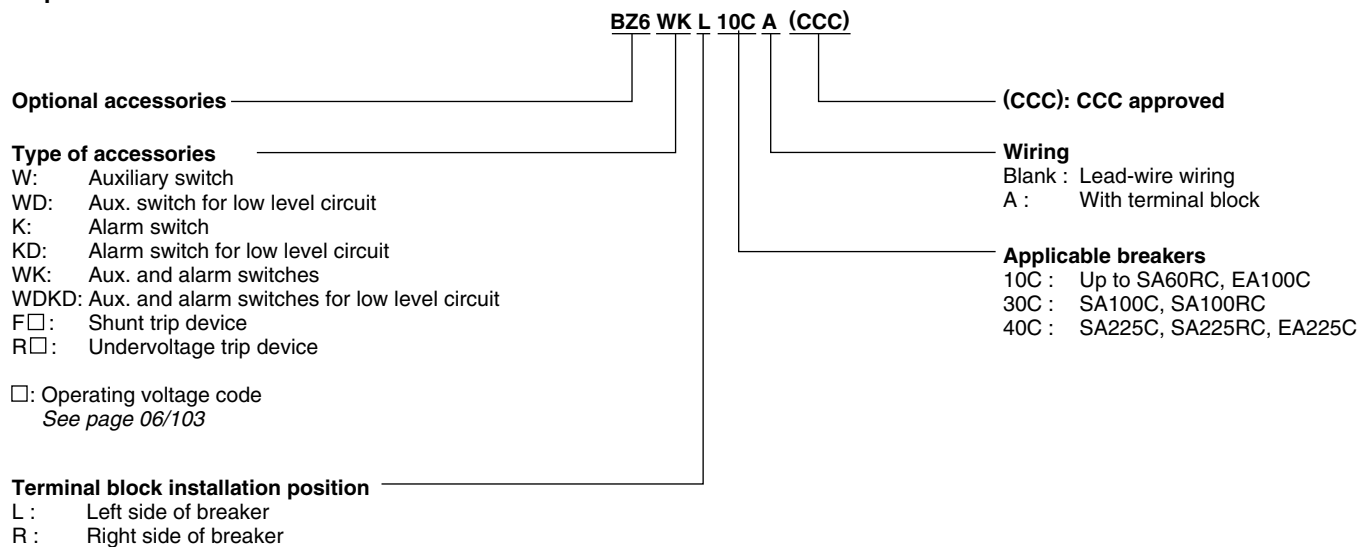
Notes: • The lead wires are pulled out and terminal blocks are attached on the same side of the accessory attached.  
\* Terminal block connection is standard method

# Molded Case Circuit Breakers

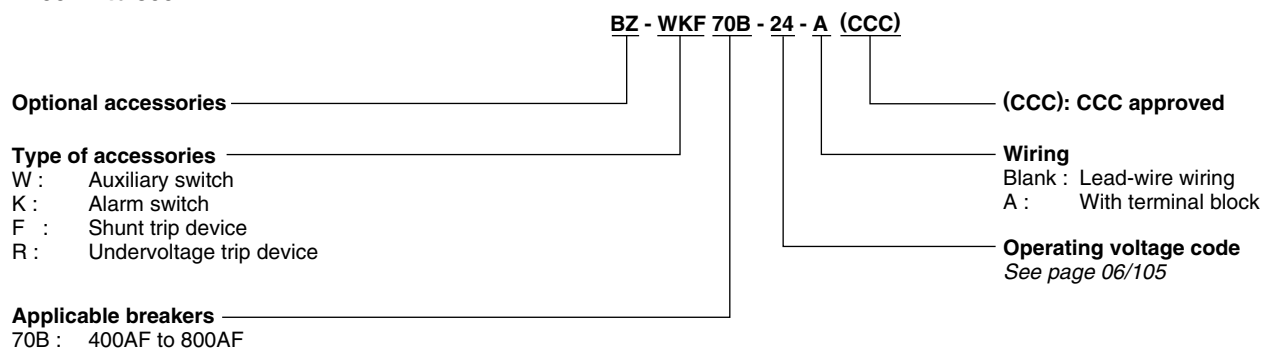
## Internal accessories

### ■ Type number nomenclature of internal accessory

#### • Up to 225AF



#### • 400AF to 800AF



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

Accessory	Handle position		Trip
	ON	OFF	
Auxiliary switch			
	SPDT: <b>W</b>		
		2PDT: <b>W2</b>	
Alarm switch			
	SPDT: <b>K</b>		
		2PDT: <b>K2</b>	

Note: Ring mark indication

# Molded Case Circuit Breakers

## Internal accessories

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

#### ● Standard type

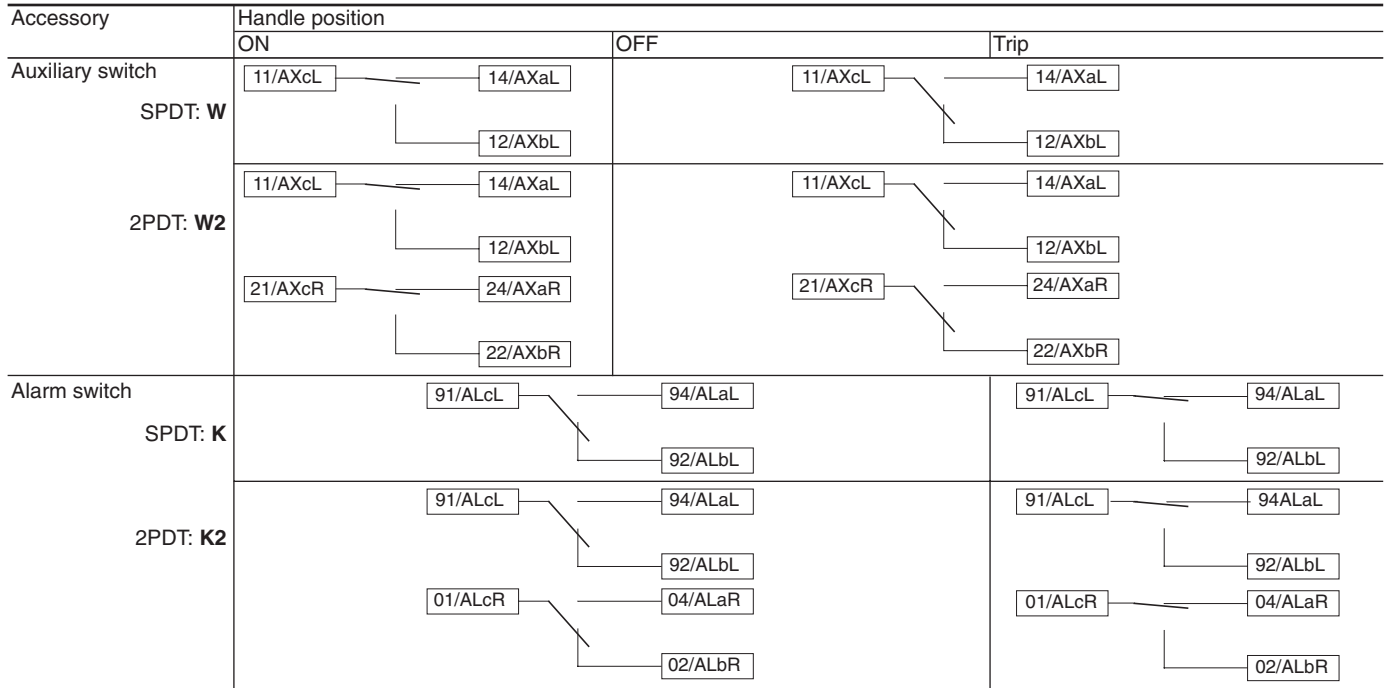
Applicable breaker type			Rated operating current (A) IEC60947-5-1, JIS C8201-5-1				Minimum load current
S series	E series	H and L series	AC		DC		
			Voltage (V)	AC15 Ind. load	Voltage (V)	DC13 Ind. load	
SA30C	EA30AC	–	125	5	125	0.6	5V DC 160mA 30V DC 30mA
SA50C	EA50AC		250	5	250	0.3	
SA50RC	EA50C						
SA60C	EA60C						
SA60RC	EA100AC EA100C						

Applicable breaker type			Rated operating current (A) IEC60947-5-1, JIS C8201-5-1				Minimum load current
S series	E series	H and L series	AC		DC		
			Voltage (V)	AC15 Ind. load	Voltage (V)	DC14 Ind. load	
–	–	LA50B, H50BA H100BA, H100R H225BA, H225R	125	2	125	0.5	5V DC 160mA 30V DC 30mA
			250	1	250	0.2	
SA100C SA100RC SA225C SA225RC	EA225C	–					
SA400C SA400RC SA600RC SA800RC	EA400C EA600C EA800C	H400B H400R H600B H600R H800B H800R					

#### ● Low level circuit

Applicable breaker type			DC		Minimum load current
S series	E series	H and L series	Voltage (V)	Make/break current (A)	
SA30C SA50C SA50RC SA60C SA60RC	EA30AC EA50AC EA50C EA60C EA100AC EA100C	–	30	0.1	5V DC 1mA 30V DC 1mA
SA100C SA100RC SA225C SA225RC	EA225C	–			
SA400C SA400RC SA600RC SA800RC	EA400C EA600C EA800C	–			
–	–	H50BA, LA50B H100BA, H100R H225BA, H225R H400B, H400R H600B, H600R H800B, H800R			

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



Note: □ Ring mark indication

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

● Standard type

MCCB		AC		DC		Minimum load current
S series	E series	Voltage (V)	Make/break current (A)	Voltage (V)	Make/break current (A)	
SA50RCUL	EA100CUL	120	3.6	125	0.55	5V DC 160mA 30V DC 30mA
		240	1.8	250	0.27	
SA100CUL SA100RCUL SA225CUL SA225RCUL	—	120	5	—	—	
		240	3			
SA400CUL SA400RCUL SA600RCUL SA800RCUL	—	120	5	—	—	
		240	5			

● Low level circuit

MCCB		DC		Minimum load current
S series	E series	Voltage (V)	Make/break current (A)	
SA50RCUL	EA100CUL	30	0.1	5V DC 1mA 30V DC 1mA
SA100CUL SA100RCUL SA225CUL SA225RCUL SA400CUL SA400RCUL SA600RCUL SA800RCUL	—			

# Molded Case Circuit Breakers

## Internal accessories

### ■ Rating of shunt trip (F)

- IEC and CE marking conformed

MCCB type			Power consumption				Time rating of coil	Operating time (ms)		
S series	E series	H and L series	AC		DC					
			V	VA	V	W				
SA30C SA50C SA50RC SA60C SA60RC	EA30AC EA50AC EA50C EA60C EA100AC EA100C	–	100-120 (50/60Hz) 200-240 (50/60Hz) 380-450 (50/60Hz)	150 150 200	100-110 – –	150 – –	Continuous (With 1NO contact to prevent coil burn-out)	7-13		
SA100C SA100RC SA225C SA225RC	EA225C	H50BA LA50B H100BA H100R H225BA H225R	24 (50/60Hz) 48 (50/60Hz) 100-125 (50/60Hz) 200-240 (50/60Hz) 380-450 (50/60Hz) 440-480 (50/60Hz)	30	24 48 100-110 200-220 – –	35			Continuous (With 1NO contact to prevent coil burn-out)	7-21
SA400C SA400RC SA600RC SA800RC	EA400C EA600C EA800C	H400B H400R H600B H600R H800B H800R	24-48 (50/60Hz) 100-240 (50/60Hz) 380-550 (50/60Hz)	2 3 4	24-48 100-220 –	2 3 –				

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

### ● UL Listed

MCCB type			Power consumption				Time rating of coil	Operating time (ms)		
S series	E series	H and L series	AC		DC					
			V	VA	V	W				
SA50RCUL	EA100CUL	–	100-120 (50/60Hz) 200-240 (50/60Hz) 380-450 (50/60Hz)	150 150 200	100-110 – –	150 – –	Continuous (With 1NO contact to prevent coil burn-out)	7-13		
SA100CUL SA100RCUL SA225CUL SA225RCUL	–	–	24 (50/60Hz) 48 (50/60Hz) 100-125 (50/60Hz) 200-240 (50/60Hz)	30	24 48 100-110 200-220	35			Continuous	7-21
SA400CUL SA400RCUL SA600RCUL SA800RCUL	–	–	24-48 (50/60Hz) 100-240 (50/60Hz)	2 3	24-48 100-220	2 3				

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)

- IEC and CE marking conformed

MCCB type			Power consumption				Operating voltage
S series	E series	H and L series	AC		DC		
			V	VA	V	W	
SA30C	EA30AC	-	100(50Hz)/100-110(60Hz)	2.8	-	-	Tripping voltage: 70 to 35% of coil rating voltage
SA50C	EA50AC		200(50Hz)/200-220(60Hz)	3.4	-	-	
SA50RC	EA50C		400(50Hz)/400-440(60Hz)	4.4	-	-	
SA60C	EA60C		-	-	100-110	2.86	
SA60RC	EA100AC EA100C						Closing voltage: 85% or more of coil rating voltage
SA100C	EA225C	H50C	100(50Hz)/100-110(60Hz)	200	-	-	
SA100RC		H100C	200(50Hz)/200-220(60Hz)	150	-	-	
SA225C		H225C	400(50Hz)/400-440(60Hz)	200	-	-	
SA225RC		-	-	-	100-110	200	
-	-	LA50B * <sup>1</sup>	24 (50/60Hz)	0.76	24	0.76	
		H 50BA * <sup>1</sup>	48 (50/60Hz)	1.5	48	1.5	
		H100BA * <sup>1</sup>	100-110 (50/60Hz)	3.5	100-110	3.5	
		H100R * <sup>1</sup>	200-220 (50/60Hz)	2.0	200-220	2.0	
		H225BA * <sup>1</sup>	380-440 (50/60Hz)	2.9	-	-	
		H225R * <sup>1</sup>	440-480 (50/60Hz)	4.3	-	-	
SA400C	EA400C EA600C EA800C	H400B	24 (50/60Hz)	2	24	2	
SA400RC		H400R	48 (50/60Hz)	2	48	2	
SA600RC		H600B	100-110 (50/60Hz)	3	100-110	3	
SA800RC		H600R	200-240 (50/60Hz)	3	200-220	3	
		H800B	380-480 (50/60Hz)	4	-	-	
		H800R					

Notes: • Specify the operating voltage when ordering.  
\*<sup>1</sup> Terminal block connection is standard method.

● UL type

MCCB type			Power consumption				Operating voltage
S series	E series	H and L series	AC		DC		
			V	VA	V	W	
SA50RCUL	EA100CUL	-	100(50Hz)/100-110(60Hz)	3	-	-	Tripping voltage: 70 to 35% of coil rating voltage
			200(50Hz)/200-220(60Hz)	3	-	-	
			400(50Hz)/400-440(60Hz)	4	-	-	
					100-110	200	Closing voltage: 85% or more of coil rating voltage
SA100CUL	-	-	-	-			
SA100RCUL			100(50Hz)/100-110(60Hz)	200	-	-	
SA225CUL			200(50Hz)/200-220(60Hz)	150	-	-	
SA225RCUL			400(50Hz)/400-440(60Hz)	200	-	-	
SA400CUL	-	-	24 (50/60Hz)	2	24	2	
SA400RCUL			48 (50/60Hz)	2	48	2	
SA600RCUL			100-110 (50/60Hz)	3	100-110	3	
SA800RCUL			200-240 (50/60Hz)	3	200-220	3	

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# Molded Case Circuit Breakers

## Internal accessories

### ■ Dimensions, mm

#### Shunt trip device "F" and undervoltage trip device "R"

S series	E series	Fig.	Mass (kg)
SA30C SA50C, SA50RC SA60C, SA60RC	EA30AC EA50AC, EA50C EA60C EA100AC, EA100C	Fig.1	0.15
SA100C, SA100RC	—	Fig.2	0.17
SA225C, SA225RC	EA225C	Fig.3	

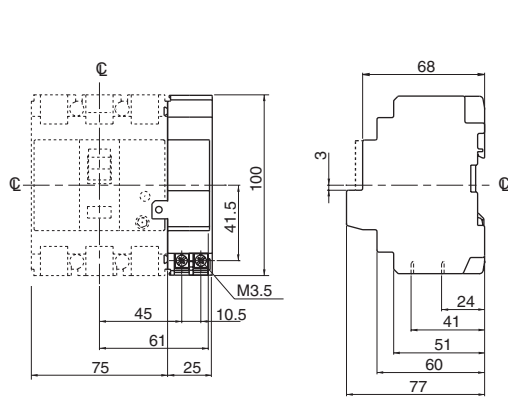


Fig.1

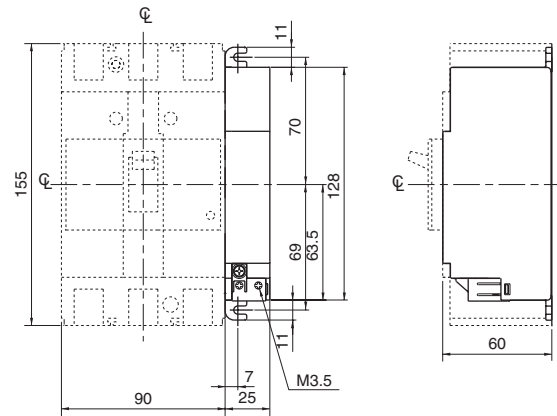


Fig.2

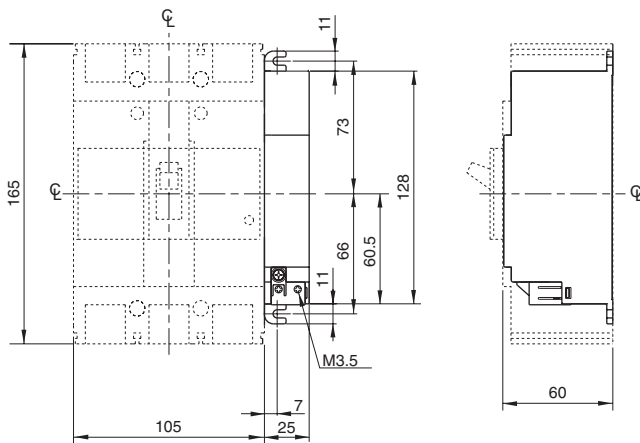


Fig.3

■ Lead wire specifications

- IEC and CE marking conformed

S series	E series	L and H series	Wire size	Wire length
SA30C SA50C, SA50RC SA60C, SA60RC	EA30A EA50AC, EA50C EA60C EA100AC, EA100C	-	22AWG (0.4mm <sup>2</sup> )	500mm
SA100C, SA100RC SA225C, SA225RC SA400C, SA400RC SA600RC SA800RC S1000 S1200 SE1600	EA225C EA400C EA600C EA800C	LA50B H50BA H100BA, H100R H225BA, H225R H400B, H400R H600B, H600R H800B, H800R	0.5mm <sup>2</sup>	500mm

● UL Listed

S series	E series	L and H series	Wire size	Wire length
SA100CUL, SA100RCUL SA225CUL, SA225RCUL SA400CUL, SA400RCUL SA600RCUL SA800RCUL	-	-	20AWG	500mm

■ Terminal block specifications

MCCB type	S series	E series	L and H series	Terminal screw	Dimensions (mm)						
					Fig.	A	B	C	D	E	F
SA30C SA50C, SA50RC SA60C, SA60RC	EA30AC EA50AC, EA50C EA60C EA100AC, EA100C	-	-	M3.5	Fig.1	0	10.5	23.5	36	48.5	-
					Fig.2	0	10.5	23.5	36	48.5	-
					Fig.3	0	4	19	31	43.5	-
SA50RCUL *	EA100CUL *	-	-	-	+4.7	2.9	19.8	32.2	44.5	-	
SA100C, SA100CUL SA100RC, SA100RCUL	-	-	H50BA, H100BA	-	+2.5	4	19	31	43.5	-	
SA225C, SA225CUL SA225RC, SA225RCUL	EA225C	-	H225BA	-	+5.5	2.8	19.7	32.1	44.4	-	
-	-	-	H100R, H225R	-	+0.2	34.9	51.8	64.2	76.5	-	
-	-	-	LA50B	-	+4.8	26.9	44.3	56.2	68.5	-	
SA400C, SA400CUL SA400RC, SA400RCUL	EA400C	-	H400B, H400R	Fig.4	-6.5	-	-	-	-	76.5	
SA600RC, SA600RCUL SA800RC, SA800RCUL	EA600C EA800C	-	H600B, H600R H800B, H800R	-	-	-	-	-	-	85.5	

Notes: • Lead wire ø1.6 or 2mm<sup>2</sup> \* Lead wire pull-out type are not available

Fig.1

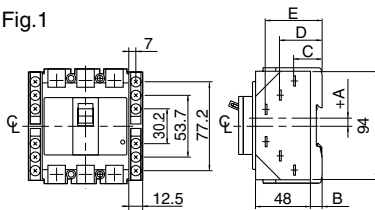


Fig.2

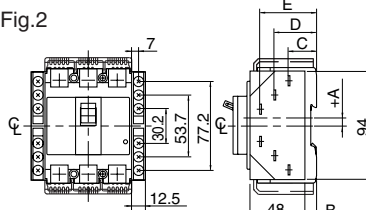


Fig.3

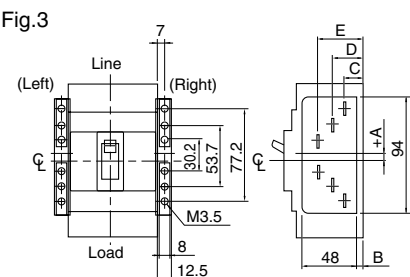
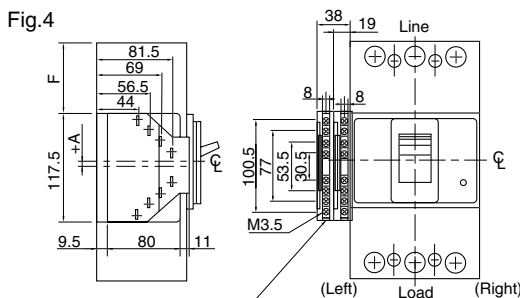


Fig.4



Lead-wire extension type is not available.  
(EA100CUL, SA50RCUL)

# Molded Case Circuit Breakers

## Internal accessories

### ■ Type number

#### ● Auxiliary switches (W) and alarm switches (K)

MCCB type		Type number									
S series	E series	Auxiliary switch / W		Alarm switch / K		Auxiliary switch + Alarm switch / WK					
		SPDT: W	Mass(kg)	2PDT: W2	Mass(kg)	SPDT: K	Mass(kg)	2PDT: K2	Mass(kg)		
SA30C *	EA30AC *	<b>BZ6W□10C</b>	0.01	–	–	<b>BZ6K□10C</b>	0.01	–	–	<b>BZ6WK□10C</b>	0.02
SA50C *	EA50AC *	<b>BZ6W□10CA</b>	0.04	–	–	<b>BZ6K□10CA</b>	0.04	–	–	<b>BZ6WK□10CA</b>	0.08
SA50RC *	EA50C *	(With terminal block)				(With terminal block)				(With terminal block)	
SA60C *	EA60C *										
SA60RC *	EA100AC *										
	EA100C *										
SA100C	–	<b>BZ6W□30C</b>	0.02	–	–	<b>BZ6K□30C</b>	0.02	–	–	<b>BZ6WK□30C</b>	0.04
SA100RC	–	<b>BZ6W□30CA</b>	0.05	–	–	<b>BZ6K□30CA</b>	0.05	–	–	<b>BZ6WK□30CA</b>	0.07
		(With terminal block)				(With terminal block)				(With terminal block)	
SA225C	EA225C	<b>BZ6W□40C</b>	0.02	–	–	<b>BZ6K□40C</b>	0.02	–	–	<b>BZ6WK□40C</b>	0.04
SA225RC	–	<b>BZ6W□40CA</b>	0.05	–	–	<b>BZ6K□40CA</b>	0.05	–	–	<b>BZ6WK□40CA</b>	0.07
		(With terminal block)				(With terminal block)				(With terminal block)	
SA400C	EA400C	<b>BZ-W70B</b>	0.02	<b>BZ-W270B</b>	0.04	<b>BZ-K70B</b>	0.02	<b>BZ-K270B</b>	0.04	<b>BZ-WK70B</b>	0.04
SA400RC	EA600C	<b>BZ-W70B-A</b>	0.11	<b>BZ-W270B-A</b>	0.22	<b>BZ-K70B-A</b>	0.11	<b>BZ-K270B-A</b>	0.22	<b>BZ-WK70B-A</b>	0.03
SA600RC	EA800C	(With terminal block)		(With terminal block)		(With terminal block)		(With terminal block)		(With terminal block)	
SA800RC	–										

MCCB type		Type number			
L series	H series	Auxiliary switch / W		Alarm switch / K	
		SPDT: W		SPDT: K	
LA50B	–	<b>BZ-W23B□</b>		<b>BZ-K23B□</b>	
–	H50B H100BA	<b>BZ-W35B□</b>		<b>BZ-K35B□</b>	
–	H225BA	<b>BZ-W40B□</b>		<b>BZ-K40B□</b>	
–	H100R H225R	<b>BZ-W50B□</b>		<b>BZ-K50B□</b>	
–	H400B H600B H800B	<b>BZ-W70B□</b>		<b>BZ-K70B□</b>	

#### ● UL Listed

MCCB type		Type number			
S series	E series	Auxiliary switch / W		Alarm switch / K	
		SPDT: W		SPDT: K	
SA50RCUL	EA100CUL	<b>BZ6W□10CU</b> <b>BZ6W□10CAU</b> (With terminal block)		<b>BZ6K□10CU</b> <b>BZ6K□10CAU</b> (With terminal block)	
SA100CUL	–	<b>BZ6W□30CU</b> <b>BZ6W□30CAU</b> (With terminal block)		<b>BZ6K□30CU</b> <b>BZ6K□30CAU</b> (With terminal block)	–
SA225CUL	–	<b>BZ6W□40CU</b> <b>BZ6W□40CAU</b> (With terminal block)		<b>BZ6K□40CU</b> <b>BZ6K□40CAU</b> (With terminal block)	–
SA400CUL	–	▲		▲	–
SA600CUL	–	▲		▲	–
SA800CUL	–				–

Notes: • Auxiliary switch and alarm switch for low level circuit are also available on request, in this case add **D** to the type number when ordering. Example: WD, KD  
 • Replace the □ mark by the **R** when an auxiliary switch or an alarm switch is mounted on right hand side of the breaker. Enter the **L** when it is mounted on left hand side of the breaker.  
 \* 2-pole types are mountable on right side only.

▲ Factory-mounted accessory

● Shunt trip devices (F)

MCCB type		Operating voltage		Type number	With terminal block
S series	E series	Code	Voltage		
SA30C SA50C SA50RC SA60C SA60RC	EA30AC EA50AC EA50C EA60C EA100AC EA100C	<b>A</b> <b>K</b> <b>P</b>	100-120V AC 50/60Hz, 100-110V DC 200-240V AC 50/60Hz 380-450V AC 50/60Hz	<b>BZ6FA10C</b> <b>BZ6FK10C</b> <b>BZ6FP10C</b>	<b>BZ6FA10CA</b> <b>BZ6FK10CA</b> <b>BZ6FP10CA</b>
SA100C SA100RC	—	<b>R</b> <b>S</b> <b>T</b> <b>U</b> <b>P</b>	24V AC 50/60Hz, 24V DC 48V AC 50/60Hz, 48V DC 100-125V AC 50/60Hz, 100-110V DC 200-240V AC 50/60Hz, 200-220V DC 380-450V AC 50/60Hz	<b>BZ6FR30C</b> <b>BZ6FS30C</b> <b>BZ6FT30C</b> <b>BZ6FU30C</b> <b>BZ6FP30C</b>	<b>BZ6FR30CA</b> <b>BZ6FS30CA</b> <b>BZ6FT30CA</b> <b>BZ6FU30CA</b> <b>BZ6FP30CA</b>
SA225C SA225RC	EA225C	<b>R</b> <b>S</b> <b>T</b> <b>U</b> <b>P</b>	24V AC 50/60Hz, 24V DC 48V AC 50/60Hz, 48V DC 100-125V AC 50/60Hz, 100-110V DC 200-240V AC 50/60Hz, 200-220V DC 380-450V AC 50/60Hz	<b>BZ6FR40C</b> <b>BZ6FS40C</b> <b>BZ6FT40C</b> <b>BZ6FU40C</b> <b>BZ6FP40C</b>	<b>BZ6FR40CA</b> <b>BZ6FS40CA</b> <b>BZ6FT40CA</b> <b>BZ6FU40CA</b> <b>BZ6FP40CA</b>
SA400C SA400RC SA600RC SA800RC	EA400C EA600C EA800C	<b>24</b> <b>100</b> <b>380</b>	24-48V AC 50/60Hz, 24-48V DC 100-240V AC 50/60Hz, 100-220V DC 380-550V AC 50/60Hz	<b>BZ-F70B-24</b> <b>BZ-F70B-100</b> <b>BZ-F70B-380</b>	<b>BZ-F70B-24-A</b> <b>BZ-F70B-100-A</b> <b>BZ-F70B-380-A</b>

● Undervoltage trip devices (R)

MCCB type		Operating voltage		Type number	Operating voltage
S series	E series	Code	Voltage		
SA30C SA50C SA50RC SA60C SA60RC	EA30AC EA50AC EA50C EA60C EA100AC EA100C	<b>2</b> <b>1</b> <b>W</b> <b>4</b> <b>5</b> <b>8</b> <b>0</b> <b>9</b> <b>F</b> <b>T</b>	100V AC 50Hz/100-110V AC 60Hz 110V AC 50Hz/110-127V AC 60Hz 200V AC 50Hz/200-220V AC 60Hz 220V AC 50Hz/220-240V AC 60Hz 230V AC 50Hz/230-240V AC 60Hz 240V AC 50Hz 380V AC 50Hz/380-415V AC 60Hz 400V AC 50Hz/400-440V AC 60Hz 24V DC 100-110V DC	<b>BZ6R210C</b> <b>BZ6R110C</b> <b>BZ6RW10C</b> <b>BZ6R410C</b> <b>BZ6R510C</b> <b>BZ6R810C</b> <b>BZ6R010C</b> <b>BZ6R910C</b> <b>BZ6RF10C</b> <b>BZ6RT10C</b>	Tripping voltage: 70 to 35% of coil rated voltage  Closing voltage: 85% or more of coil rated voltage
SA100C SA100RC SA225C SA225RC	EA225C	<b>2</b> <b>4</b> <b>C</b> <b>T</b>	100V AC 50Hz/100-110V AC 60Hz 200V AC 50Hz/200-220V AC 60Hz 400V AC 50Hz/400-440V AC 60Hz 100-110V DC	▲ ▲ ▲ ▲	
SA400C SA400RC SA600RC SA800RC	EA400C EA600C EA800C	<b>R</b> <b>S</b> <b>X</b> <b>U</b> <b>E</b>	24V AC 50/60Hz, 24V DC 48V AC 50/60Hz, 48V DC 100-110V AC 50/60Hz, 100-110V DC 200-240V AC 50/60Hz, 200-220V DC 380-480V AC 50/60Hz	<b>BZ-R70B-24</b> <b>BZ-R70B-48</b> <b>BZ-R70B-100</b> <b>BZ-R70B-200</b> <b>BZ-R70B-380</b>	

Notes: • Specify operating voltage with ordering.  
• Terminal block

▲ Factory-mounted accessory  
When ordering, specify the rated voltage.

# Molded Case Circuit Breakers

## Internal accessories

### ● UL Listed Shunt trip devices (F)

MCCB type		Rated voltage	Type number	
S series	E series		Lead wire	With terminal block
SA50RCUL	EA100CUL	100-120V AC 50/60Hz 200-240V AC 50/60Hz 380-450V AC 50/60Hz	<b>BZ6FA10CU</b> <b>BZ6FK10CU</b> <b>BZ6FP10CU</b>	<b>BZ6FA10CAU</b> <b>BZ6FK10CAU</b> <b>BZ6FP10CAU</b>
SA100CUL SA100RCUL	–	100-125V AC 50/60Hz 200-240V AC 50/60Hz	<b>BZ6FT30CU</b> <b>BZ6FU30CU</b>	<b>BZ6FT30CAU</b> <b>BZ6FU30CAU</b>
SA225CUL SA225RCUL	–	100-125V AC 50/60Hz 200-240V AC 50/60Hz	<b>BZ6FT40CU</b> <b>BZ6FU40CU</b>	<b>BZ6FT40CAU</b> <b>BZ6FU40CAU</b>
SA400CUL SA400RCUL SA600RCUL SA800RCUL	–	24V 50/60Hz 48V 50/60Hz 100-240V 50/60Hz	▲ ▲ ▲	

▲ Factory-mounted accessory

### ● UL Listed Undervoltage trip devices (R)

MCCB type		Rated voltage	Type number	
S series	E series		Lead wire	With terminal block
SA50RCUL	EA100CUL	100V AC 50Hz/100-110V AC 60Hz 200V AC 50Hz/200-220V AC 60Hz 400V AC 50Hz/400-440V AC 60Hz	– – –	<b>BZ6R210CAU</b> <b>BZ6RW10CAU</b> <b>BZ6R910CAU</b>

● Internal accessories (optional) for 400AF to 800AF

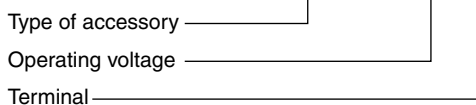
Accessory type	Auxiliary switch		Alarm switch		Shunt trip F	Undervoltage trip R	Number of terminal blocks	Mass (kg)	
	W	W2	K	K2				w/lead wire	w/terminal block
BZ-W70B-□	●						1	0.05	0.14
BZ-K70B-□			●				1	0.05	0.14
BZ-F70B-■-□					●		1	0.09	0.18
BZ-R70B-■-□						●	1	0.09	0.18
BZ-W270B-□		●					2	0.07	0.25
BZ-WK70B-□	●		●				1	0.07	0.16
BZ-W2K70B-□		●	●				2	0.09	0.27
BZ-K270B-□				●			2	0.07	0.25
BZ-WK270B-□	●			●			2	0.09	0.27
BZ-W2K270B-□		●	●				2	0.11	0.29
BZ-WF70B-■-□	●				●		1	0.11	0.20
BZ-W2F70B-■-□		●			●		2	0.13	0.31
BZ-WR70B-■-□	●					●	1	0.11	0.20
BZ-W2R70B-■-□		●				●	2	0.13	0.31
BZ-KF70B-■-□			●		●		1	0.11	0.20
BZ-KR70B-■-□			●			●	1	0.11	0.20
BZ-WKF70B-■-□	●		●		●		1	0.13	0.22
BZ-WKR70B-■-□	●		●			●	1	0.13	0.22
BZ-K2F70B-■-□				●	●		2	0.13	0.31
BZ-K2R70B-■-□				●		●	2	0.13	0.31
BZ-W2KF70B-■-□		●	●		●		2	0.15	0.33
BZ-W2KR70B-■-□		●	●			●	2	0.15	0.33
BZ-WK2F70B-■-□	●			●	●		2	0.15	0.33
BZ-WK2R70B-■-□	●			●		●	2	0.15	0.33
BZ-W2K2F70B-■-□		●	●		●		2	0.17	0.35
BZ-W2K2R70B-■-□		●	●			●	2	0.17	0.35

Notes: ● Indicates the mountable accessories.

- Replace the mark ■ by the operating voltage of shunt trip or undervoltage trip device.
- Replace the mark □ by the A suffix for terminal block type, **blank** for lead-wire connection type.

● Operating voltage for 400AF to 800AF

**BZ - WKF 70B - 100 - A**



Operating voltage	Shunt trip			Undervoltage trip				
	24/48V AC/DC	100-240V AC 100-220V DC	380-550V AC	24V AC/DC	48V AC/DC	100-110V AC/DC	200-240V AC 200-220V DC	380-480V AC
Code	24	100	380	24	48	100	200	380

■ Ordering information

Specify the following.

1. Type number
2. Lead-wire connection or terminal block type