

30AF ELCB

EBS30c

Metasol



EBS33c

Ratings

Frame size			30AF		
Type and pole			S-type		
	2-pole (2-sensor)		EBS32c		
	3-pole (3-sensor)		EBS33c		
	4-pole (3-sensor)		EBS34c		
Rated current, I _n			(5-10) Note 4 -15-20-30A		
Rated residual current, I _{Δn}			30, 100/200/500mA (Adjustable)		
Residual current off-time at I _{Δn}			≤0.1 sec		
Rated operational voltage, U _e			AC: 220/460V		
Rated impulse withstand voltage, U _{imp}			6kV		
Wiring system	2-pole (2-sensor)		1Ø2W		
	3-pole (3-sensor)		1Ø2W, 1Ø3W, 3Ø3W		
	4-pole (3-sensor)		1Ø2W, 1Ø3W, 3Ø3W, 3Ø4W		
Rated short-circuit breaking			S-type		
capacity, I _{cu}	AC	460V	14 (10) kA		
		415V	14 (10) kA		
		220/250V	30 (25) kA		
I _{cs} =%×I _{cu}			100%		
Protective function			Overload, Short-circuit and ground fault		
Type of trip unit			Thermal-Magnetic		
Magnetic trip range			400A		
Endurance	Mechanical		25,000 operations		
	Electrical		10,000 operations		
Connection	Standard		Front connection		
	Optional		Rear connection		
			Screw fixing		
Mounting	Standard		Screw fixing		
Dimensions (mm)		Pole	2p	3p	4p
	a		75		100
	b		130		130
	c1 Note		60		60
	c2 Note		64		64
	d		82		82
Weight, kg	Standard		0.5	0.7	0.9
Certification		Pole	3p	4p	
CE marking	CE		○	○	

Note) 1. Depth by door cut size : c1 for large cut, c2 for small cut
 2. Do not test withstand voltage or insulation resistance test between poles to avoid the damage of the PCB.
 3. The short-circuit breaking capacities in () are applied to the rated current in (5, 10A)
 4. 4-pole product's ampacity on neutral conductor is equal to or less than 50% of the rated current.
 5. Rated non-trip current sensitivity is equal to or less than 50% of the rated current sensitivity.

For more information

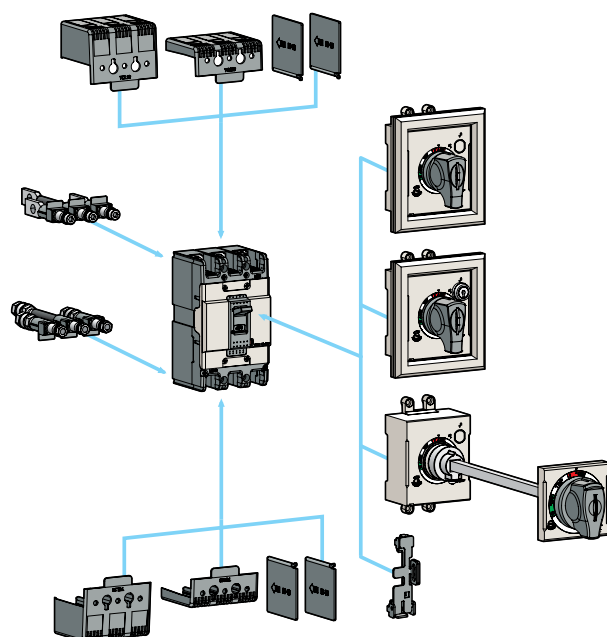
- Drawings ▶ 116 page
- Trip curves ▶ 101 page
- Accessories ▶ 74 page
- Connection and mounting ▶ 127 page

Ordering types

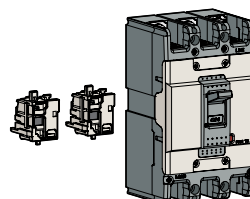
Breaker types

EBS type (14kA/460V)			
Rated current, In	Rated residual current, I Δ n: 30mA		
	2-pole	3-pole	4-pole
5 A	EBS32c/5/30	EBS33c/5/30	EBS34c/5/30
10 A	EBS32c/10/30	EBS33c/10/30	EBS34c/10/30
15 A	EBS32c/15/30	EBS33c/15/30	EBS34c/15/30
20 A	EBS32c/15/30	EBS33c/20/30	EBS34c/20/30
30 A	EBS32c/30/30	EBS33c/30/30	EBS34c/30/30

EBS type (14kA/460V)			
Rated current, In	Rated residual current, I Δ n: 100/200/500mA		
	2-pole	3-pole	4-pole
5 A	EBS32c/5/100	EBS33c/5/100	EBS34c/5/100
10 A	EBS32c/10/100	EBS33c/10/100	EBS34c/10/100
15 A	EBS32c/15/100	EBS33c/15/100	EBS34c/15/100
20 A	EBS32c/20/100	EBS33c/20/100	EBS34c/20/100
30 A	EBS32c/30/100	EBS33c/30/100	EBS34c/30/100

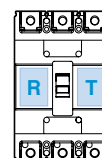


Accessories



Electrical auxiliaries

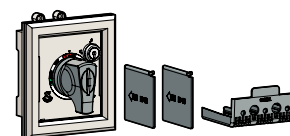
AX	Auxiliary switch
AL	Alarm switch
AX+AL	Combination switch



Maximum possibilities

T-position	Not available
R-position	Option of AX or AL or AX+AL

Note) For more detail see 74 page



External accessories

EBS30c	Name
IB13	Insulation barrier
TCL13	Terminal cover (Long) - Inde type, D-handle type, N-handle type
TCS13	Terminal cover (Short) - Inde type, D-handle type, N-handle type
DH100	Rotary handle (Direct)
DHK100	Rotary handle (Direct, Key lock)
EH100	Rotary handle (Extended)
RTR1	Rear terminal (Bar)
Handle lock	

Note) For more detail see 82 page

- Inde type: This cover is used without auxiliary handle.
- D-handle type: This cover is used with D-handle.
- N-handle type: This cover is used with N-handle.

50AF ELCB

EBN50c, EBS50c, EBH50c



EBN53c

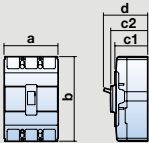


EBS53c

For more information

- Drawings ▶ 116, 117 page
- Trip curves ▶ 101, 102 page
- Accessories ▶ 74 page
- Connection and mounting ▶ 127 page

Ratings

Frame size			50AF						
Type and pole			N-type		S-type		H-type		
	2-pole (2-sensor)		EBN52c		-		-		
	3-pole (3-sensor)		EBN53c		EBS53c		EBH53c		
	4-pole (3-sensor)		-		EBS54c		EBH54c		
Rated current, In			15-20-30-40-50A						
Rated residual current, IΔn			30, 100/200/500mA (Adjustable)						
Residual current off-time at IΔn			≤0.1 sec						
Rated operational voltage, Ue			AC: 220/460V						
Rated impulse withstand voltage, Uimp			6kV						
Wiring system	2-pole (2-sensor)		1Ø2W						
	3-pole (3-sensor)		1Ø2W, 1Ø3W, 3Ø3W						
	4-pole (3-sensor)		1Ø2W, 1Ø3W, 3Ø3W, 3Ø4W						
Rated short-circuit breaking			N-type		S-type		H-type		
capacity, Icu	AC	460V	14kA		18kA		50kA		
		415V	14kA		18kA		50kA		
		220/250V	30kA		35kA		100kA		
Ics=%×Icu			100%		100%		100%		
Protective function			Overload, Short-circuit and ground fault						
Type of trip unit			Thermal-Magnetic						
Magnetic trip range			12×In (30A and under: 400A)						
Endurance	Mechanical		25,000 operations						
	Electrical		10,000 operations						
Connection	Standard		Front connection						
	Optional		Rear connection						
Mounting		Standard	Screw fixing						
Dimensions (mm)			Pole	2p	3p	3p	4p	3p	4p
	a			75	75	75	100	90	120
	b			130		130		155	
	c1 <small>Note)</small>			60		60		60	
	c2 <small>Note)</small>			64		64		64	
	d			82		82		82	
Weight, kg			Standard	0.5	0.7	0.7	0.9	1	1.2
Certification			Pole	2p	3p	3p	4p	3p	4p
CE marking			CE	○		○		○	

Note) 1. Depth by door cut size : C1 for large cut, C2 for small cut

2. Do not test withstand voltage or insulation resistance test between poles to avoid the damage of the PCB.

3. 4-pole product's ampacity on neutral conductor is equal to or less than 50% of the rated current.

4. Rated non-trip current sensitivity is equal to or less than 50% of the rated current sensitivity.

Ordering types

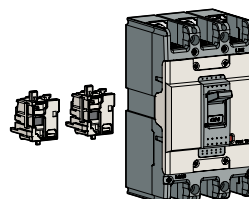
Breaker types

EBN type (14kA/460V)				
Rated current, In	Rated residual current, I Δ n: 30mA		Rated residual current, I Δ n: 100/200/500mA	
	2-pole	3-pole	2-pole	3-pole
15 A	EBN52c/15/30	EBN53c/15/30	EBN52c/15/100	EBN53c/15/100
20 A	EBN52c/20/30	EBN53c/20/30	EBN52c/20/100	EBN53c/20/100
30 A	EBN52c/30/30	EBN53c/30/30	EBN52c/30/100	EBN53c/30/100
40 A	EBN52c/40/30	EBN53c/40/30	EBN52c/40/100	EBN53c/40/100
50 A	EBN52c/50/30	EBN53c/50/30	EBN52c/50/100	EBN53c/50/100

EBS type (18kA/460V)				
Rated current, In	Rated residual current, I Δ n: 30mA		Rated residual current, I Δ n: 100/200/500mA	
	3-pole	4-pole	3-pole	4-pole
15 A	EBS53c/15/30	EBS54c/15/30	EBS53c/15/100	EBS54c/15/100
20 A	EBS53c/20/30	EBS54c/20/30	EBS53c/20/100	EBS54c/20/100
30 A	EBS53c/30/30	EBS54c/30/30	EBS53c/30/100	EBS54c/30/100
40 A	EBS53c/40/30	EBS54c/40/30	EBS53c/40/100	EBS54c/40/100
50 A	EBS53c/50/30	EBS54c/50/30	EBS53c/50/100	EBS54c/50/100

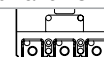
EBH type (50kA/460V)				
Rated current, In	Rated residual current, I Δ n: 30mA		Rated residual current, I Δ n: 100/200/500mA	
	3-pole	4-pole	3-pole	4-pole
15 A	EBH53c/15/30	EBH54c/15/30	EBH53c/15/100	EBH54c/15/100
20 A	EBH53c/20/30	EBH54c/20/30	EBH53c/20/100	EBH54c/20/100
30 A	EBH53c/30/30	EBH54c/30/30	EBH53c/30/100	EBH54c/30/100
40 A	EBH53c/40/30	EBH54c/40/30	EBH53c/40/100	EBH54c/40/100
50 A	EBH53c/50/30	EBH54c/50/30	EBH53c/50/100	EBH54c/50/100

Accessories



Electrical auxiliaries

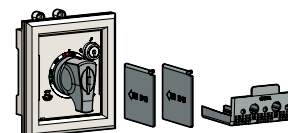
AX	Auxiliary switch
AL	Alarm switch
AX+AL	Combination switch



Maximum possibilities

T-position	Not available
R-position	Option of AX or AL or AX+AL

Note) For more detail see 74 page



External accessories

EBN50c EBS50c	EBH50c	Name
IB13	IB23	Insulation barrier
TCL13	TCL23	Terminal cover (Long) - Inde type, D-handle type, N-handle type
TCS13	TCS23	Terminal cover (Short) - Inde type, D-handle type, N-handle type
DH100	DH125	Rotary handle (Direct)
DHK100	DHK125	Rotary handle (Direct, Key lock)
EH100	EH125	Rotary handle (Extended)
-	RTB2	Rear terminal (Bar)
RTR1	RTR2	Rear terminal (Round)
Handle lock		

Note) For more detail see 82 page

- Inde type: This cover is used without auxiliary handle.
- D-handle type: This cover is used with D-handle.
- N-handle type: This cover is used with N-handle.

60AF ELCB

EBN60c, EBS60c

Metasol

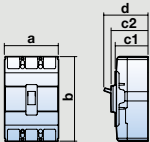


EBN63c



EBS63c

Ratings

Frame size		60AF			
Type and pole		N-type		S-type	
	2-pole (2-sensor)	-		-	
	3-pole (3-sensor)	EBN63c		EBS63c	
	4-pole (3-sensor)	-		EBS64c	
Rated current, I _n		60A			
Rated residual current, I Δ n		30, 100/200/500mA (Adjustable)			
Residual current off-time at I Δ n		≤ 0.1 sec			
Rated operational voltage, U _e		AC: 220/460V			
Rated impulse withstand voltage, U _{imp}		6kV			
Wiring system	2-pole (2-sensor)	-			
	3-pole (3-sensor)	1Ø2W, 1Ø3W, 3Ø3W			
	4-pole (3-sensor)	1Ø2W, 1Ø3W, 3Ø3W, 3Ø4W			
Rated short-circuit breaking capacity, I _{cu}		N-type		S-type	
AC	460V	14kA		18kA	
	415V	14kA		18kA	
	220/250V	30kA		35kA	
I _{cs} =%×I _{cu}		100%		100%	
Protective function		Overload, Short-circuit and ground fault			
Type of trip unit		Thermal-Magnetic			
Magnetic trip range		12×I _n			
Endurance	Mechanical	25,000 operations			
	Electrical	10,000 operations			
Connection	Standard	Front connection			
	Optional	Rear connection			
		Screw fixing			
Mounting	Standard	Screw fixing			
Dimensions (mm)		Pole	3p	3p	4p
	a		75	75	100
	b		130	130	130
	c1 <small>Note)</small>		60	60	60
	c2 <small>Note)</small>		64	64	64
	d		82	82	82
Weight, kg	Standard		0.7	0.7	0.9
Certification		Pole	3p	3p	4p
CE marking	CE		○	○	

Note) 1. Depth by door cut size : C1 for large cut, C2 for small cut
 2. Do not test withstand voltage or insulation resistance test between poles to avoid the damage of the PCB.
 3. 4-pole product's ampacity on neutral conductor is equal to or less than 50% of the rated current.
 4. Rated non-trip current sensitivity is equal to or less than 50% of the rated current sensitivity.

For more information

- Drawings ▶ 116 page
- Trip curves ▶ 101 page
- Accessories ▶ 74 page
- Connection and mounting ▶ 127 page

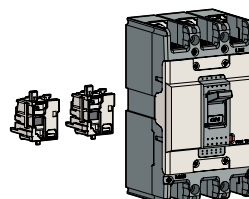
Ordering types

Breaker types

EBN type (14kA/460V)			
Rated current, In	Rated residual current, I _{Δn} : 30mA		Rated residual current, I _{Δn} : 100/200/500mA
	3-pole		3-pole
60 A	EBN63c/60/30		EBN63c/60/100

EBS type (18kA/460V)				
Rated current, In	Rated residual current, I _{Δn} : 30mA		Rated residual current, I _{Δn} : 100/200/500mA	
	3-pole	4-pole	3-pole	4-pole
60 A	EBS63c/60/30	EBS64c/60/30	EBS63c/60/100	EBS64c/60/100

Accessories



Electrical auxiliaries

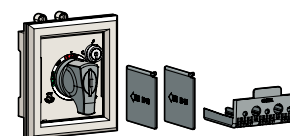
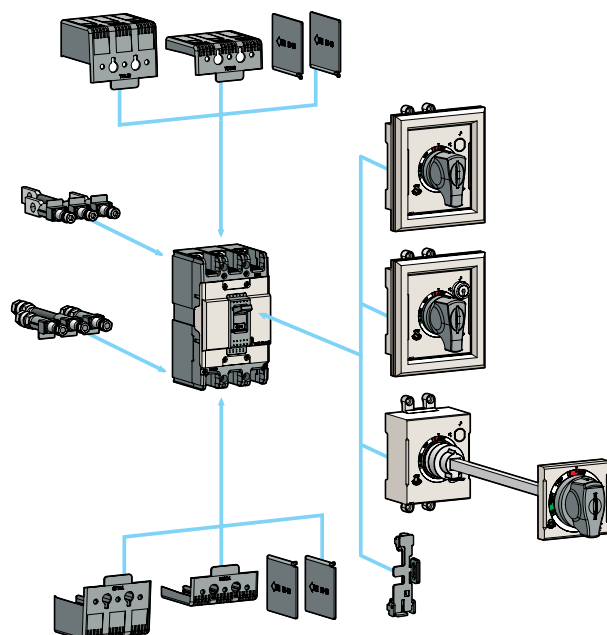
AX	Auxiliary switch
AL	Alarm switch
AX+AL	Combination switch



Maximum possibilities

T-position	Not available
R-position	Option of AX or AL or AX+AL

Note) For more detail see 74 page



External accessories

EBS60c EBN60c	Name
IB13	Insulation barrier
TCL13	Terminal cover (Long) - Inde type, D-handle type, N-handle type
TCS13	Terminal cover (Short) - Inde type, D-handle type, N-handle type
DH100	Rotary handle (Direct)
DHK100	Rotary handle (Direct, Key lock)
EH100	Rotary handle (Extended)
RTB1	Rear terminal (Bar)
RTR1	Rear terminal (Round)
Handle lock	

Note) For more detail see 82 page

- Inde type: This cover is used without auxiliary handle.
- D-handle type: This cover is used with D-handle.
- N-handle type: This cover is used with N-handle.

100AF ELCB

EBN100c

Metasol



EBN103c

Ratings

Frame size		100AF			
Type and pole		N-type			
	2-pole (2-sensor)	EBN102c			
	3-pole (3-sensor)	EBN103c			
	4-pole (3-sensor)	EBN104c			
Rated current, I _n		60-75-100A			
Rated residual current, I _{Δn}		30, 100/200/500mA (Adjustable)			
Residual current off-time at I _{Δn}		≤ 0.1 sec			
Rated operational voltage, U _e		AC: 220/460V			
Rated impulse withstand voltage, U _{imp}		6kV			
Wiring system	2-pole (2-sensor)	1Ø2W			
	3-pole (3-sensor)	1Ø2W, 1Ø3W, 3Ø3W			
	4-pole (3-sensor)	1Ø2W, 1Ø3W, 3Ø3W, 3Ø4W			
Rated short-circuit breaking capacity, I _{cu}		N-type			
AC	460V	18kA			
	415V	18kA			
	220/250V	35kA			
I _{cs} =%×I _{cu}		100%			
Protective function		Overload, Short-circuit and ground fault			
Type of trip unit		Thermal-Magnetic			
Magnetic trip range		12 × I _n			
Endurance	Mechanical	25,000 operations			
	Electrical	10,000 operations			
Connection	Standard	Front connection			
	Optional	Rear connection			
Mounting	Standard	Screw fixing			
Dimensions (mm)		Pole	2p	3p	4p
	a		75	75	100
	b		130	130	130
	c1 <small>Note)</small>		60	60	60
	c2 <small>Note)</small>		64	64	64
	d		82	82	82
Weight, kg	Standard		0.5	0.7	0.9
Certification		Pole	2p	3p	4p
CE marking		CE	○	○	○

Note) 1. Depth by door cut size : c1 for large cut, c2 for small cut

2. Do not test withstand voltage or insulation resistance test between poles to avoid the damage of the PCB.

3. 4-pole product's ampacity on neutral conductor is equal to or less than 50% of the rated current.

4. Rated non-trip current sensitivity is equal to or less than 50% of the rated current sensitivity.

For more information

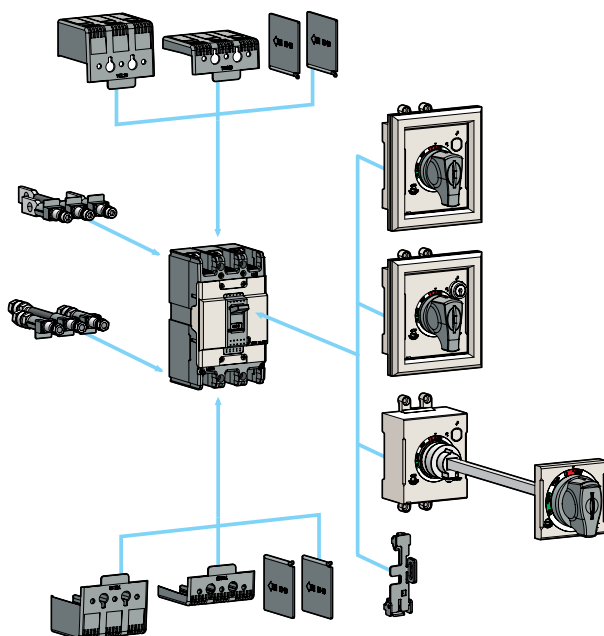
- Drawings ▶ 116 page
- Trip curves ▶ 101 page
- Accessories ▶ 74 page
- Connection and mounting ▶ 127 page

Ordering types

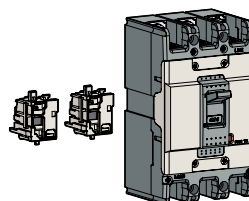
Breaker types

EBN type (18kA/460V)			
Rated current, I _n	Rated residual current, I _{Δn} : 30mA		
	2-pole	3-pole	4-pole
60 A	EBN102c/60/30	EBN103c/60/30	EBN104c/60/30
75 A	EBN102c/75/30	EBN103c/75/30	EBN104c/75/30
100 A	EBN102c/100/30	EBN103c/100/30	EBN104c/100/30

Rated current, I _n	Rated residual current, I _{Δn} : 100/200/500mA		
	2-pole	3-pole	4-pole
60 A	EBN102c/60/100	EBN103c/60/100	EBN104c/60/100
75 A	EBN102c/75/100	EBN103c/75/100	EBN104c/75/100
100 A	EBN102c/100/100	EBN103c/100/100	EBN104c/100/100



Accessories



Electrical auxiliaries

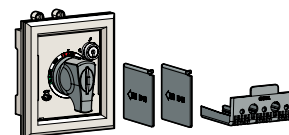
AX	Auxiliary switch
AL	Alarm switch
AX+AL	Combination switch



Maximum possibilities

T-position	Not available
R-position	Option of AX or AL or AX+AL

Note) For more detail see 74 page



External accessories

EBN100c	Name
IB13	Insulation barrier
TCL13	Terminal cover (Long) - Inde type, D-handle type, N-handle type
TCS13	Terminal cover (Short) - Inde type, D-handle type, N-handle type
DH100	Rotary handle (Direct)
DHK100	Rotary handle (Direct, Key lock)
EH100	Rotary handle (Extended)
RTB1	Rear terminal (Bar)
RTR1	Rear terminal (Round)
Handle lock	

Note) For more detail see 82 page

- Inde type: This cover is used without auxiliary handle.
- D-handle type: This cover is used with D-handle.
- N-handle type: This cover is used with N-handle.

125AF ELCB

EBS125c, EBH125c



EBS103c



EBH103c

For more information

- Drawings ▶ 117 page
- Trip curves ▶ 102 page
- Accessories ▶ 74 page
- Connection and mounting ▶ 127 page

Ratings

Frame size			125AF			
Type and pole			S-type		H-type	
	2-pole (2-sensor)		-		-	
	3-pole (3-sensor)		EBS103c		EBH103c	
	4-pole (3-sensor)		EBS104c		EBH104c	
Rated current, I _n			15-20-30-40-50-60-75-100-125A			
Rated residual current, I _{Δn}			30, 100/200/500mA (Adjustable)			
Residual current off-time at I _{Δn}			≤0.1 sec			
Rated operational voltage, U _e			AC: 220/460V			
Rated impulse withstand voltage, U _{imp}			6kV			
Wiring system	2-pole (2-sensor)		-			
	3-pole (3-sensor)		1Ø2W, 1Ø3W, 3Ø3W			
	4-pole (3-sensor)		1Ø2W, 1Ø3W, 3Ø3W, 3Ø4W			
Rated short-circuit breaking capacity, I _{cu}			N-type		S-type	
AC	460V		37kA		50kA	
	415V		37kA		50kA	
	220/250V		85kA		100kA	
I _{cs} =%×I _{cu}			100%		100%	
Protective function			Overload, Short-circuit and ground fault			
Type of trip unit			Thermal-Magnetic			
Magnetic trip range			12×I _n (30A and under: 400A)			
Endurance	Mechanical		25,000 operations			
	Electrical		10,000 operations			
Connection	Standard		Front connection			
	Optional		Rear connection			
Mounting	Standard		Screw fixing			
Dimensions (mm)		Pole	3p	4p	3p	4p
	a		90	120	90	120
	b		155	155	155	155
	c1 <small>Note)</small>		60	60	60	60
	c2 <small>Note)</small>		64	64	64	64
	d		82	82	82	82
Weight, kg	Standard		1	1.2	1	1.2
Certification		Pole	3p	4p	3p	4p
CE marking	CE		○	○	○	○

Note) 1. Depth by door cut size : c1 for large cut, c2 for small cut

2. Do not test withstand voltage or insulation resistance test between poles to avoid the damage of the PCB.

3. 4-pole product's ampacity on neutral conductor is equal to or less than 50% of the rated current.

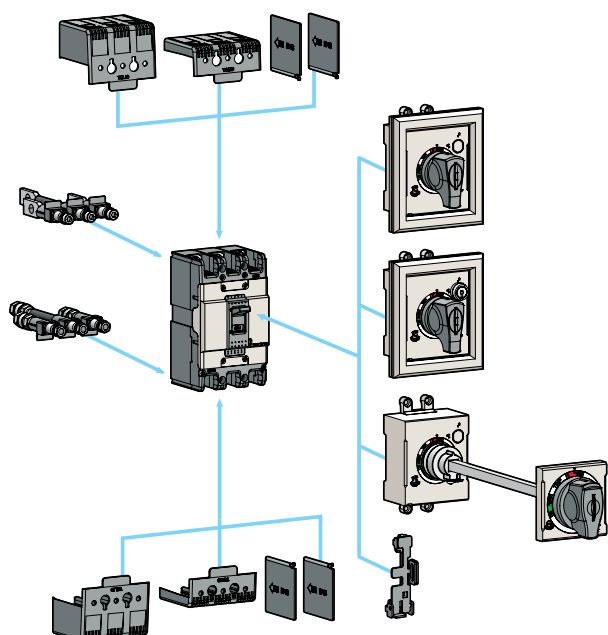
4. Rated non-trip current sensitivity is equal to or less than 50% of the rated current sensitivity.

Ordering types

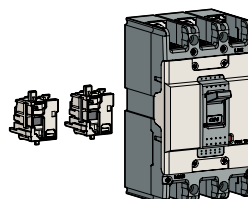
Breaker types

EBS type (37kA/460V)				
Rated current, In	Rated residual current, I Δ n: 30mA		Rated residual current, I Δ n: 100/200/500mA	
	3-pole	4-pole	3-pole	4-pole
15 A	EBS103c/15/30	EBS104c/15/30	EBS103c/15/100	EBS104c/15/100
20 A	EBS103c/20/30	EBS104c/20/30	EBS103c/20/100	EBS104c/20/100
30 A	EBS103c/30/30	EBS104c/30/30	EBS103c/30/100	EBS104c/30/100
40 A	EBS103c/40/30	EBS104c/40/30	EBS103c/40/100	EBS104c/40/100
50 A	EBS103c/50/30	EBS104c/50/30	EBS103c/50/100	EBS104c/50/100
60 A	EBS103c/60/30	EBS104c/60/30	EBS103c/60/100	EBS104c/60/100
75 A	EBS103c/75/30	EBS104c/75/30	EBS103c/75/100	EBS104c/75/100
100 A	EBS103c/100/30	EBS104c/100/30	EBS103c/100/100	EBS104c/100/100
125 A	EBS103c/125/30	EBS104c/125/30	EBS103c/125/100	EBS104c/125/100

EBH type (50kA/460V)				
Rated current, In	Rated residual current, I Δ n: 30mA		Rated residual current, I Δ n: 100/200/500mA	
	3-pole	4-pole	3-pole	4-pole
15 A	EBH103c/15/30	EBH104c/15/30	EBH103c/15/100	EBH104c/15/100
20 A	EBH103c/20/30	EBH104c/20/30	EBH103c/20/100	EBH104c/20/100
30 A	EBH103c/30/30	EBH104c/30/30	EBH103c/30/100	EBH104c/30/100
40 A	EBH103c/40/30	EBH104c/40/30	EBH103c/40/100	EBH104c/40/100
50 A	EBH103c/50/30	EBH104c/50/30	EBH103c/50/100	EBH104c/50/100
60 A	EBH103c/60/30	EBH104c/60/30	EBH103c/60/100	EBH104c/60/100
75 A	EBH103c/75/30	EBH104c/75/30	EBH103c/75/100	EBH104c/75/100
100 A	EBH103c/100/30	EBH104c/100/30	EBH103c/100/100	EBH104c/100/100
125 A	EBH103c/125/30	EBH104c/125/30	EBH103c/125/100	EBH104c/125/100

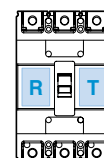


Accessories



Electrical auxiliaries

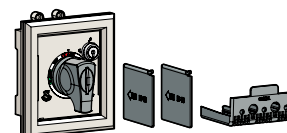
AX	Auxiliary switch
AL	Alarm switch
AX+AL	Combination switch



Maximum possibilities

T-position	Not available
R-position	Option of AX or AL or AX+AL

Note) For more detail see 74 page



External accessories

EBS60c EBN60c	Name
IB23	Insulation barrier
TCL23	Terminal cover (Long) - Inde type, D-handle type, N-handle type
TCS23	Terminal cover (Short) - Inde type, D-handle type, N-handle type
DH125	Rotary handle (Direct)
DHK125	Rotary handle (Direct, Key lock)
EH125	Rotary handle (Extended)
RTB2	Rear terminal (Bar)
RTR2	Rear terminal (Round)
Handle lock	

Note) For more detail see 82 page

- Inde type: This cover is used without auxiliary handle.
- D-handle type: This cover is used with D-handle.
- N-handle type: This cover is used with N-handle.

250AF ELCB

EBN250c, EBS250c, EBH250c

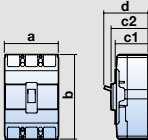


EBN203c



EBS203c

Ratings

Frame size			250AF						
Type and pole			N-type		S-type		H-type		
	2-pole (2-sensor)		EBN202c		-		-		
	3-pole (3-sensor)		EBN203c		EBS203c		EBH203c		
	4-pole (3-sensor)		-		EBS204c		EBH204c		
Rated current, In			100-125-150-175-200-225-250A						
Rated residual current, IΔn			30, 100/200/500mA (Adjustable)						
Residual current off-time at IΔn			≤0.1 sec						
Rated operational voltage, Ue			AC: 220/460V						
Rated impulse withstand voltage, Uimp			6kV						
Wiring system	2-pole (2-sensor)		1Ø2W						
	3-pole (3-sensor)		1Ø2W, 1Ø3W, 3Ø3W						
	4-pole (3-sensor)		1Ø2W, 1Ø3W, 3Ø3W, 3Ø4W						
Rated short-circuit breaking capacity, Icu			N-type		S-type		H-type		
AC	460V		26kA		37kA		50kA		
	415V		26kA		37kA		50kA		
	220/250V		65kA		85kA		100kA		
Ics=%×Icu			100%		100%		100%		
Protective function			Overload, Short-circuit and ground fault						
Type of trip unit			Thermal-Magnetic						
Magnetic trip range			12×In						
Endurance	Mechanical		20,000 operations						
	Electrical		5,000 operations						
Connection	Standard		Front connection						
	Optional		Rear connection						
Mounting	Standard		Screw fixing						
Dimensions (mm)			Pole	2p	3p	3p	4p	3p	4p
	a			105	105	105	140	105	140
	b			165		165		165	
	c1 <small>Note)</small>			60		60		60	
	c2 <small>Note)</small>			64		64		64	
	d			87		87		87	
Weight, kg	Standard		1.1	1.2	1.2	1.5	1.2	1.5	
Certification			Pole	2p	3p	3p	4p	3p	4p
CE marking			CE	○		○		○	

Note) 1. Depth by door cut size : c1 for large cut, c2 for small cut
 2. Do not test withstand voltage or insulation resistance test between poles to avoid the damage of the PCB.
 3. 4-pole product's ampacity on neutral conductor is equal to or less than 50% of the rated current.
 4. Rated non-trip current sensitivity is equal to or less than 50% of the rated current sensitivity.

For more information

- Drawings ▶ 118 page
- Trip curves ▶ 103 page
- Accessories ▶ 74 page
- Connection and mounting ▶ 127 page

Ordering types

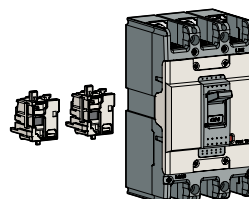
Breaker types

EBN type (25kA/460V)				
Rated current, I _n	Rated residual current, I _{Δn} : 30mA		Rated residual current, I _{Δn} : 100/200/500mA	
	2-pole	3-pole	2-pole	3-pole
100 A	EBN202c/100/30	EBN203c/100/30	EBN202c/100/100	EBN203c/100/100
125 A	EBN202c/125/30	EBN203c/125/30	EBN202c/125/100	EBN203c/125/100
150 A	EBN202c/150/30	EBN203c/150/30	EBN202c/150/100	EBN203c/150/100
175 A	EBN202c/175/30	EBN203c/175/30	EBN202c/175/100	EBN203c/175/100
200 A	EBN202c/200/30	EBN203c/200/30	EBN202c/200/100	EBN203c/200/100
225 A	EBN202c/225/30	EBN203c/225/30	EBN202c/225/100	EBN203c/225/100
250 A	EBN202c/250/30	EBN203c/250/30	EBN202c/250/100	EBN203c/250/100

EBS type (37kA/460V)				
Rated current, I _n	Rated residual current, I _{Δn} : 30mA		Rated residual current, I _{Δn} : 100/200/500mA	
	3-pole	4-pole	3-pole	4-pole
100 A	EBS203c/100/30	EBS204c/100/30	EBS203c/100/100	EBS204c/100/100
125 A	EBS203c/125/30	EBS204c/125/30	EBS203c/125/100	EBS204c/125/100
150 A	EBS203c/150/30	EBS204c/150/30	EBS203c/150/100	EBS204c/150/100
175 A	EBS203c/175/30	EBS204c/175/30	EBS203c/175/100	EBS204c/175/100
200 A	EBS203c/200/30	EBS204c/200/30	EBS203c/200/100	EBS204c/200/100
225 A	EBS203c/225/30	EBS204c/225/30	EBS203c/225/100	EBS204c/225/100
250 A	EBS203c/250/30	EBS204c/250/30	EBS203c/250/100	EBS204c/250/100

EBH type (50kA/460V)				
Rated current, I _n	Rated residual current, I _{Δn} : 30mA		Rated residual current, I _{Δn} : 100/200/500mA	
	3-pole	4-pole	3-pole	4-pole
100 A	EBH203c/100/30	EBH204c/100/30	EBH203c/100/100	EBH204c/100/100
125 A	EBH203c/125/30	EBH204c/125/30	EBH203c/125/100	EBH204c/125/100
150 A	EBH203c/150/30	EBH204c/150/30	EBH203c/150/100	EBH204c/150/100
175 A	EBH203c/175/30	EBH204c/175/30	EBH203c/175/100	EBH204c/175/100
200 A	EBH203c/200/30	EBH204c/200/30	EBH203c/200/100	EBH204c/200/100
225 A	EBH203c/225/30	EBH204c/225/30	EBH203c/225/100	EBH204c/225/100
250 A	EBH203c/250/30	EBH204c/250/30	EBH203c/250/100	EBH204c/250/100

Accessories



Electrical auxiliaries

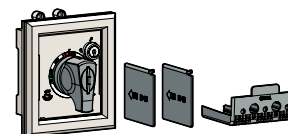
AX	Auxiliary switch
AL	Alarm switch
AX+AL	Combination switch



Maximum possibilities

T-position	Not available
R-position	Option of AX or AL or AX+AL

Note) For more detail see 74 page



External accessories

EBN250c EBS250c EBH250c	Name
IB23	Insulation barrier
TCL33	Terminal cover (Long) - Inde type, D-handle type, N-handle type
TCS33	Terminal cover (Short) - Inde type, D-handle type, N-handle type
DH250	Rotary handle (Direct)
DHK250	Rotary handle (Direct, Key lock)
EH250	Rotary handle (Extended)
RTB3	Rear terminal (Bar)
RTR3	Rear terminal (Round)
Handle lock	

Note) For more detail see 82 page

- Inde type: This cover is used without auxiliary handle.
- D-handle type: This cover is used with D-handle.
- N-handle type: This cover is used with N-handle.

400AF ELCB

EBN400c, EBS400c, EBH400c, EBL400c

Metasol



EBS403c



EBL404c

Ratings

Frame size			400AF								
Type and pole			N-type		S-type		H-type		L-type		
3-pole (3-sensor)			EBN403c		EBS403c		EBH403c		EBL403c		
4-pole (3-sensor)			EBN404c		EBS404c		EBH404c		EBL404c		
Rated current, I _n			250-300-350-400A								
Rated residual current, I _{Δn}			30, 100/200/500mA (Adjustable)								
Residual current off-time at I _{Δn}			≤0.1 sec								
Rated operational voltage, U _e			220/460V								
Rated impulse withstand voltage, U _{imp}			6kV								
Wiring system	2-pole (2-sensor)		1Ø2W, 1Ø3W, 3Ø3W								
	3-pole (3-sensor)		1Ø2W, 1Ø3W, 3Ø3W, 3Ø4W								
	4-pole (3-sensor)		1Ø2W, 1Ø3W, 3Ø3W, 3Ø4W								
Rated short-circuit breaking			N-type		S-type		H-type		L-type		
capacity, I _{cu}	AC	415V/460V	37kA		50kA		65kA		85kA		
		220/250V	50kA		75kA		85kA		125kA		
I _{cs} =%×I _{cu}			100%		100%		100%		75%		
Protective function			Overload, Short-circuit and ground fault								
Type of trip unit			Thermal-Magnetic								
Magnetic trip range			8~12I _n								
Endurance	Mechanical		4,000 operations								
	Electrical		1,000 operations								
Connection	Standard		Front connection								
Mounting	Standard		Screw fixing								
Dimensions (mm)	Pole		3p	4p	3p	4p	3p	4p	3p	4p	
	a		140	184	140	184	140	184	140	184	
	b		257		257		257		257		
	c1 <small>Note)</small>		109		109		109		109		
	c2 <small>Note)</small>		113		113		113		113		
	d		145		145		145		145		
Weight, kg	Standard		7	8.4	7	8.4	7		7		
Certification			Pole	3p	4p	3p	4p	3p	4p	3p	4p
CE marking			-		-		-		-		

Note) 1. Depth by door cut size : c1 for large cut, c2 for small cut
2. Do not test withstand voltage or insulation resistance test between poles to avoid the damage of the PCB.
3. 4-pole product's ampacity on neutral conductor is equal to or less than 50% of the rated current.
4. Rated non-trip current sensitivity is equal to or less than 50% of the rated current sensitivity.

For more information

- Drawings ▶ 119 page
- Trip curves ▶ 104 page
- Accessories ▶ 75 page
- Connection and mounting ▶ 128 page

Ordering types

Breaker types

EBN type (25kA/460V)

Rated current, In	Rated residual current, I Δ n: 30mA		Rated residual current, I Δ n: 100/200/500mA	
	3-pole	4-pole	3-pole	4-pole
250 A	EBN403c/250/30	EBN404c/250/30	EBN403c/250/100	EBN404c/250/100
300 A	EBN403c/300/30	EBN404c/300/30	EBN403c/300/100	EBN404c/300/100
350 A	EBN403c/350/30	EBN404c/350/30	EBN403c/350/100	EBN404c/350/100
400 A	EBN403c/400/30	EBN404c/400/30	EBN403c/400/100	EBN404c/400/100

EBS type (50kA/460V)

Rated current, In	Rated residual current, I Δ n: 30mA		Rated residual current, I Δ n: 100/200/500mA	
	3-pole	4-pole	3-pole	4-pole
250 A	EBS403c/250/30	EBS404c/250/30	EBS403c/250/100	EBS404c/250/100
300 A	EBS403c/300/30	EBS404c/300/30	EBS403c/300/100	EBS404c/300/100
350 A	EBS403c/350/30	EBS404c/350/30	EBS403c/350/100	EBS404c/350/100
400 A	EBS403c/400/30	EBS404c/400/30	EBS403c/400/100	EBS404c/400/100

EBH type (65kA/460V)

Rated current, In	Rated residual current, I Δ n: 30mA		Rated residual current, I Δ n: 100/200/500mA	
	3-pole	4-pole	3-pole	4-pole
250 A	EBH403c/250/30	EBH404c/250/30	EBH403c/250/100	EBH404c/250/100
300 A	EBH403c/300/30	EBH404c/300/30	EBH403c/300/100	EBH404c/300/100
350 A	EBH403c/350/30	EBH404c/350/30	EBH403c/350/100	EBH404c/350/100
400 A	EBH403c/400/30	EBH404c/400/30	EBH403c/400/100	EBH404c/400/100

EBL type (85kA/460V)

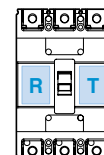
Rated current, In	Rated residual current, I Δ n: 30mA		Rated residual current, I Δ n: 100/200/500mA	
	3-pole	4-pole	3-pole	4-pole
250 A	EBL403c/250/30	EBL404c/250/30	EBL403c/250/100	EBL404c/250/100
300 A	EBL403c/300/30	EBL404c/300/30	EBL403c/300/100	EBL404c/300/100
350 A	EBL403c/350/30	EBL404c/350/30	EBL403c/350/100	EBL404c/350/100
400 A	EBL403c/400/30	EBL404c/400/30	EBL403c/400/100	EBL404c/400/100

Accessories



Electrical auxiliaries

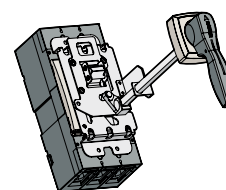
AX	Auxiliary switch
AL	Alarm switch
SHT	Shunt trip
UVT	Undervoltage trip



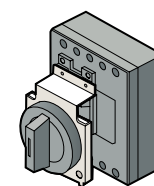
Maximum possibilities

T-position	Not available
R-position	Option of 2AX, 2AL and SHT or UVT

Note) For more detail see 75 page



E-70U



N-70

External accessories

IBL400	Insulation barrier
T1-43A	Terminal cover (Long) - 2, 3pole
T1-44A	Terminal cover (Long) - 4pole
N-70	Rotary handle (Direct)
E-70U	Rotary handle (Extended)
MI-43	Mechanical interlock - 2, 3pole
MI-44	Mechanical interlock - 4pole

Note) For more detail see 82 page

800AF ELCB

EBN803c, EBS803c, EBL803c



EBS803c

Ratings

Frame size		100AF		
Type and pole		N-type	S-type	L-type
	3-pole (3-sensor)	EBN803c	EBS803c	EBL803c
	4-pole (3-sensor)	-	-	-
Rated current, I _n		500-630-700-800A		
Rated residual current, I _{Δn}		30, 100/200/500mA (Adjustable)		
Residual current off-time at I _{Δn}		≤ 0.1 sec		
Rated operational voltage, U _e		220/460V		
Rated impulse withstand voltage, U _{imp}		6 kV		
Wiring system	3-pole (3-sensor)	1Ø2W, 1Ø3W, 3Ø3W		
	4-pole (3-sensor)	-		
Rated short-circuit breaking capacity, I _{cu}		N-type	S-type	L-type
AC	415/460V	37kA	65kA	85kA
	220/250V	50kA	85kA	125kA
I _{cs} =%×I _{cu}		100%	100%	75%
Protective function		Overload, Short-circuit and ground fault		
Type of trip unit		Thermal-Magnetic		
Magnetic trip range		8~12I _n		
Endurance	Mechanical	2,500 operations		
	Electrical	500 operations		
Connection	Standard	Front connection		
Mounting	Standard	Screw fixing		
Dimensions (mm)		Pole		
	a	210		
	b	280		
	c1 <small>Note)</small>	109		
	c2 <small>Note)</small>	113		
	d	145		
	Weight, kg	Standard 11.5		
Certification		Pole		
CE marking		3p		
		-		

Note) 1. Depth by door cut size : c1 for large cut, c2 for small cut

2. Do not test withstand voltage or insulation resistance test between poles to avoid the damage of the PCB.

3. Rated non-trip current sensitivity is equal to or less than 50% of the rated current sensitivity.

For more information

- Drawings ▶ 120 page
- Trip curves ▶ 104 page
- Accessories ▶ 75 page
- Connection and mounting ▶ 127 page

Ordering types

Breaker types

EBN type (37kA/460V)		
Rated current, I _n	Rated residual current, I _{Δn} : 30mA	Rated residual current, I _{Δn} : 100/200/500mA
	3-pole	3-pole
500 A	EBN803c/500/30	EBN803c/500/100
630 A	EBN803c/630/30	EBN803c/630/100
700 A	EBN803c/700/30	EBN803c/700/100
800 A	EBN803c/800/30	EBN803c/800/100

EBS type (65kA/460V)		
Rated current, I _n	Rated residual current, I _{Δn} : 30mA	Rated residual current, I _{Δn} : 100/200/500mA
	3-pole	3-pole
500 A	EBS803c/500/30	EBS803c/500/100
630 A	EBS803c/630/30	EBS803c/630/100
700 A	EBS803c/700/30	EBS803c/700/100
800 A	EBS803c/800/30	EBS803c/800/100

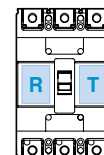
EBL type (85kA/460V)		
Rated current, I _n	Rated residual current, I _{Δn} : 30mA	Rated residual current, I _{Δn} : 100/200/500mA
	3-pole	3-pole
500 A	EBL803c/500/30	EBL803c/500/100
630 A	EBL803c/630/30	EBL803c/630/100
700 A	EBL803c/700/30	EBL803c/700/100
800 A	EBL803c/800/30	EBL803c/800/100

Accessories



Electrical auxiliaries

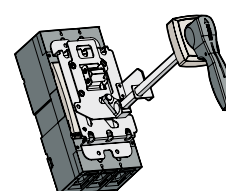
AX	Auxiliary switch
AL	Alarm switch
AX+AL	Combination switch



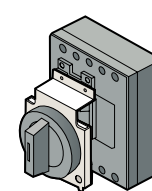
Maximum possibilities

T-position	Not available
R-position	Option of AX or AL or AX+AL

Note) For more detail see 75 page



E-80U



N-80

External accessories

IBL800	Insulation barrier
T1-63A	Terminal cover (Long) - 2, 3pole
T1-64A	Terminal cover (Long) - 4pole
N-80	Rotary handle (Direct)
E-80U	Rotary handle (Extended)
MI-83S	Mechanical interlock - 2, 3pole
MI-84S	Mechanical interlock - 4pole

Note) For more detail see 82 page

1000/1200AF ELCB

EBS1003b, EBS1203b

Metasol



① Adjustable instantaneous for each phase

For more information

- Drawings ▶ 121 page
- Trip curves ▶ 105 page

Ratings

Frame size		1000AF	1200AF
Type and pole		S-type	S-type
	3-pole (3-sensor)	EBS1003b	EBS1203b
	4-pole (3-sensor)	-	-
Rated current, I_n		1000A	1200A
Rated residual current, $I_{\Delta n}$		100/200/500mA (Adjustable)	
Residual current off-time at $I_{\Delta n}$		≤ 0.1 sec	
Rated operational voltage, U_e		AC: 460V	
3-pole (3-sensor)		1Ø2W, 1Ø3W, 3Ø3W	
Rated short-circuit breaking capacity, I_{cu}		S-Type	S-Type
AC		415/460V	85kA
		220/250V	125kA
Protective function		Overload, Short-circuit and ground fault	
Type of trip unit		Thermal-Magnetic	
Magnetic trip range		$3-6 \times I_n \dots ①$	
Endurance	Mechanical	2,500operations	
	Electrical	500operations	
Connection		Front connection	
Mounting		Screw fixing	
Dimensions (mm)		Pole	3p
		a	220
		b	565
		c	105
		d	159
		Weight, kg	27.1
		Standard	

Note) Rated non-trip current sensitivity is equal to or less than 50% of the rated current sensitivity.

Ordering types

Breaker types

EBS type (85kA/460V)	
Rated current, In	3-pole
1000 A	EBS1003b/1,000/100
1200 A	EBS1203b/1200/100

Contact operation for auxiliary and alarm switches

MCCB	On	Off	Trip
AX			
AL			

Option of below items for T-position

AX1	Auxiliary switch (1c)
AL1	Alarm switch (1c)
AX1+AL1	Auxiliary (1c) + Alarm (1c) switch

Note) R-position is not available.



Contact rating for auxiliary and alarm switches

AC			DC		
Voltage (V)	Current (A)		Voltage (V)	Current (A)	
	Resistive load	Inductive load		Resistive load	Inductive load
125	20	20	30	6	5
250	20	20	125	0.4	0.05
500	10	5	250	0.2	0.03