

Earth Leakage Circuit Breakers

Metasol 30AF to 250AF Series

ELCB

Frame Size (AF)		30	50		
Type		S-Type	N-Type	S-Type	H-Type
Type and pole	2-pole	EBS32c	EBN52c	-	-
	3-pole	EBS33c	EBN53c	EBS53c	EBH53c
	4-pole	EBS34c	-	EBS54c	EBH54c
Protective function		Overload, Short-circuit and ground fault	Overload, Short-circuit and ground fault		Overload, Short-circuit and ground fault
Rated current, In	(A)	(5, 10) ^{Note 2)} , 15, 20, 30	15, 20, 30, 40, 50		15, 20, 30, 40, 50
Rated impulse withstand voltage, Uimp	(kV)	6	6		6
Instantaneous type	Rated residual current, IΔn	(mA)	30, 100, 100/200/500 100/300/500	30, 100, 100/200/500, 100/300/500	30, 100, 100/200/500 100/300/500
Time delay type	Residual current off-time at IΔn	sec	≤ 0.1	≤ 0.1	≤ 0.1
	Rated operational voltage, Ue	AC (V)	220/460	220/460	220/460
	Rated residual current	1A	0.1/0.2/0.5/1	0.1/0.2/0.5/1	0.1/0.2/0.5/1
	Intentional time delay	1s	0/0.2/0.5/1	0/0.2/0.5/1	0/0.2/0.5/1
	Rated residual current	2A	0.1/0.4/1/2	0.1/0.4/1/2	0.1/0.4/1/2
	Intentional time delay	2s	0.5/1/1.5/2	0.5/1/1.5/2	0.5/1/1.5/2
Rated short-circuit breaking capacity (Icu) kA (Sym), KSC8321, IEC 60947-2					
AC	460V	14 (10)	14	18	50
	415V	14 (10)	14	18	50
	220/250V	30 (25)	30	35	100
Service breaking capacity(%Icu), Ics		100	100	100	100
Category of use		A	A	A	A
Endurance (Number of operations)	Mechanical Electrical	20,000 5,000	20,000 5,000	20,000 5,000	20,000 5,000
Type of trip unit					
Overcurrent pick-up		Thermal-magnetic	Thermal-magnetic		
Earth leakage pick-up		Electronic	Electronic		
Accessories					
Electrical auxiliaries	Auxiliary switch	●	●	●	●
	Alarm switch	●	●	●	●
External accessories	Insulation barrier	●	●	●	●
	Terminal cover (Long)	●	●	●	●
	Terminal cover (Short)	●	●	●	●
	Rotary handle (Direct)	●	●	●	●
	Rotary handle (Direct, Key lock)	●	●	●	●
	Rotary handle (Extended)	●	●	●	●
	Rear terminal (Bar)				●
	Rear terminal (Round)	●	●	●	●
	Pad handle lock	●	●	●	●
Dimensions (mm)	WxHxD (3P)	75×130×60	75×130×60		90×155×60
Weight(kg)	2 pole	-	0.5	-	-
	3 pole	0.7	0.7	0.7	1
	4 pole	0.9	-	0.9	1.2

Note) 1. ● applicable or available

2. The short-circuit breaking capacities in () are applied to the rated current in (5, 10A)



60		100	125		250		
N-Type	S-Type	N-Type	S-Type	H-Type	N-Type	S-Type	H-Type
-	-	EBN102c	-	-	EBN202c	-	-
EBN63c	EBS63c	EBN103c	EBS103c	EBH103c	EBN203c	EBS203c	EBH203c
-	EBS64c	EBN104c	EBS104c	EBH104c	-	EBS204c	EBH204c
Overload, Short-circuit and ground fault		Overload, Short-circuit and ground fault	Overload, Short-circuit and ground fault		Overload, Short-circuit and ground fault		
60		60, 75, 100	15, 20, 30, 40, 50, 60, 75, 100, 125		100, 125, 150, 175, 200, 225, 250		
6		6	6		6		
30, 100, 100/200/500, 100/300/500		30, 100, 100/200/500, 100/300/500	30, 100, 100/200/500, 100/300/500		30, 100, 100/200/500, 100/300/500		
≤ 0.1		≤ 0.1	≤ 0.1		≤ 0.1		
220/460		220/460	220/460		220/460		
0.1/0.2/0.5/1		0.1/0.2/0.5/1	0.1/0.2/0.5/1		0.1/0.2/0.5/1		
0/0.2/0.5/1		0/0.2/0.5/1	0/0.2/0.5/1		0/0.2/0.5/1		
0.1/0.4/1/2		0.1/0.4/1/2	0.1/0.4/1/2		0.1/0.4/1/2		
0.5/1/1.5/2		0.5/1/1.5/2	0.5/1/1.5/2		0.5/1/1.5/2		
14	18	18	37	50	26	37	50
14	18	18	37	50	26	37	50
30	35	35	85	100	65	85	100
100	100	100	100	100	100	100	100
A	A	A	A	A	A	A	A
20,000	20,000	20,000	20,000	20,000	20,000	20,000	20,000
5,000	5,000	5,000	5,000	5,000	5,000	5,000	5,000
Thermal-magnetic		Thermal-magnetic	Thermal-magnetic		Thermal-magnetic		
Electronic		Electronic	Electronic		Electronic		
●	●	●	●	●	●	●	●
●	●	●	●	●	●	●	●
●	●	●	●	●	●	●	●
●	●	●	●	●	●	●	●
●	●	●	●	●	●	●	●
●	●	●	●	●	●	●	●
●	●	●	●	●	●	●	●
●	●	●	●	●	●	●	●
●	●	●	●	●	●	●	●
●	●	●	●	●	●	●	●
●	●	●	●	●	●	●	●
75×130×60		75×130×60	90×155×60		105×165×60		
-	-	0.5	-	-	1.1	-	-
0.7	0.7	0.7	1	1	1.2	1.2	1.2
-	0.9	0.9	1.2	1.2	-	1.5	1.5

Earth Leakage Circuit Breakers

Metasol 400AF to 1200AF Series

ELCB

Frame Size (AF)		400				
Type		N-Type	S-Type	H-Type	L-Type	
Type and pole	3-pole	EBN403c	EBS403c	EBH403c	EBL403c	
	4-pole	EBN404c	EBS404c	EBH404c	EBL404c	
Protective function	Overload, Short-circuit and ground fault					
Rated current, In	(A)	250, 300, 350, 400				
Rated impulse withstand voltage, Uimp	(kV)	6				
Rated operational voltage, Ue	AC (V)	220/460				
Instantaneous type	Rated residual current, IΔn	(mA)	30, 100/200/500			
	Residual current off-time at IΔn	sec	≤ 0.1	≤ 0.1	≤ 0.1	
Time delay type	Rated residual current	A	0.1/0.4/1/2	0.1/0.4/1/2	0.1/0.4/1/2	
	Intentional time delay	s	0.5/1/1.5/2	0.5/1/1.5/2	0.5/1/1.5/2	
Rated short-circuit breaking capacity (Icu) kA (Sym), KSC8321, IEC 60947-2						
AC		415/460V	37	50	65	
		220/250V	50	75	85	
Service breaking capacity(%Icu), Ics		100	100	100	100	
Category of use		A	A	A	A	
Endurance	Mechanical		4,000	4,000	4,000	
(Number of operations)	Electrical		1,000	1,000	1,000	
Type of trip unit						
Overcurrent pick-up	Thermal-magnetic					
Earth leakage pick-up	Electronic					
Accessories						
Electrical auxiliaries	Auxiliary switch	●	●	●	●	
	Alarm switch	●	●	●	●	
	Shunt trip	●	●	●	●	
	Undervoltage trip	●	●	●	●	
External accessories	Insulation barrier	●	●	●	●	
	Terminal cover (Long) - 2, 3 pole	●	●	●	●	
	Terminal cover (Long) - 4 pole	●	●	●	●	
	Rotary handle (Direct)	●	●	●	●	
	Rotary handle (Extended)	●	●	●	●	
	Mechanical interlock - 2, 3 pole	●	●	●	●	
	Mechanical interlock - 4 pole	●	●	●	●	
	Rear terminal - 2 pole	●	●	●	●	
	Rear terminal - 3 pole	●	●	●	●	
	Rear terminal - 4 pole	●	●	●	●	
Dimensions (mm)	WxHxD (3P)		140×257×109			
Weight(kg)	3 pole	7	7	7	7	
	4 pole	8.4	8.4	7	7	

Note) 1. ● applicable or available



800			1000	1200
N-Type	S-Type	L-Type	S-Type	S-Type
EBN803c	EBS803c	EBL803c	EBS1003b	EBS1203b
-	-	-	-	-
Overload, Short-circuit and ground fault			Overload, Short-circuit and Ground fault	
500, 630, 700, 800			1000	1200
6			-	-
220/460			220/460	220/460
30, 100/200/500			100/200/500	100/200/500
≤ 0.1	≤ 0.1	≤ 0.1	≤ 0.1	≤ 0.1
0.1/0.4/1/2	0.1/0.4/1/2	0.1/0.4/1/2	-	-
0.5/1/1.5/2	0.5/1/1.5/2	0.5/1/1.5/2	-	-
37	65	85	85	85
50	85	125	125	125
100	100	75	-	-
A	A	A	-	-
2,500	2,500	2,500	2,500	2,500
500	500	500	500	500
Thermal-magnetic			Thermal-magnetic	
Electronic			Electronic	
●	●	●	●	●
●	●	●	●	●
●	●	●	-	-
●	●	●	-	-
●	●	●	-	-
●	●	●	-	-
●	●	●	-	-
●	●	●	-	-
●	●	●	-	-
●	●	●	-	-
●	●	●	-	-
●	●	●	-	-
●	●	●	-	-
210×280×109			220×565×105	
11.5	11.5	11.5	27.1	27.1
-	-	-	-	-