

Quick selection table

ELCBs

30AF to 800AF

Frame size(AF)		30		50			60		
Frame type		EBS	EBH	EBE	EBS	EBH	EBE	EBS	
Breaking capacity(kA), I _{cu} at 415VAC		5	10	5	10	25	5	10	
Number of poles		3	3	2, 3	3	3	3	3	
Type	2 pole	-	-	EBE52b	-	-	-	-	
	3 pole	EBS33b	EBH33b	EBE53b	EBS53b	EBH53b	EBE63b	EBS63b	
Rated current (A) (Non-adjustable)		5, 10, 15, 20, 30		5, 10, 15, 20, 30, 40, 50		40, 50	60		
Residual current(A), I _{Δn}		0.03 (Fixed) 0.1-0.2-0.5 (Adjustable)		0.03 (Fixed) 0.1-0.2-0.5 (Adjustable)			0.03 (Fixed) 0.1-0.2-0.5 (Adjustable)		
Residual non-operating current		0.5 x I _{Δn}		0.5 x I _{Δn}			0.5 x I _{Δn}		
Residual current off-time at I _{Δn}		≤ 0.1 sec		≤ 0.1 sec			≤ 0.1 sec		
Rated operational voltage(V), U _e (50/60Hz)		176-510		176-510			176-510		
Technical data conforming to IEC/EN60947-2									
Rated impulse withstand voltage(kV), U _{imp}		6	6	6	6	6	6	6	
Ultimate breaking capacity(kA), I _{cu}	AC 50/60Hz	220/240V	10	25	10	25	50	10	25
		415/460V	5	10	5	10	25	5	10
Service breaking capacity(%I _{cu}), I _{cs}		50	50	50	50	50	50	50	
Endurance (number of operations)	Mechanical	8500	8500	8500	8500	8500	8500	8500	
	Electrical	1500	1500	1500	1500	1500	1500	1500	
Type of trip unit									
Overcurrent pick-up		Hydraulic-magnetic		Hydraulic-magnetic		Thermal-magnetic	Hydraulic-magnetic		
Earth leakage pick-up		Electronic		Electronic		Electronic	Electronic		
Accessories									
Electrical auxiliaries	Auxiliary switch	●	●	●	●	●	●	●	
	Alarm switch	●	●	●	●	●	●	●	
	Shunt trip	-	-	-	-	-	-	-	
	Undervoltage trip	-	-	-	-	-	-	-	
External accessories	Direct rotary handle	●	●	●	●	●	●	●	
	Terminal shield	●	●	●	●	●	●	●	
	Insulation barrier	●	●	●	●	●	●	●	
	Motor operator	-	-	-	-	-	-	-	
Dimensions (WxHxD mm)	3 pole breaker	75 × 130 × 60		75 × 130 × 60		90 × 155 × 60	75 × 130 × 60		
Weight(kg)	2 pole								
	3 pole	0.7	0.7	0.7	0.7	1	0.7	0.7	
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* Note) ● applicable or available



100			225			400				800		
EBE	EBS	EBH	EBE	EBS	EBH	EBE	EBS	EBH	EBL	EBE	EBS	EBL
10	25	35	18	25	35	25	35	50	85	35	50	85
2, 3	3	3	3	3	3	3	3	3	3	3	3	3
EBE102b	-	-	-	-	-	-	-	-	-	-	-	-
EBE103b	EBS103b	EBH103b	EBE203b	EBS203b	EBH203b	EBE403b	EBS403b	EBH403b	EBL403b	EBE803b	EBS803b	EBL803b
60, 75, 100	40, 50, 60, 75, 100	60, 75, 100	100, 125, 150, 175, 200, 225			250, 300, 350, 400				500, 600, 700, 800		
0.03 (Fixed) 0.1-0.2-0.5 (Adjustable)			0.03 (Fixed) 0.1-0.2-0.5 (Adjustable)			0.03 (Fixed) 0.1-0.2-0.5 (Adjustable)				0.03 (Fixed) 0.1-0.2-0.5 (Adjustable)		
0.5 x I _{Δn}			0.5 x I _{Δn}			0.5 x I _{Δn}				0.5 x I _{Δn}		
≤ 0.1 sec			≤ 0.1 sec			≤ 0.1 sec				≤ 0.1 sec		
176-510 (EBE102b : 88-242)			176-510			176-510				176-510		
6	6	6	6	6	6	6	6	6	6	6	6	6
25	50	65	35	50	65	35	50	85	125	50	100	125
10	25	35	18	25	35	25	35	50	85	35	50	85
50	50	50	50	50	50	50	50	50	50	50	50	50
8500	8500	8500	7000	7000	7000	4000	4000	4000	4000	4000	4000	4000
1500	1500	1500	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000
Hydraulic-magnetic	Thermal-magnetic	Thermal-magnetic			Thermal-magnetic				Thermal-magnetic			
Electronic	Electronic	Electronic			Electronic				Electronic			
•	•	•	•	•	•	•	•	•	•	•	•	•
•	•	•	•	•	•	•	•	•	•	•	•	•
-	-	-	-	-	-	•	•	•	•	•	•	•
-	-	-	-	-	-	•	•	•	•	•	•	•
•	•	•	•	•	•	•	•	•	•	•	•	•
•	•	•	•	•	•	•	•	•	•	•	•	•
•	•	•	•	•	•	•	•	•	•	•	•	•
-	-	-	-	-	-	-	-	-	-	-	-	-
75 × 130 × 60	90 × 155 × 60		105 × 165 × 60			140 × 257 × 110				210 × 280 × 110		
0.7	1	1.2	1.4	1.4	1.4	7	7	7	7	11.5	11.5	11.5
	85		86			87				88		

Quick selection table

ELCBs

50AF to 400AF, 4-Pole

Frame size(AF)		50	
Frame type		EBS	EBH
Breaking capacity(kA), I _{cu} at 415VAC		25	35
Number of poles		4	4
Type	4 pole	EBS54b	EBH54b
Rated current (A) (Non-adjustable)		15, 20, 30, 40, 50	
Residual current(A), I _{Δn}		0.03 (Fixed) 0.1-0.2-0.5 (Adjustable)	
Residual non-operating current		0.5 x I _{Δn}	
Residual current off-time at I _{Δn}		≤ 0.1 sec	
Rated operational voltage(V), U _e (50/60Hz)		176-510	
Technical data conforming to IEC/EN60947-2			
Rated impulse withstand voltage(kV), U _{imp}		6	
Ultimate breaking capacity(kA), I _{cu}			
	AC 50/60Hz	220/240V	415/460V
		50	65
		25	35
Service breaking capacity(%I _{cu}), I _{cs}		50	
Endurance (number of operations)	Mechanical	4000	
	Electrical	6000	
Type of trip unit			
Overcurrent pick-up		Thermal-magnetic	
Earth leakage pick-up		Electronic	
Accessories			
Electrical auxiliaries	Auxiliary switch	●	●
	Alarm switch	●	●
External accessories	Direct rotary handle	●	●
	Terminal shield	●	●
	Insulation barrier	●	●
	Motor operator	-	-
Dimensions (WxHxD mm)	4 pole breaker	120X175X60	
Weight(kg)	4 pole	1.4	
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* Note) ● applicable or available



100		225		400	
EBS	EBH	EBS	EBH	EBE	EBS
25	35	25	35	25	35
4	4	4	4	4	4
EBS104b	EBH104b	EBS204b	EBH204b	EBE404b	EBS404b
15, 20, 30, 40, 50, 60, 75, 100		100, 125, 150, 175, 200, 225		250, 300, 350, 400	
0.03 (Fixed) 0.1-0.2-0.5 (Adjustable)		0.03 (Fixed) 0.1-0.2-0.5 (Adjustable)		0.03 (Fixed) 0.1-0.2-0.5 (Adjustable)	
0.5 x I _{Δn} ≤ 0.1 sec		0.5 x I _{Δn} ≤ 0.1 sec		0.5 x I _{Δn} ≤ 0.1 sec	
176-510		176-510		176-510	
6		6		6	
50	65	50	65	35	50
25	35	25	35	25	35
50		50		50	
4000		4000		4000	
6000		4000		1000	
Thermal-magnetic		Thermal-magnetic		Thermal-magnetic	
Electronic		Electronic		Electronic	
●	●	●	●	●	●
●	●	●	●	●	●
●	●	●	●	●	●
●	●	●	●	●	●
●	●	●	●	●	●
-	-	-	-	-	-
120X175X60		140X185X60		185X257X109	
1.4		1.9		8.4	
92		93		94	