

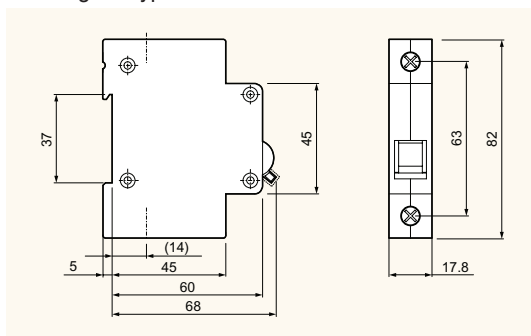


Miniature circuit breakers

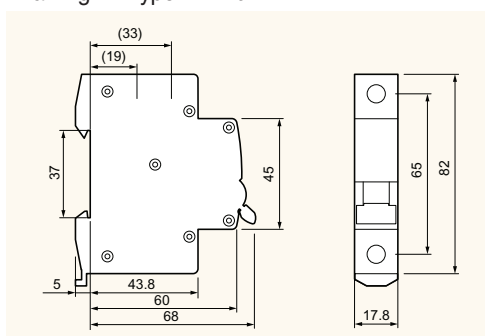
1, 2, 3 and 4 pole series up to 125AF

Type	MCB			
	BKN	BKN-c	BKN-b	
Protection	Overload and short circuit		Overload and short circuit	
Rated current	1, 2, 3, 4, 6, 10, 16, 20, 25, 32, 40, 50, 63A		1, 2, 3, 4, 6, 10, 16, 20, 25, 32, 40, 50, 63A	
Characteristic	B, C, D curve		B, C, D curve	
Poles	1p, 1p+N, 2p, 3p, 3p+N, 4p		1p, 1p+N, 2p, 3p, 3p+N, 4p	
Breaking capacity	1pole	2~4pole	1pole	2~4pole
	1A~63A 6kA at 230/400VAC	1A~63A 6kA at 400VAC	1A~63A 10kA at 240/415VAC	1A~63A 10kA at 415VAC
Standard	IEC 60898/60947-2		IEC 60898/60947-2	
Type of trip	Thermal magnetic release		Thermal magnetic release	
Electrical endurance	6000 operations		8000 operations	
Mount	On 35mm DIN rail		On 35mm DIN rail	
Width	17.8mm per pole		17.8mm per pole	
Terminal	Lug type(cable up to 25mm ²) Dual type(Lug & Screw)		Lug type(cable up to 25mm ²)	
Auxiliary switch, AX Optional	 1 changeover contact 6A at 240VAC, 3A at 415VAC(AX) 6A at 230VAC, 3A at 415VAC(AL) 2A at 48VDC, 1A at 125VDC Lug terminal Cable capacity 2.5mm ² 9mm wide		 1 changeover contact 6A at 240VAC, 3A at 415VAC(AX/AL) 6A at 24VDC, 2A at 48VDC, 1A at 130VDC Lug terminal cable capacity 0.75~2.5mm ² 8.8mm wide	
Dimension	See drawing 1		See drawing 2	
Characteristic curve	See curve 1		See curve 1	

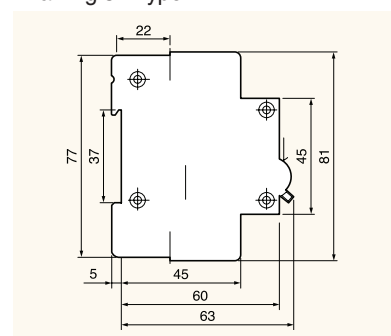
Drawing 1 : Type BKN & BKN-c

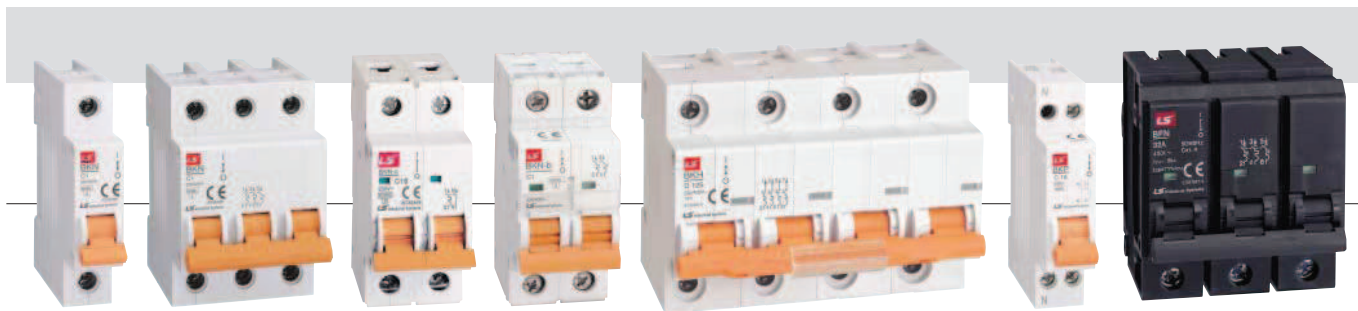


Drawing 2 : Type BKN-b



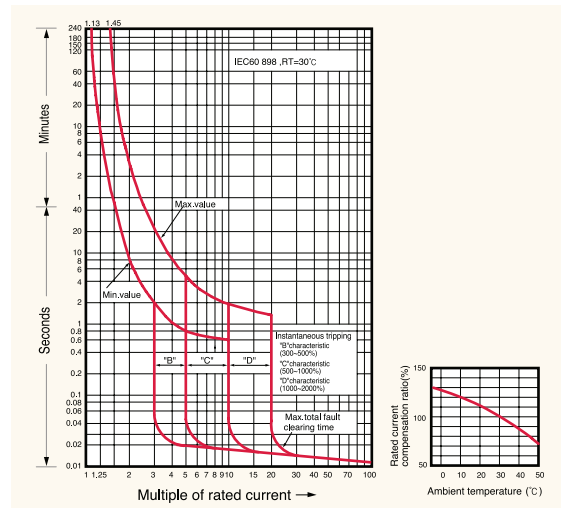
Drawing 3 : Type BKH



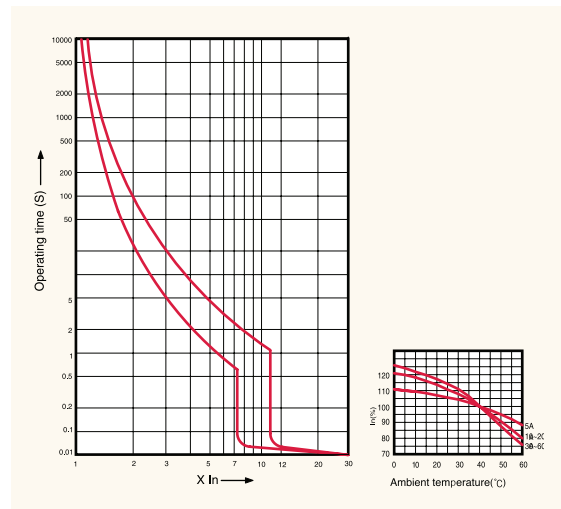


MCB		
BKH	BKP	BFN
Overload and short circuit	Overload and short circuit	Overload and short circuit
63, 80, 100A, 125A	3, 6, 10, 16, 20, 25, 32A	5, 10, 15, 20, 30, 40, 50A
C, D curve	B, C, D curve	1P, 2P, 3P
1p, 2p, 3p, 3p+N, 4p	1p+N	1P, 2P, 3P
1pole	2~4pole	
63A~125A 10kA at 230/400VAC	63A~125A 10kA at 400VAC	3A~32A 4.5kA at 230VAC
		5A~50A 10kA at 220/240VAC
IEC 60947-2	IEC 60898	IEC 60947-2
Thermal magnetic release	Thermal magnetic release	Thermal magnetic release
6000 operations	20000 operations	10000 operations
On 35mm DIN rail	On 35mm DIN rail	Plug-in
27mm per pole	17.8mm per pole	25mm per pole
Lug type(cable up to 50mm ²)	Lug type(cable up to 10mm ²)	Lug type (14-6 AWG.)
See drawing 3	See drawing 4	See drawing 5
See curve 1	See curve 1	See curve 2

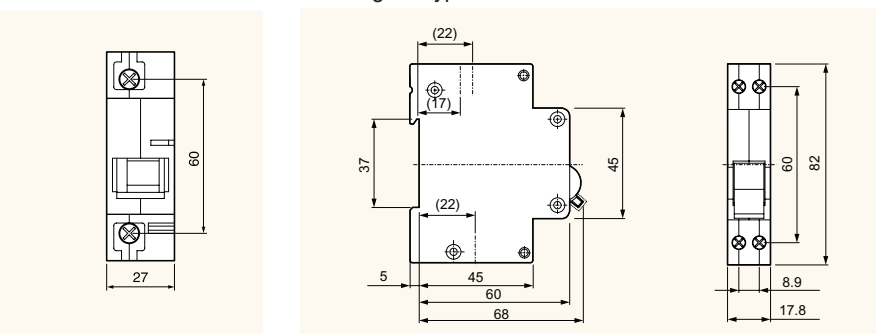
Curve 1 : Type BKN, BKN-b, BKN-c, BKH, BKP, RKP, RKS



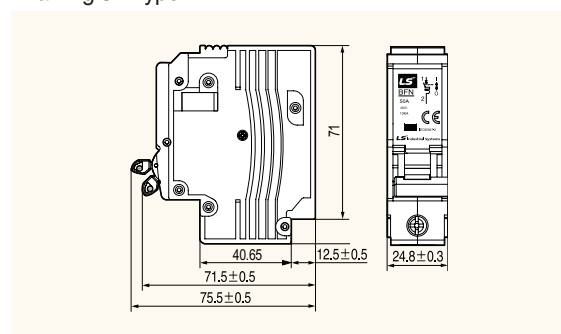
Curve 2 : Type BFN



Drawing 4 : Type BKP



Drawing 5 : Type BFN

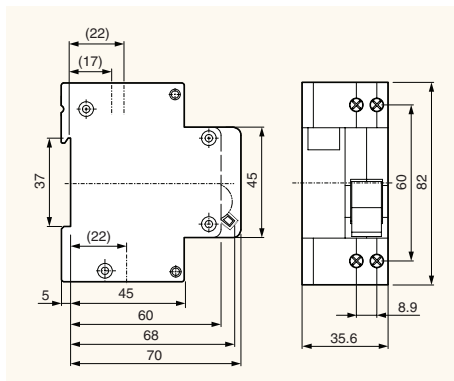


Residual current circuit breakers

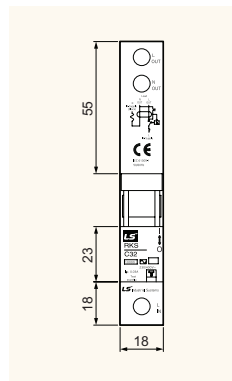
2 and 4 pole series up to 63AF

Type	RCBO							
	RKP	RKS	RKS-b	32KGRc	32KGRd	32GRhc	32GRhd	
Protection	Ground fault and overcurrent		Ground fault and overcurrent		Ground fault and overcurrent		Ground fault and overcurrent	
Rated current, I _n	3(C,D), 6, 10, 16, 20, 25, 32A (B,C,D curve)		6, 10, 16, 20, 25, 32A (B, C curve)		15, 20, 30A		15, 20, 30A	
Rated residual current								
Operating, I _{Δn}	30, 100, 300mA(non-adjustable)		30, 100mA(non-adjustable)		15, 30mA(non-adjustable)		15, 30mA(non-adjustable)	
Non-operating, I _{Δno}	0.5I _{Δn}		0.5I _{Δn}		0.5I _{Δn}		0.5I _{Δn}	
Number of poles	1P+N		1P+N		2 pole		2 pole	
Rated voltage	230VAC		230VAC		110/220VAC		110/220VAC	
Residual current off-time	≤ 0.1 sec.		≤ 0.3 sec.		≤ 0.03 sec.		≤ 0.03 sec.	
Standard	IEC 61009		IEC 61009		KS		KS	
Type of trip								
Ground fault	Electronic		Electronic		Electronic		Electronic	
Overcurrent	Thermal-magnetic		Thermal-magnetic		Bimetallic		Bimetallic	
Breaking capacity	4.5kA		10kA		1.5kA	2.5kA	1.5kA	2.5kA
Conditional short circuit capacity	-		-		-		-	
Electrical endurance	20000 operations		≤ 4000 operations		6000 operations		6000 operations	
Mount	On 35mm DIN rail		On 35mm DIN rail		On 35mm DIN rail / Screw		On 35mm DIN rail / Screw	
Width	35.6mm		18mm		35mm		33mm	
Terminal	Lug type (cable up to 10mm ²)		Lug type (cable up to 10mm ²)		Screw clamp type (cable up to 5.5mm ²)		Screw clamp type (cable up to 5.5mm ²)	
Type of operation	-		-		-		-	
Dimension	See drawing 1		See drawing 2	See drawing 3	See drawing 4		See drawing 5	
Characteristic curve	See page 5(Curve 1)		See page 5(Curve 1)		Curve 3		Curve 4	

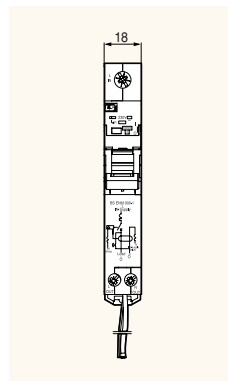
Drawing 1: Type RKP



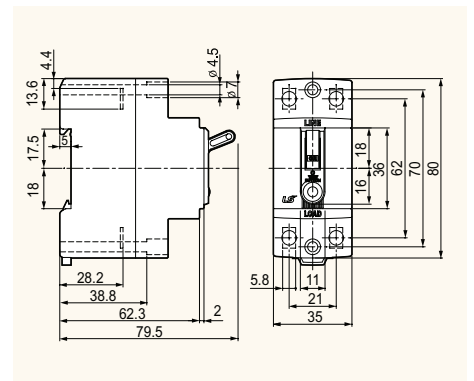
Drawing 2: Type RKS



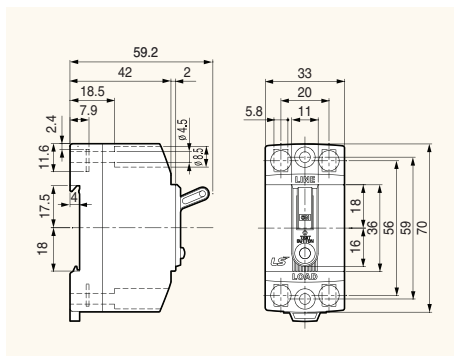
Drawing 3: Type RKS-b



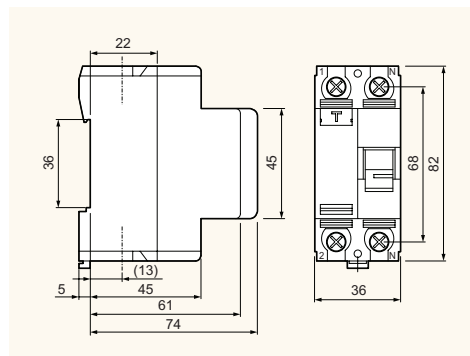
Drawing 4: Type 32KGRc & 32KGRd



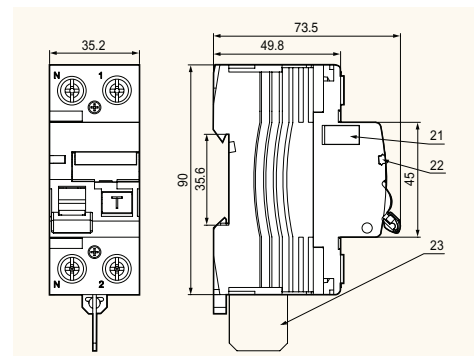
Drawing 5: Type 32GRhc & 32GRhd



Drawing 6: Type RKN



Drawing 7: Type RKN-b

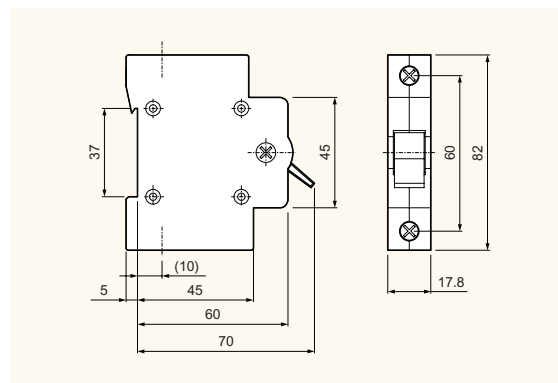




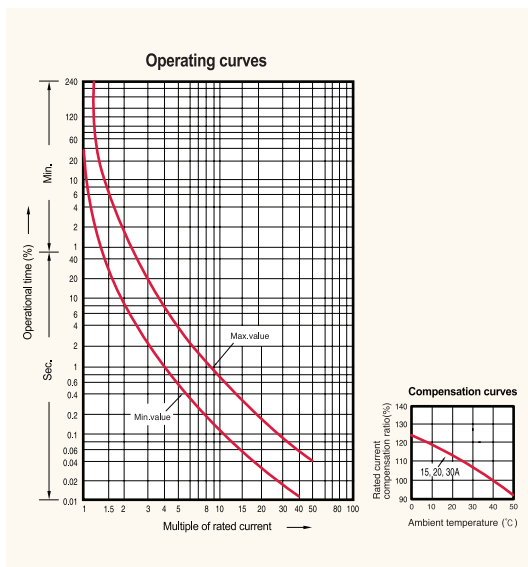
RCCB	
RKN	RKN-b
Ground fault	
25, 32, 40, 63A	25, 32, 40, 63, 80, 100A
30, 100, 300mA(non-adjustable)	
0.5I _{Δn}	
1P+N, 3P+N	
230VAC(1P+N), 230/415VAC(3P+N)	
≤0.1 sec.	
IEC 61008	
Electro-magnetic	
N.A	
-	
6kA	10kA
6000 operations	
On 35mm DIN rail	
18mm	
Lug type (cable up to 35mm ²)	
A/AC	
See drawing 6	See drawing 7
-	

Isolator	
Type	BKD
Rated current, I _n	40, 50, 63, 80, 100, 125A
Number of poles	1p, 2p, 3p, 4p
Rated voltage	240/415VAC
Standard	IEC 60947-3
Electrical endurance	40, 50, 63A 80, 100, 125A
	20000 operations 10000 operations
Mount	On 35mm DIN rail
Width	17.8mm per pole
Terminal	Lug type(cable up to 50mm ²)
Dimension	See drawing 8

Drawing 8: Type BKD



Curve 3 : Type 32KGRc, 32KGRd



Curve 4 : Type 32GRhc, 32GRhd

