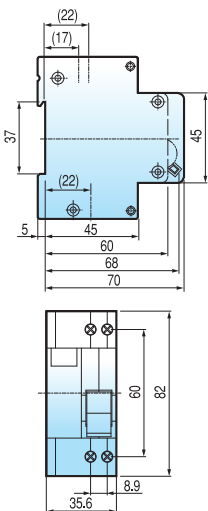
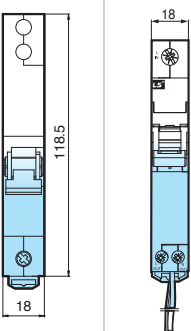
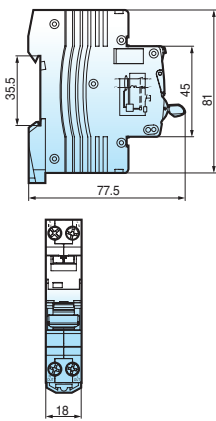
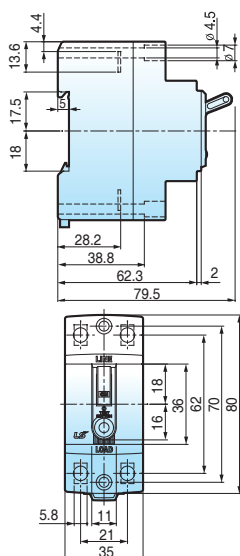


# Residual Current Circuit Breakers

## 2 and 4 pole series up to 63AF



Type	RCBO					
	RKP	RKS	RKS-b	RKC	32KGRc	32KGRd
Protection	Ground fault and overcurrent	Ground fault and overcurrent	Ground fault and overcurrent	Ground fault and overcurrent	Ground fault and overcurrent	Ground fault and overcurrent
Rated current	3 (C, D curve), 6, 10, 16, 20, 25, 32A (B, C, D curve)	6, 10, 16, 20, 25, 32A (40, 50A)* (B, C curve)	6, 10, 16, 20, 25, 32A (B, C curve)	6, 10, 16, 20, 25, 32A (B, C curve)	15, 20, 30A	
Rated residual current	-	-	-	-	-	-
Operating, $I_{\Delta n}$	30, 100, 300mA (Non-adjustable)	30, 100mA (Non-adjustable)		10, 30mA (Non-adjustable)	15, 30mA (Non-adjustable)	
Non-operating, $I_{\Delta no}$	$0.5I_{\Delta n}$	$0.5I_{\Delta n}$		$0.5I_{\Delta n}$	$0.5I_{\Delta n}$	
Poles	1P+N	1P+N		1P+N	2pole	
Rated voltage	230VAC	230VAC	240VAC	240VAC	110/240VAC	
Residual current off-time	$\leq 0.1$ sec.	$\leq 0.3$ sec.		$\leq 0.1$ sec.	$\leq 0.03$ sec.	
Standard	IEC 61009	IEC 61009		IEC 61009	IEC 61009, KS	
Approval	CCC, SEMKO CB, CE, SABS	SEMKO CB, CE, SABS	SEMKO CB, CE	SEMKO CB, CE	CCC	
Type of trip	-	-		-	-	
Ground fault	Electronic	Electronic		Electronic	Electronic	
Overcurrent	Thermal-magnetic	Thermal-magnetic		Thermal-magnetic	Bimetallic	
Breaking capacity	4.5kA	10kA		6kA (32A 4.5kA)	1.5kA	2.5kA
Conditional short circuit capacity	-	-		-	-	
Endurance						
Electrical	4,000 operations	4,000 operations		4,000 operations	4,000 operations	
Mechanical	10,000 operations	10,000 operations		10,000 operations	10,000 operations	
Mount	On 35mm DIN rail	On 35mm DIN rail		On 35mm DIN rail	On 35mm DIN rail / Screw	
Width	35.6mm	18mm		18mm	35mm	
Terminal	Lug type (Cable up to 10mm <sup>2</sup> )	Lug type (Cable up to 10mm <sup>2</sup> )		Lug type (Cable up to 10mm <sup>2</sup> )	Screw clamp type (Cable up to 5.5mm <sup>2</sup> )	
Type of operation	AC	AC		A/AC	-	
Dimension						
Characteristic curve	See page 45	See page 45		-	-	

\* 40, 50A are available only for RKS-b



RCCB				RCCB		Isolator
32GRh				RKN	RKN-b	BKD
Ground fault and overcurrent				Ground fault		-
N type	S type	H type		25, 32, 40, 63A	63AF	100AF
15, 20, 30A			25, 40, 63A		80, 100A	40, 50, 63, 80, 100, 125A
-				-		-
15, 30mA (Non-adjustable)				30, 100, 300mA (Non-adjustable)		-
0.5I <sub>Δn</sub>				0.5I <sub>Δn</sub>		-
2pole				1P+N, 3P+N		1p, 2p, 3p, 4p
110/220/230VAC				240VAC (1P+N), 240/415V (3P+N)		230/400VAC
≤0.03 sec				≤0.1 sec		-
CB(IEC60947/IEC61009-1)				IEC 61008		IEC 60947-3
-				SEMKO CB, CE, SABS, CCC	SEMKO CB, CE, SABS	SABS, SEMKO CB
-				-	-	-
Electronic				Electro-magnetic		-
Bimetallic				N.A		-
1.5kA	2.5kA	3.5kA		-		-
-				6kA	10kA	-
4,000 operations				4,000 operations		1,500 operations (125A 1,000 operations)
10,000 operations				10,000 operations		10,000 operations
On 35mm DIN rail / Screw				On 35mm DIN rail		On 35mm DIN rail
32mm				-		17.8mm per pole
Screw clamp type (Cable up to 5.5mm <sup>2</sup> )				Lug type (Cable up to 35mm <sup>2</sup> )		Lug type (Cable up to 50mm <sup>2</sup> )
-				A/AC	A/AC AC	-
						-
-				-	-	-

# Surge Protective Device

## BK Series

### Din-rail type

## Product description

The BK Series AC/DIN type surge protect protects a 50/60Hz electric system from surge voltages. Also, the system allows replacement of the protective element (MOV), ensuring convenience and economy. However, as only the protective module is provided, other components should be added when the system is installed in accordance with the site condition. When the protective device is activated (in an anomaly or an accident), the red lever in the status indicator protrudes.



## Product rating <math>U\_c: 385V</math>

Item		AC Type						
		BK05S-T3	BK10S-T2	BK20S-T2	BK30S-T2	BK40S-T2	BK12S-T1 <small>Note4</small>	
No. of poles	[Pole]	2, 4P	1, 1+N, 2, 3, 3+N, 4P					
Rated voltages	$U_n$ [V]	230/440V						
Max. continued-operation voltage	$U_c$ [V]	-	385	385	385	385	385	
		N-PE	-	255	255	255	255	255
Voltage protection level	$U_p$ [kV]	-	$\leq 0.8$	$\leq 1.5$	$\leq 1.8$	$\leq 2.0$	$\leq 2.5$	
		N-PE	-	$\leq 1.0$	$\leq 1.2$	$\leq 1.5$	$\leq 2.0$	$\leq 2.5$
	$U_p$ [kV] <sup>Ⓢ</sup>	-	$\leq 2.0$	$\leq 1.5$	$\leq 1.8$	-	$\leq 2.5$	-
		N-PE	-	$\leq 2.5$	$\leq 2.5$	-	$\leq 3.5$	-
Nominal discharge current	$I_n$ [kA]	-	10	20	30	40	-	
Max. discharge current	$I_{max}$ [kA]	-	20	40	60	80	-	
Impulse current	$I_{imp}$ [kA]	-	-	-	-	-	12.5 (10/350)	
Open circuit voltage	$U_{oc}$ [kV]	10	-	-	-	-	-	
Grades	Test class	Class III	Class II				Class I (Built-in type)	
Reaction time		$< 25ns$						
Status indication <small>Note2</small>		Have Status indication						
Operating temperature range		$-40^\circ C \sim -80^\circ C$						
Cross-sectional area of the connecting wires		6~16mm <sup>2</sup>	6~32mm <sup>2</sup>				16~32mm <sup>2</sup>	
Accessories		AL <small>Note3</small>					-	
Standard		IEC 61643-11 / KS C IEC 61643-11 / UL1449						
Certification		CE, UL, KS, S	CE, UL, KS, S	CE, UL, KS, S	CE, UL	CE, UL, KS, S	CE	

**Note)**

- When the protective device is activated (in an anomaly or an accident) in products with Class II and III indication features, the red lever in the status indicator protrudes.
- With a product with Class I indication feature, a green light will turn on when the protective device is in a normal condition. The green light will go off when the protective device is activated (for an anomaly or an accident.)
- The AL contact accessories are not sole separately. You need to choose these accessories when you place your order for the product. Please be mindful of this fact when you place your order.
- The Class I products are integrated with the MOVs, which cannot be detached.

## Product description

The BK Series AC/DIN type surge protect protects a 50/60Hz electric system from surge voltages. Also, the system allows replacement of the protective element (MOV), ensuring convenience and economy. However, as only the protective module is provided, other components should be added when the system is installed in accordance with the site condition. When the protective device is activated (in an anomaly or an accident), the red lever in the status indicator protrudes.



## Product rating <Uc: 460V>

Item		AC Type				
		BK10S-T2	BK20S-T2	BK30S-T2	BK40S-T2	
No. of poles	[Pole]	1, 1+N, 2, 3, 3+N, 4P				
Rated voltages	Un [V]	254/440V				
Max. continued-operation voltage	Uc [V]	-	460	460	460	460
		N-PE	255	255	255	255
Voltage protection level	Up [kV]	-	≤1.5	≤2.0	≤2.2	≤2.5
		N-PE	≤1.0	≤1.2	≤1.5	≤2.0
	Up [kV] Ⓜ	-	-	-	-	-
		N-PE	-	-	-	-
Nominal discharge current	In [kA]	10	20	30	40	
Max. discharge current	I <sub>max</sub> [kA]	20	40	60	80	
Impulse current	I <sub>imp</sub> [kA]	-	-	-	-	
Open circuit voltage	Uoc [kV]	-	-	-	-	
Grades	Test class	Class II				
Reaction time		< 25ns				
Status indication <sup>Note2)</sup>		Have Status indication				
Operating temperature range		-40℃~80℃				
Cross-sectional area of the connecting wires		6~32mm <sup>2</sup>				
Accessories		AL <sup>Note3)</sup>				
Standard		IEC 61643-11, UL1449				
Certification		CE, S	CE, S, UL	CE, S, UL	CE, S, UL	

### Note)

- When the protective device is activated (in an anomaly or an accident) in products with Class II and III indication features, the red lever in the status indicator protrudes.
- With a product with Class I indication feature, a green light will turn on when the protective device is in a normal condition. The green light will go off when the protective device is activated (for an anomaly or an accident.)
- The AL contact accessories are not sole separately. You need to choose these accessories when you place your order for the product. Please be mindful of this fact when you place your order.

