# **Residual Current Circuit Breakers**

# 2 and 4 pole series up to 63AF



<b>T</b>	RCBO							
Туре	RKP	RKS	RKS-b	RKC	32KGRc	32KGRd		
Protection	Ground fault and overcurrent	Ground fault a	nd overcurrent	Ground fault and overcurrent	Ground fault a	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)	15, 20, 30A			
Rated residual current	-		-	-		-		
Operating, I	30, 100, 300mA (Non-adjustable)	30, 1 (Non-ad	00mA justable)	10, 30mA (Non-adjustable)	15, 30mA (No	on-adjustable)		
Non-operating, I∆no	0.5I∆n		ol∆n	0.5I∆n		ōl∆n		
Poles	1P+N		P+N	1P+N		ole		
Rated voltage	230VAC	230VAC	240VAC	240VAC		40VAC		
Residual current off-time	≤0.1 sec.		3 sec.	$\leq$ 0.1 sec		)3 sec		
Standard	IEC 61009		51009	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	Elect	ronic	Electronic	Elec	tronic		
Overcurrent	Thermal-magnetic	Thermal-	magnetic	Thermal-magnetic	Bime	etallic		
Breaking capacity	4.5kA	10	)kA	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	Lug type (Cable up to 10mm <sup>2</sup> )		Lug type	Screw clamp type			
	(Cable up to 10mm <sup>-</sup> )			(Cable up to 10mm)	(Cable up	to 5.5mm <sup>2</sup> )		
Type of operation	AC	A	IC	A/AC		-		
Dimension				950   77.5     100   77.5				
Characteristic curve	See page 45	Seep	bage 45	-		-		
			lible only for RK	S-b	1		1	



Image: Name of the state of the s		RCCB		Isolator	
Ntype     Stype     Htype     25, 32, 40, 63A     EAR     100AF     40, 50, 63, 80, 100, 125A       15, 20, 30A     - <td< td=""><td>32GRh</td><td>RKN</td><td>RKN-b</td><td>BKD</td></td<>	32GRh	RKN	RKN-b	BKD	
It.     LS, 20, 30A     LS, 20, 40, 63A     25, 40, 63A     80, 100A     40, 50, 63, 80, 100, 125A       15, 30m4 (Non-adjustable)     -	Ground fault and overcurrent	Groun	nd fault	-	
15,30mA (Non-adjustable) 30,100,300mA (Non-adjustable) -   0.5Lc. 0.5Lc. -   2pole 1PN, 3PN 1p, 2p, 3p, 4p   110/202/20XAC 240VAC (1PN, 3PN 1p, 2p, 3p, 4p   230.03 yec 50.1 sec -   CBUEC60947/EC61009-1) IEC 61008 IEC 60947-3   CBUEC60947/IEC61009-1) SEMKO CB, CE, SABS SABS, SEMKO CB   - - - -   Electronic Electronægnetic -   1.5KA 2.5KA 3.5KA -   - - - -   1.5KA 2.5KA 3.5KA -   - - 6KA 10kA -   1.5KA 2.5KA 3.5KA - -   - - 6KA 10kA -   1.5KA 2.5KA 3.5KA - -   - - 6KA 10kA -   1.0000 operations 1.0000 operations 1.0000 operations) 1.0000 operations)   10.000 operations 10.000 operations 1.0000 operations) 1.0000 operations)   10.000 operations 10.000 operations 1.0000 operations) 1.0000 operations)   10.000 operations 10.000 operations <		25, 32, 40, 63A		40, 50, 63, 80, 100, 125A	
0.5La     0.5La     -       2pole     1P+N, 3P+N     1p, 2p, 3p, 4p       10/20/2030AC     240AC (1P+N), 26/415V (3P+N)     230/400AC       S03 sec     S01 sec     IEC 6008       CB/Ec60947/EC51009-1)     IEC 6103     IEC 60947.3       CB/Ec60947/EC51009-1     IEC 6106     IEC 6008       -     SEMKO CB, CE, SABS, CECC     SEMKO CB, CE, SABS, CECC       Bimetalic     NA     -       1.5M     2.5M     3.5M       -     6KA     10KA       1.5M     2.5M     3.5M       -     6KA     10KA       1.5M     2.5K     0.035mm DIN all       10.000 operations     1.0000 operations     1.0000 operations       10.000 operations     10.000 operations     10.000 operations       10.000 operations<	-	-	-	_	
2pole 1P+N, 3P+N 1p, 2p, 3p, 4p   110/220/230VAC 240WC (1P+N), 240/415V (3P+N) 230/400/AC   ≤ 0.03 sec - -   CB/EC60947/IEC61009-1) IEC 61008 IEC 60947.3   CB/EC60947/IEC61009-1 IEC 61008 IEC 60947.3   Electronic SEMKO CB, CE, SABS SABS, SEMKO CB   Image: Semicor CB/Ec60947.3 SEMKO CB, CE, SABS SABS, SEMKO CB   Image: Semicor CB/Ec60947.3 SABS, SEMKO CB -   Image: Semicor CB/Ec60947.3 SABS, SEMKO CB, CE, SABS SABS, SEMKO CB   Image: Semicor CB/Ec60947.3 SABS, SEMKO CB -   Image: Semicor CB/Ec60947.3 SABS, SEMKO CB -   Image: Semicor CB/Ec60947.3 SABS, SEMKO CB, CE, SABS SABS, SEMKO CB   Image: Semicor CB/Ec60947.3 SEMKO CB, CE, SABS SABS, SEMKO CB   Image: Semicor CB/Ec60947.3 SEMKO CB, CE, SABS SABS, SEMKO CB   Image: Semicor CB/Ec60947.3 SEMKO CB, CE, SABS SABS, SEMKO CB   Image: Semicor CB/Ec60947.3 SEMKO CB, CE, SABS SABS, SEMKO CB   Image: Semicor CB/Ec60947.3 SEMKO CB, CE, SABS SABS, SEMKO CB   Image: Semicor CB/Ec60947.3 SEMKO CB Image: Semicor CB/Ec60947.3   Image: Semicor CB/Ec60947.3 SEMKO CB Image: Semicor CB/Ec60947.3	15, 30mA (Non-adjustable)		-	-	
110/220/230VAC   12+Vh), 240/415V (3P+N) 230/400VAC   50.03 sec < S0.13 sec < S0.13 sec < S0.13 sec < S1.25 s					
CB(JEC60947/JEC61009-1)     IEC 61098     IEC 60947-3       -     -     SEMKO CB, CE, SABS, CCC     SEMKO CB, CE, SABS, SEMKO CB       -     -     -     -       Bimetallic     NA     -     -       1.5kA     2.5kA     3.5kA     -     -       4.000 operations     10kA     -     -     -       10,000 operations     10,000 operations     10,000 operations     10,000 operations     10,000 operations       0 10,000 operations     10,000 operations     10,000 operations     10,000 operations     0.035mm DIN rail     On 35mm DIN rail       303mm     -     -     -     17.8mm per pole       (Cable up to 5.5mm)     Lug type (Cable up to 5.5mm)     Lug type (Cable up to 5.5mm)     Lug type (Cable up to 5.5mm)       -     -     -     -     -     -     -       -     -     -     A/AC     A/AC     -     -				230/400VAC	
Image: Constraint of the second sec	≤0.03 sec	≤0.	1 sec	-	
Image: Second secon	CB(IEC60947/IEC61009-1)	IEC 6	51008	IEC 60947-3	
Electronic Electronagnetic -   Iska 2.5kA 3.5kA -   I.5kA 2.5kA 3.5kA -   I.5kA 2.5kA 3.5kA -   Image: International Constraints 1.500 operations 1.500 operations   I.5kA 2.5kA 3.5kA -   Image: International Constraints 1.500 operations 1.500 operations   Image: International Constraints 1.500 operations 1.500 operations   Image: International Constraints 1.500 operations 1.500 operations   Image: International Constraints Image: International Constraints Image: International Constraints   Image: International Constraints Image: International Constraints Image: International Constraints   Image: International Constraints Image: International Constraints Image: International Constraints   Image: International Constraints Image: International Constraints Image: International Constraints   Image: International Constraints Image: International Constraints Image: International Constraints   Image: International Constraints Image: International Constraints Image: International Constraints   Image: International Constraints Image: International Constraints Image: International Constraints   Image: International Constraints <t< td=""><td>-</td><td>SEMKO CB, CE, SABS, CCC</td><td>SEMKO CB, CE, SABS</td><td>SABS, SEMKO CB</td></t<>	-	SEMKO CB, CE, SABS, CCC	SEMKO CB, CE, SABS	SABS, SEMKO CB	
$   \\   \\   \\   \\   \\   \\   \\   \\   \\   $	-	_	-	-	
1.5kA 2.5kA 3.5kA - -   - - 6kA 10kA -   4.000 operations 1,000 operations 1,500 operations) 10,000 operations   10,000 operations 10,000 operations 10,000 operations 0.000 operations   0.03mm DIN rail On 35mm DIN rail On 35mm DIN rail On 35mm DIN rail   32nm - - 17.8mm per pole   Cable up to 5.5mm <sup>-</sup> ) Lug type (Cable up to 35mm <sup>-</sup> ) Lug type (Cable up to 50mm <sup>-</sup> )   - - A/AC A/AC A   - - A/AC A/AC -			-	-	
- 6kA 10kA -   4,000 operations 1,000 operations 1,500 operations   10,000 operations 10,000 operations 10,000 operations   On 35mm DIN rail On 35mm DIN rail On 35mm DIN rail   32mm - 17.8mm per pole   Cable up to 5.5mm) Lug type (Cable up to 35mm) Lug type (Cable up to 50mm)   - - A/AC A/AC   - - A/AC A/AC		N	I.A	-	
4,000 operations   4,000 operations   1,500 operations     10,000 operations   10,000 operations   10,000 operations     On 35mm DIN rail   On 35mm DIN rail   On 35mm DIN rail     32mm   -   17.8mm per pole     Cable up to 5.5mm   Lug type (Cable up to 35mm)   Lug type (Cable up to 55mm)     -   -   AAC   -     -   -   AAC   -	1.5kA 2.5kA 3.5kA		-	-	
10,000 operations 10,000 operations   On 35mm DIN rail On 35mm DIN rail   32mm -   Screw clamp type (Cable up to 5.5mm) Lug type (Cable up to 35mm)   - A/AC				-	
On 35mm DIN rail On 35mm DIN rail On 35mm DIN rail   32mm - 17.8mm per pole   Screw clamp type (Cable up to 55mm) Lug type (Cable up to 35mm) Lug type (Cable up to 55mm)   - - A/AC A/AC AC   - - A/AC A/AC AC   - - - -	4,000 operations	4,000 op	perations		
32mm - 17.8mm per pole   Screw clamp type (Cable up to 55mm) Lug type (Cable up to 55mm) Lug type (Cable up to 50mm)   - A/AC A/AC A/AC -	10,000 operations	10,000 o	perations	10,000 operations	
Screw clamp type (Cable up to 5.5mm') Lug type (Cable up to 35mm') Lug type (Cable up to 50mm')   - - A/AC A/AC AC   - - - -   - - - -   - - - -   - - - -	On 35mm DIN rail / Screw	On 35mi	m DIN rail	On 35mm DIN rail	
AAC AAC AC -	32mm		-	17.8mm per pole	
	Screw clamp type (Cable up to 5.5mm <sup>2</sup> )	Lug type (Cabl	e up to 35mm <sup>°</sup> )	Lug type (Cable up to 50mm <sup>2</sup> )	
	_	A/AC	A/AC AC	-	
	-	-	-		

# **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 <UC: 385V>

Item		АС Туре						
		BK05S-T3	BK10S-T2	BK20S-T2	BK30S-T2	BK40S-T2	BK12S-T1 Note4)	
No. of poles [Pole]			2, 4P	1, 1+N, 2, 3, 3+N, 4P				
Rated voltages		Un [V]		230/440V				
Max. continued-		-	385	385	385	385	385	385
operation voltage	Uc [V]	N-PE		255	255	255	255	255
	Up [kV]	-	≤0.8	≤1.5	≤1.8	≤2.0	≤2.5	≤2.5
Voltage protection	ор [кv]	N-PE	-	≤1.0	≤1.2	≤1.5	≤2.0	≤2.5
level		-	≤2.0	≤1.5	≤1.8	-	≤2.5	-
	Up [kV] 🛞	N-PE	-	≤2.5	≤2.5	-	≤3.5	-
Nominal discharge	Nominal discharge current In [kA]			10	20	30	40	-
Max. discharge cu	rrent	lmax [kA]	-	20	40	60	80	-
Impulse current		limp [kA]	-	-	-	-	-	12.5 (10/350)
Open circuit voltag	le	Uoc [kV]	10	-	-	-	-	-
Grades Test class		Class III	Class II Class I (Built-in type					
Reaction time			< 25ns					
Status indication Note2)		Have Status indication						
Operating temperature range		-40°C~80°C						
Cross-sectional area of the connecting wires		6~16mm <sup>2</sup>	6~32mm <sup>2</sup> 16~32mr					
Accessories		AL Note3) -						
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.

2. 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.

4. 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		АС Туре					
item			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	Up [kV]	-	≤1.5	≤2.0	≤2.2	≤2.5	
	ορ [κν]	N-PE	≤1.0	≤1.2	≤1.5	≤2.0	
level	Up [kV] 🛞	-	-	-	-	-	
		N-PE	-	-	-	-	
Nominal discharge	current	In [kA]	10	20	30	40	
Vax. discharge cu	rrent	lmax [kA]	20	40	60	80	
Impulse current limp [kA]		limp [kA]	-	-	-	-	
Open circuit voltag	je	Uoc [kV]	-	-	-	-	
Grades Test class		Test class	Class II				
Reaction time			< 25ns				
Status indication Note2)		Have Status indication					
Operating temperature range		-40℃~80℃					
Cross-sectional area of the connecting wires		6~32mm <sup>2</sup>					
Accessories		AL NoteS)					
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.

2. 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.)

3. 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.

