

Residual Current Circuit Breakers

1, 2 and 4pole series up to 125AF



Type	RCBO					
	RKP	RKS	RKS-b	RKJ	RKJ-b	
Protection	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, 32, 40, 50, 63A (B, C, D curve)	1, 2, 3, 4, 5, 6, 10, 16, 20, 25, 32, 40, 50, 63A (B, C, D curve)	6, 10, 16, 20, 25, 32A (B, C curve)	
Rated residual current	–	–	–	–	–	
Operating, $I_{\Delta n}$	30, 100, 300mA (Non-adjustable)	30, 100mA (Non-adjustable)	30, 100, 300mA (Non-adjustable)	30, 100, 300mA (Non-adjustable)	10, 30mA (Non-adjustable)	
Non-operating, $I_{\Delta no}$	0.5 $I_{\Delta n}$	0.5 $I_{\Delta n}$	0.5 $I_{\Delta n}$	0.5 $I_{\Delta n}$	0.5 $I_{\Delta n}$	
Poles	1P+N	1P+N	1P+N, 2P, 3P, 3P+N, 4P	1P+N, 2P, 3P, 3P+N, 4P	1P+N	
Rated voltage	230VAC	230VAC	240VAC	230VAC	240VAC	
Residual current off-time	≤ 0.1 sec.	≤ 0.3 sec.	≤ 0.1 sec.	≤ 0.1 sec.	≤ 0.1 sec	
Standard	IEC 61009	IEC 61009	IEC 61009-1	IEC 61009-1	IEC 61009	
Approval	CCC, SEMKO CB, CE, SABS	SEMKO CB, CE, SABS	SEMKO CB, CE	SEMKO CB	SEMKO CB, CE	
Type of trip	–	–	–	–	–	
Ground fault	Electronic	Electronic	Electro-magnetic	Electro-magnetic	Electronic	
Overcurrent	Thermal-magnetic	Thermal-magnetic	Thermal-magnetic	Thermal-magnetic	Thermal-magnetic	
Breaking capacity	4.5kA	10kA	6kA	10kA	6kA (32A 4.5kA)	
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	On 35mm DIN rail	
Width	35.6mm	18mm	17.8mm	17.8mm	18mm	
Terminal	Lug type (Cable up to 10mm ²)	Lug type (Cable up to 10mm ²)	Lug type (Cable up to 25mm ²)	Lug type (Cable up to 25mm ²)	Lug type (Cable up to 10mm ²)	
Type of operation	AC	AC	A/AC	A/AC	A/AC	
Dimension						
Characteristic curve	See page 52	See page 52	–	–	–	

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



	RCBO			RCCB			Isolator			
	32KGRc	32KGRd	32GRh	RKN	RKN-b		BKD			
Ground fault and overcurrent	Ground fault and overcurrent			Ground fault			-			
15, 20, 30A	N type 15, 20, 30A		H type 15, 20, 30A	25, 32, 40, 63A	63AF 25, 40, 63A	100AF 80, 100A	40, 50, 63, 80, 100, 125A			
-	-			-	-		-			
15, 30mA (Non-adjustable)	15, 30mA (Non-adjustable)			30, 100, 300mA (Non-adjustable)	-		-			
0.5I _{Δn}	0.5I _{Δn}			0.5I _{Δn}			-			
2pole	2pole			1P+N, 3P+N			1p, 2p, 3p, 4p			
110/240VAC	110/220/230VAC			240VAC (1P+N), 240/415V (3P+N)			230/400VAC			
≤0.03 sec	≤0.03 sec			≤0.1 sec			-			
IEC 61009, KS	CB(IEC60947/IEC61009-1)			IEC 61008			IEC 60947-3			
CCC	-			SEMKO CB, CE, SABS, CCC	SEMKO CB, CE, SABS		SABS, SEMKO CB			
-	-			-	-		-			
Electronic	Electronic			Electro-magnetic			-			
Bimetallic	Bimetallic			N.A			-			
1.5kA	2.5kA	1.5kA	2.5kA	3.5kA	-		-			
-	-			6kA	10kA		-			
4,000 operations	4,000 operations			4,000 operations			1,500 operations (125A 1,000 operations)			
10,000 operations	10,000 operations			10,000 operations			10,000 operations			
On 35mm DIN rail / Screw	On 35mm DIN rail / Screw			On 35mm DIN rail			On 35mm DIN rail			
35mm	32mm			-			17.8mm per pole			
Screw clamp type (Cable up to 5.5mm ²)	Screw clamp type (Cable up to 5.5mm ²)			Lug type (Cable up to 35mm ²)			Lug type (Cable up to 50mm ²)			
-	-			A/AC	A/AC	AC	-			

KGR type



32KGRc/d

Technical data

Type	32KGRc	32KGRd
Protection	Ground fault and overcurrent	
Rated current	15, 20, 30A	
Rated residual current		
Operating, $I_{\Delta n}$	15, 30mA (Non-adjustable)	
Non-operating, $I_{\Delta no}$	0.5 $I_{\Delta n}$	
Number of poles	2pole	
Rated voltage	110/220VAC	
Residual current off-time	≤ 0.03 sec.	
Standard	IEC 61009, KS	
Approval	CCC CB	
Type of trip		
Ground fault	Electronic	
Overcurrent	Bimetallic	
Breaking capacity	1.5kA	2.5kA
Electrical endurance	4,000 operations	
Mount	On 35mm DIN rail	
Width	35mm	
Terminal	Screw clamp type (Cable up to 5.5mm ²)	

32KGRc type

In	$I_{\Delta n}$	Model	Order No.	Pack. unit (Pcs.)
15A	15mA	32KGRc 15A 15mA 0.03s	0750000400	60
	30mA	32KGRc 15A 30mA 0.03s	0750000100	60
20A	15mA	32KGRc 20A 15mA 0.03s	0750000500	60
	30mA	32KGRc 20A 30mA 0.03s	0750000200	60
32A	15mA	32KGRc 30A 15mA 0.03s	0750000600	60
	30mA	32KGRc 30A 30mA 0.03s	0750000300	60

32KGRd type

In	$I_{\Delta n}$	Model	Order No.	Pack. unit (Pcs.)
15A	15mA	32KGRd 15A 15mA 0.03s	0748001000	60
	30mA	32KGRd 15A 30mA 0.03s	0748001100	60
20A	15mA	32KGRd 20A 15mA 0.03s	0748001200	60
	30mA	32KGRd 20A 30mA 0.03s	0748001300	60
32A	15mA	32KGRd 30A 15mA 0.03s	0748001400	60
	30mA	32KGRd 30A 30mA 0.03s	0748001500	60

Residual Current Circuit Breakers With Overcurrent Protection

DIN rail & Screw type

GRh type

Technical data



32GRhN

Type	32GRh		
Number of poles	N type	S type	H type
Protection	Ground fault and overcurrent		
Rated current	15, 20, 30A		
Rated residual current			
Operating, $I_{\Delta n}$	15, 30mA (Non-adjustable)		
Non-operating, $I_{\Delta no}$	0.5 $I_{\Delta n}$		
Rated voltage	110/220/230VAC		
Residual current off-time	≤ 0.03 sec.		
Standard	CB (IEC60947/IEC61009-1)		
Type of trip			
Ground fault	Electronic		
Overcurrent	Bimetallic		
Frequency	50/60Hz		
Rated insulation voltage	300V		
Rated impulse voltage	4kV		
Breaking capacity	1.5kA	2.5kA	3.5kA
$I_{cs} = \% \times I_{cu}$	50%		
Electrical endurance	4,000 operations		
Mount	On 35mm DIN rail		
Width	32mm		
Terminal	Screw clamp type (Cable up to 5.5mm ²)		

BS type



Certificate



BS32c/d

Technical data

Type	BS32c	BS32d
Protection	Overload and short circuit	
Rated current	6, 10, 15, 20, 30A	10, 15, 20, 30A
Rated residual current		
Operating, $I_{\Delta n}$	15, 30mA (Non-adjustable)	
Non-operating, $I_{\Delta no}$	0.5 $I_{\Delta n}$	
Number of poles	2pole	
Rated voltage	110/220VAC	
Residual current off-time	≤ 0.03 sec.	
Standard	IEC 60898-1, KS	
Approval	CCC CB	
Type of trip		
Ground fault	Electronic	
Overcurrent	Bimetallic	
Breaking capacity	1.5kA	2.5kA
Electrical endurance	4,000 operations	
Mount	On 35mm DIN rail	
Width	35mm	
Terminal	Screw clamp type (Cable up to 5.5mm ²)	