

Isomax S Molded Case Circuit Breakers

Description: Sace isomax S molded case circuit breakers offer performance features that meet the full spectrum of application requirements, from small users through to large industrial electricity distribution installations.

Technical data of Sace S Molded Case Circuit Breakers



Sace S3N



Sace S5N



Sace S6N



Sace S7S

Type & specifications: Sace				S1	S3	S5	S6	S7								
Number of poles				3	3	3	3	3								
Rated uninterrupted current, I _u				A	100-125	160-250	400-630	630-800	1250-1600							
Rated service voltage, U _e		AC50/60Hz	V	500	690	690	690	690								
		DC	V	250	750	750	750	-								
Rated impulse withstand voltage, U _{imp}				kV	6	8	8	8								
Rated insulation voltage, U _i				V	500	800	800	800								
Test voltage at industrial frequency for 1 minute				V	3000	3000	3000	3000								
Breaking class					B	N	N	H	N	H	N	H	S	H		
Rated limit short-circuit breaking capacity, I _{cu}		AC, 50/60Hz	220/230V	kA	25	40	65	100	65	100	65	100	85	100		
			380/415V	kA	16	25	35	65	35	65	35	65	35	65	50	65
			440V	kA	10	16	30	50	30	50	30	50	30	50	40	55
			550V	kA	8	12	25	40	25	40	25	40	25	40	35	45
			690V	kA	-	-	14	18	20	25	20	25	20	25	20	25
DC		DC	250V/2P in series	kA	16	25	35	65	35	65	35	65	-	-		
			500V/2P in series	kA	-	-	35	50	35	50	20	50	-	-		
			500V/3P in series	kA	-	-	-	-	-	-	-	-	-	-	-	
			750V/3P in series	kA	-	-	20	35	20	35	16	35	-	-		
Rated duty short-circuit making capacity, I _{cs}				I _{cu}	50%	50%	100%	75%	100%	100%	100%	100%	100%	75%		
Rated short-circuit making capacity, I _{cm} /415VAC				kA	32	53	74	143	74	143	74	143	105	143		
Tripping time, 415VAC				ms	8	8	8	7	8	7	10	8	22	22		
Use category, IEC 60947-2					A	A	A	B/A	B	B	B	B	B			
Isolation behavior					■	■	■	■	■	■	■	■	■			
Release		Thermo-magnetic	T fixed, M fixed 5th	■	■	-	-	-	-	-	-	-	-			
			T fixed, M fixed 10th	■	■	-	-	-	-	-	-	-	-			
			T adjustable, M fixed 3th	-	-	-	-	-	-	-	-	-	-			
			T adjustable, M fixed 5th	-	-	■	■	-	-	-	-	-	-			
			T adjustable, M fixed 10th	-	-	■	■	-	-	-	-	-	-			
			T adjustable, M adjustable	-	-	-	-	■	■	-	-	-	-			
		Magnetic only: M fixed	-	■	■	■	-	-	-	-	-	-				
Microprocessor-based	PR211/P	-	-	-	-	■	■	■	■	■	■					
	PR212/P	-	-	-	-	■	■	■	■	■	■					
Interchangeability					-	-	■	■	■	■	■					
Versions		Fixed		FC-R	F-EF-ES-FC	F-EF-ES-FC	F-EF-ES-FC	F-EF-ES-FC								
		Plug-in		FC-R	EF-FC-R	EF-FC-R	-	-								
Fixing on DIN rail					EN 50022	EN 50023	EN 50023	-	-							
Mechanical life					25000/240	25000/120	20000/120	20000/120	10000/120							
Electrical life/415V					8000/120	8000/120	7000/60	7000/60	7000/20							
Basic dimensions		Fixed	3P, mm	W	78	105	140	210	210							
				D	70	103.5	103.5	103.5	138.5							
				H	120	170	254	268	406							
Weight		3P	Fixed	kg	0.9	2.6	5	9.5	17							
			Plug-in	kg	1	3.1	6.1	-	-							

Notes:

- The percentage I_{cs} performance of S3N/H, S5N/H and S6N/H circuit breakers is 25% lower at 690V;
- The plug-in version of circuit breaker S5 is only available for rated current 400A;
- Explanation of accessories

RC	Rear terminals for copper/aluminium cables	F	Front terminals	FC	Front terminals for copper cables
HR	Rear horizontal flat bar terminals	EF	Extended front terminals	FC CuAl	Front terminals for Cu/Al cables
VR	Rear vertical flat bar terminals	ES	Spread front terminals	R	Rear threaded terminals